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VOCABULARY LEARNING STRATEGIES AND GENDER DIFFERENCES

An Experimental Case Study of EFL Undergraduate Students at the English Department of Algiers 2 University

Thesis Submitted in Fulfilment of the Requirements for the Degree of Doctorate (es-Sciences) in Linguistics and Didactics

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DEDICATION

To My Beloved Family,

SADEK

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Abstract

The present research is a quasi-experimental case study that examines the vocabulary learning strategies that undergraduate EFL students most/least use and perceive as useful to expand their lexicon range. It also seeks to identify the approaches learners adopt to endorse their vocabulary acquaintance. Two major variables are emphasized mainly gender and year of study. A sample of 150 first, second, and third-year students (75 males and 75 females) majoring in English at Algiers 2 University were requested to fill in a questionnaire, a vocabulary levels (2,000 and 3,000) test, and a survey. Additionally, classroom observation, focus group, and think-aloud protocol were performed. Binary learning groups were also formed for the test; control and experimental to observe the impact of VLSs training on students' utilization frequency and performance by comparing the pre and post-test results along with focus group assigned tasks and discussions. The data collection took place once the program was launched, and thematically related courses and practical sessions were held. Digital learners got away from their screens, sit down in restricted contexts, and had to engage deeply with the academic world in front of them by embracing different strategies and approaches to overcome the faced vocabulary expanse. Three pioneer theories were relied on to analyze the gathered data namely; Schmitt's taxonomy (1997, 2000), Sanaoui classification (1995), and Clouston's research (1996).

The findings demonstrated that determination strategies were highly used and also praised as the upmost expedient in the discovery category, primarily contextual clues guessing, bilingual, and monolingual dictionaries. In the consolidation category, cognitive strategies scored the highest rate of usefulness particularly note taking and keeping a vocabulary notebook. Conversely, the metacognitive set was the least deployed yet it encompassed one of the most culminating recognized strategies which was the English language media resort. A vast majority of male students drastically overestimated that strategy claiming that they were better off starting imperfectly than being paralyzed by the hope or delusion of perfection. These proclamations did not impact the obtained results yet exhibited on the focus group discussion.

Moreover, this research revealed that an overwhelming majority of undergraduate students mostly female developed an amalgamation combination of structured and semi-structured approaches system to cope with the lexical items bucket, whereas others had their personalized spin. They created their own timetable, socialized, had hobbies, and also balanced what they like to do with what they needed to do (combined the enjoyable with the instructive). Nevertheless, being unstructured was not the number one predictor of how well a student learns vocabulary. It was the way they apply the strategy, whether it worked successfully for them and their consistency across the years. Students might follow an analog system or go digital, their VLSs system evolves transversely. Over time, learners developed a sorting process to help them determine what to hold onto in their explicit memory, while others scaled the learned ones. Some students practiced the same strategies to date (taking notes, highlighting), absorbed the intake, and implemented the inside through outcomes. Ultimately, valuable insights and pedagogical implications were provided to promote teachers' teaching environment, students' autonomy, and awareness towards VLSs.

Key Terms: approaches, EFL undergraduate students, gender, use and usefulness, vocabulary learning strategies, year of study.

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List of Abbreviations and Acronyms:

AL Academic Learning

ARCS Attention, Relevance, Confidence, and Satisfaction

CALL Computer-Assisted Language Learning

DTU Discovery Teaching Unit

EFL English Foreign Language

ELT English Language Teaching

ESL English as a Second Language

ESP English for Specific Purposes

F.E Few Evidence

FSL French as Second Language

FTU Fundamental Teaching Unit

GPA Grade Point Average

ICT Information and Communication Technology

L1 First Language

L2 Second Language

LMD Licence-Master-Doctorate

LLS Language Learning Strategies

MTU Methodology Teaching Unit

S.E Some evidence

SILL Strategy Inventory for Language Learning

SUD Strategy Use Dimensions

STV Scheduled Time Value

St.E Strong Evidence

TBLT Task-Based Language Teaching

TL Target Language

TOEFL Test of English as a Foreign Language

TOEIC Test of English for International Communication

TTU Transversals Teaching Unit

US United States

VLSs Vocabulary Leaning Strategies

VLT Vocabulary Level Test

VOLSI Vocabulary Learning Strategy Inventory

1. Background of the Study

Vocabulary is an essential component of language learning and a fundamental skill in students' language proficiency. Besides helping individuals communicate effectively in various settings, it has a crucial role in conveying comprehensive messages. It generally refers to the set of words that people acquires along their learning process, whether in terms of meanings or usage in context then subsequently deploy in both oral and written statements. Students who have a wide array of vocabulary are likely to express themselves more fluently and confidently which ultimately leads to better academic performance and success (Nation, 2001). However, vocabulary learning could be quite challenging for learners, especially non-native speakers who have limited exposure to the targeted language.

In order to enhance vocabulary learning and language proficiency, students require effective strategies. Learning strategies refer to the techniques or methods that learners use to facilitate their learning and improve their performance (Oxford, 2003). Vocabulary learning strategies (VLSs) promote students' retention of unfamiliar lexicons and help them understand the context of words once properly deployed. However, there are multiple strategies (Schmitt, 1997) that could be advantageous in endorsing learners' vocabulary repertoire and its usefulness varies from one individual to another according to their needs and preferences. Besides, there are specific approaches that might be trailed to retain and recall the newly stored lexical items. Sanaoui (1995) and Clouston (1996) highlighted three major approaches namely; structured, semi-structured, and unstructured. These are different methods in the vocabulary learning process. The structured approach is planning, monitoring, and self-testing the assimilated words. Conversely, the unstructured one has limited practice with no immediate retrieval of the noted words. Similarly, the semi-structured combines elements from both approaches where learners receive some guidance but also self-created learning opportunities.

Learners' vocabulary acquaintance is generally influenced by many variables that could be categorized into two primary aspects; intralexical and extralexical. The

intralexical refers to the internal organization and relationships among words within a language. It includes knowledge of word forms and parts, such as orthography, length, and semantic features of the word (Laufer, 1997). The latter is the extralexical which refers to the external factors that influence vocabulary knowledge. It implies the appropriate use of vocabulary in different contexts, meaning inference, understanding of idiomatic expressions and collocations such as the role of memory, first or other languages influence, and the individual learners' differences (Takac, 2008).

Gender variable, comprised under the individual factor, is another important aspect that affects vocabulary learning. Some researches displayed that gender variances influence lexicon acquisition and language achievement (Dornyei & Skehan, 2003) where females perform better than males, whereas other studies did not find any significant gender alterations (Liu, 2011). Furthermore, the year of study has a valuable locus in vocabulary interventions and the development of striking strategies by undergraduate students throughout their academic cursus to support their English degree. Being a first-year student quietly departs from a second or third-year student. They often commence by adjusting to university life and are still exploring their educational interests and future goals. Formerly, they typically choose to major in a particular area and focus on their coursework then come to a halt for internships or career-related experience.

2. Statement of the Problem

Within the realm of foreign language acquisition and the ascending importance of English in today's world, vocabulary learning is an unbendable element in enquiring it. Many countries have placed a great emphasis on teaching and learning English as a foreign language, including Algeria. Educating the English language in the Algerian curriculum gained a shedload of momentum initiating from primary schools to the university level. Nonetheless, majoring in the target language is more discrepant than studying it as a subject in high or middle schools considering the encountered affluent lexicon. Despite the preeminent efforts made by Algerian lecturers to enhance English among undergraduate students, many still endeavour with its unfamiliar vocabulary, which has a deleterious sway on their overall language proficiency. Notwithstanding

the substantial role of vocabulary learning strategies in language headway, there is a lack of consensus about the use and effectiveness of these strategies among Algerian university students specializing in English. Additionally, the way male and female learners approach vocabulary learning might probably differ alongside their year of study which would ultimately affect their language achievement.

The interference of gender and year of education upon vocabulary learning strategies (VLSs) use and usefulness have not thoroughly been examined in the Algerian university context. Concerning the gender variable, previous studies conducted by Wang & Zhang (2019) in China for instance, pinpointed that female students employed more VLSs compared to male students. Similarly, another research explored in Turkey by Kartchava & Churadze, (2015) revealed that female students had a higher level of English vocabulary use than male counterparts. Contrariwise, Razmjoo & Riazi's (2006) investigation in Iran, descried no significant gender variances in terms of VLSs deployment. These findings indicate that the correlation between gender and VLSs utilization fluctuates depending on the inspected context and participants.

Regarding the year of study, undergraduate students generally acquire more experience and knowledge as they progress through their academic curriculum. First-year and second-year students for example might deploy similar basic VLSs such as memorization and dictionary use given their novice situation. Inversely, third-year would have developed more sophisticated strategies and opted for different ones like context clues or making connections between new vocabulary and previously stored material. In the Algerian background, only a handful of studies have been conducted on the subject of VLSs and gender differences or year of study. There is a dearth of research on this topic and the existing literature is scarce.

3. Statement of the Purpose

As aforementioned, vocabulary acquisition is part and parcel of language learning for undergraduate students. Previous researches have uncovered that university learners use a variety of vocabulary learning strategies and their perception diverges conferring with many factors (Clouston, 1997; Qian & Schedl, 2004; Fang, 2006; Azabdaftari & Behzadpour, 2016). This quasi-experimental study aims to explore the vocabulary

learning strategies used by first, second, and third-year students at the English department of Algiers 2 University, Algeria. It also examines the usefulness of these strategies according to students' perception baring their preceding involvement and the approaches adopted to expand their vocabulary array. In addition, two main variables are reckoned with namely; gender and year of study, to determine whether there is any significant VLSs dissimilarity between male and female students while progressing through their B.A degree.

Accordingly, students would also have different academic goals and priorities as they advance over their undergraduate studies. For example, a third-year student who is soaking up a specific field has an immense need to learn subject-specific vocabulary than a first-year student who is still exploring different areas of study. While some students may continue to use the same VLSs along their educational path, many will likely adapt and refine their prior strategies over time based on their changing needs and experiences. Therefore, it is paramount to reconnoiter the role of gender in using VLSs and its usefulness according to EFL undergraduate Algerian students' perception and year of study. These variables are relatively understudied with regards to the limited Algerian prevailing works. There is sparse attention on the fostered approaches by first, second, and third-year university students while coping with lexical items and gender imprint.

In order to attain the stated aims, the succeeding research questions are addressed:

- **Research Questions**

1. What are the most/least **used** VLSs by undergraduate EFL students?

    1.1 What are the most and least VLSs used by **first**-year students?

    1.2 What are the most and least VLSs used by **second-**year students?

    1.3 What are the most and least VLSs used by **third**-year students?

2. What are the most and least **useful** VLSs according to students' perceptions?

    2.1 Which VLSs do **first-year** students perceive as useful?

    2.2 Which VLSs do **second-year** students perceive as useful?

    2.3 Which VLSs do **third-year** students perceive as useful?

3. Do **male** and **female** students use and perceive as useful the same VLSs?

4. Do EFL undergraduate students resort to different VLSs during their academic cursus from first, second to third-year?

5. Which **approach**es do EFL undergraduate students (first, second, and third-year) adopt while learning vocabulary?

6. Do male and female students adopt the same approach to learning vocabulary?

The suggested hypotheses that would hypothetically answer the above uprising queries are as follows:

- **Research Hypotheses**

1. It is expected that the most dominant VLSs that undergraduate students resort to is dictionary use, and the least utilized is interacting with a native.
2. It is predicted that connecting words to personal experience is perceived as highly useful by undergraduate students, and the least supposed useful is verbal/written repetition.
3. It is presumed that male and female students use and perceive as useful the same VLSs.
4. There is a significant difference in use and usefulness between first, second, and third-year students.
5. It is predicted that the majority of EFL undergraduate students adopt the structured approach to develop their vocabulary range.
6. Female students are more likely to be organized compared to male learners.

In the expectation of fulfilling these hypotheses that were derived from previous studies, three pioneer scholars' studies are relied on; Schmitt's taxonomy (1997) on VLSs, Sanaoui's classification (1995) of the approaches embraced to consolidate and retrieve the acquired vocabulary, and finally the compulsory research of Clouston (1996) as a complementary endorsement.

4. Research Rationale

English has received more consideration during this last decade in Algeria due to globalization and the emergent requirement for international commerce and communication. Algerian students are oriented to attain a high level of English proficiency to keep pace with the modern world's demands. English is not only a worldwide language but also the language of science, technology, and business. Thus, mastering English is crucial for Algerian students to succeed whether in their academic or professional pursuits.

The research rationale of the present study is based on the use and usefulness of vocabulary learning strategies among EFL undergraduate students and the approaches enfolded to accomplish their vocabulary learning. It also investigates whether explicit instruction of VLSs would enhance learners' ability to acquire and retain new words by comparing two groups; control and experimental. By receiving VLSs training and stipulating its variety, students will be better equipped to take control of their learning and are more likely to be successful and independent

Consequently, the initial impetus for elaborating on this topic stems from the urge to understand the use and usefulness of vocabulary learning strategies among EFL students of Algiers 2 University, with particular regard to gender and year of study. Besides, it provides insights for language educators first and raises students' awareness towards the omnipresence of VLSs and their practicality in vocabulary learning. The gathered findings will also contribute to the existing literature on vocabulary learning strategies and gender correlation through educational language learning. Furthermore, the deduced implications will shed light on the approaches that EFL undergraduate students undertake to manage their lexicon collection and promote gender-inclusive language education policies.

5. Thesis Structure

The work is structured into four chapters. Chapter one serves as a preliminary foundation that provides an introduction to the literature review initiated by the eminence of communicative approach, language learning strategies, then vocabulary

learning strategies. It emphasizes the importance of vocabulary learning strategies and discusses various relevant taxonomies. It concludes by listing the types and classifications of vocabulary learning strategies.

Chapter two entitled research methodology outlines the research questions and objectives; provides an overview of the participants' sampling, English status in Algeria from a linguistic situation to its role in the Education and the public sphere. The type of research study is then discussed, and the corpus is shelled. The latter includes questionnaires, classroom observations, vocabulary levels test (pre and post), focus group, think-aloud protocol, and vocabulary survey. Additionally, the factors affecting the choice of vocabulary learning strategies and research theories are explored.

Chapter three displays the findings of the study. It begins with the questionnaires results completed by undergraduate students and university teachers. Classroom observation and vocabulary levels test results are also presented along with pre and post-test grades assembled from the two studied groups. Besides, it comprises the focus group discussion and task outcomes and the vocabulary survey mean score, including determination, social, memory, cognitive, and metacognitive strategies. The two main variables; gender and year of study are meticulously debated.

Chapter four confers and interprets the analyzed data. It answers the arising questions, confirms the suggested hypotheses, and compares gender results with Catalán's research (2003). It confers the use and usefulness of vocabulary learning strategies, and the bagged learning approaches. The investigated variables; gender and year of study are also scouted. The chapter concludes with invaluable suggestions and pedagogical instructions for both university teachers and students to develop a better understanding on how EFL Algerian learners could strengthen their vocabulary acquisition by using vocabulary learning strategies. Adding to these, a general introduction and conclusion were expounded.

Introduction

The study of foreign language learning includes various skills and language components, which entail learning vocabulary as it represents a core aspect of language acquisition. On that ground, vocabulary is considered one of the most imperative components in any target language since it enables learners to communicate effectively and understand the messages conveyed by others.

In the limelight, the first chapter of the present thesis aims to provide a detailed theoretical framework about the subject matter initiated by tracking vocabulary acquisition origin with an introductory overview and the imminence of the communicative approach. The chapter then extricates the fundamental machinery instigating first language learning strategies, the definition of strategy, learning strategy, and Rebecca Oxford's Classification. Subsequently, it delves into the main concept of vocabulary learning strategies, exploring its definition, recognition, vocabulary learning, and teaching procedure.

Additionally, this first chapter reconnoitres the importance of vocabulary learning strategies and addresses a variety of taxonomies adduced by well-known scholars. It concludes with different types of vocabulary learning strategies that are likely wise discussed along with previous academic classifications.

This chapter synthesizes the current state of research and feathers a comprehensive prospectus of the related concepts to language learning strategies in general and vocabulary learning strategies in particular serving as a foundation for the ascending subsequent chapters.
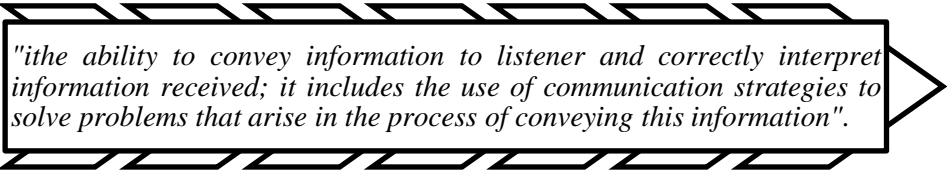
1.1 Strategic Competence

Strategic competence, as delineated by Canale and Swain in 1980, is one facet of communicative competence, a concept they proposed alongside other competencies. Canale and Swain (1980:30), as cited in Thurrell (1991), define strategic competence as the utilization of verbal and non-verbal communication strategies to address breakdowns in communication stemming from performance variables or insufficient competence. Furthermore, they have demonstrated that communicative competence

encompasses at least three essential components: grammatical competence, sociolinguistic competence, and strategic competence.
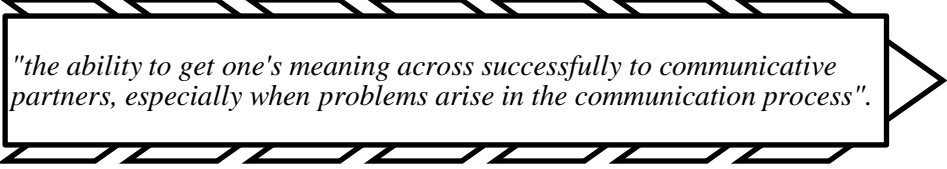
While various scholars have offered distinct explanations of strategic competence, these interpretations share substantial commonalities. Some of their elucidations are as follows:

Tarone (1983: 123)
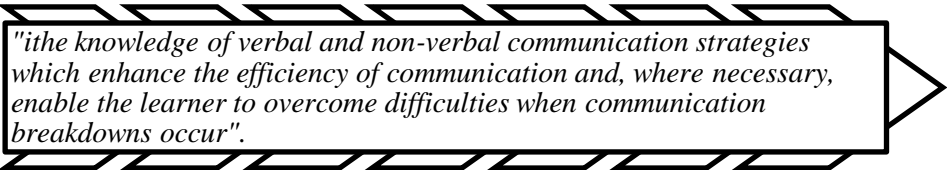
"ithe ability to convey information to listener and correctly interpret information received; it includes the use of communication strategies to solve problems that arise in the process of conveying this information".

Thurrell (1991:17)

"the ability to get one's meaning across successfully to communicative partners, especially when problems arise in the communication process".

Celce-Murcia, et al (1995:7)

"ithe knowledge of verbal and non-verbal communication strategies which enhance the efficiency of communication and, where necessary, enable the learner to overcome difficulties when communication breakdowns occur".

Littlemore & Low (2006:177)

"as a speaker's ability to use strategies to compensate for gaps in their knowledge of the target language".

Figure 1.1: Strategic Competence Definitions

From the perspectives of these scholars, it can be distilled that strategic competence pertains to the ability to effectively communicate one's intended message to partners in communication, especially when complications arise in the communication process. This competence holds relevance for both first language (L1) and second language (L2) use since communication breakdowns can transpire in both. However, given that strategic competence entails strategies for overcoming communication challenges, it assumes paramount importance for foreign language learners. Insufficiency in strategic

competence may account for situations where students possess a strong grasp of grammar and an extensive vocabulary yet encounter difficulties in conveying their communicative intent. In oral language exams, such students might even fail, leaving their educators puzzled. Conversely, some learners can successfully communicate with a limited vocabulary, relying heavily on their strategic competence.

Considering the marvel feature of the human brain, the produced number of words and sentences is infinite. The vocabulary use and acquisition field received further concern with the uprising attention on meaning indoors the inception of the communicative approach (Vemeer 1992, Ellis 1994, Lawson & Hogben 1996). Since this approach is based on communication and prioritizes communicative competence over accurate grammar, vocabulary is considered an indispensable element in conveying a meaningful message.

1.2 Communicative Approach

The Communicative Approach is a prevalent language teaching method that first arose in the early 1970s pioneered by the British linguists Wilkins (1974) in response to the structural methods (Grammar Translation Method and Audio-Lingual Method) and learners' functional demands (Habermas 1970, Hymes 1971). It was developed in response to the need for a more practical and relevant approach to language learning, which would help learners cultivate the ability to use the target language swimmingly in real-life situations. This approach is founded on the belief that the ultimate goal of language learning is not just to acquire knowledge of the language, but to also be able to use it effectively for communication.

It is centered on the use of language in meaningful contexts where activities are designed to encourage students to engage in communicative tasks. It helps to minister students with opportunities to negotiate meanings and develop their overall language proficiency. The approach also places importance on the improvement of the four language skills, namely listening, speaking, reading, and writing, with the purpose of providing learners with opportunities to use these skills in a communicative setting.

Nonetheless, some researchers like Lightbown and Spada (1999) raised concerns about the neglect of language structure and grammar in the implementation of this approach. On the other hand, Swain (1985) has pointed out that the communicative approach can be particularly efficient in promoting the development of productive language skills, such as speaking and writing, through the use of communicative tasks and activities. It also received support from other researchers, including Richards and Rodgers (2001) and Willis and Willis (2007), who argued that it is the most appropriate method for language teaching and has an effective language use in acquiring intercultural communicative skills.

The history and development of the communicative approach, its theoretical foundations, and key principles are crucial to understanding its particularity in language teaching. Furthermore, teachers turn out to be active facilitators of students' learning needs by talking less and listening more (Larsen-Freeman, 1986). By doing so, learners will express themselves much more and successfully convey a comprehensible discourse while they urge to deploy language learning strategies.

1.3 Language Learning Strategies

Language learning strategies are defined as the conscious and deliberate actions individuals take in order to facilitate the acquisition, retention, and utilization of new language knowledge (Oxford, 1990). These strategies play a solemn role in the success of language learning and serve as a medium for learners to maximize their resources, time, and effort. The effective utilization of language learning strategies will contribute to increased levels of self-direction, motivation, and confidence in language learning.

In the following section, the intricacies of language learning strategies are probed. Defining what constitutes a strategy and learning strategy is tackled first, then the specific strategies used in language learning are explored. Oxford's classification of language learning strategies is therewith examined, providing a comprehensive overview of the present various strategies in language learning.

1.3.1 Strategy Definition

Strategies are determined as useful equipment that learners resort to for solving learning problems. As Brown (1987) sustains, *"Strategies are those specific 'attacks' that we make in a given problem"* (ibid: 89). This statement closely matches Gagné's (1965) opinion, since he perceives strategies as specific methods of approaching a problem or a task mode of operating to achieve a particular end.

Ellis (1994), on the other hand, proclaims that the concept of strategy is vague, fuzzy, and not easy to tie down. He suggested a broader definition of strategy by merging simultaneously mental and behavioural activities declaring, "*...a strategy consisted of mental or behavioural activity related to some specific stage in the overall process of language acquisition or language use"* (1994: 529). Therefore, one can say that consciousness, purpose, and goal orientation are essential components in any strategy definition.

1.3.2 Learning Strategy Definition

The concept of learning strategies has received significant attention from researchers and educators in recent years owing to its profound impact on learning outcomes and the overall success of learners once accurately deployed. It has led to the development of various models and structures for understanding learning strategies, each with its peculiar unique perspectives and insights. Rubin (1987) provided a pellucid definition averring that learning strategies are, ''*any set of operations, steps, plans, routines used by the learner to facilitate the obtaining, storage, retrieval and use of information, that is, what learners do to learn and do to regulate their learning''* (ibid: 19).

The ARCS (Attention, Relevance, Confidence, and Satisfaction) model developed by Keller (1987) argues that the effectiveness of a learning strategy depends on four key factors: attention, relevance, confidence, and satisfaction. This model suggests that effective learning strategies should be designed to engage the learner's attention, make the learning relevant and meaningful, foster the learner's confidence, and provide a sense of satisfaction and achievement.

Similarly, the strategy use dimensions (SUD) model developed by Weinstein, Schulte, and Palmer (1987) focuses on the individual differences in strategy use, such as the frequency and variability of strategy use, as well as the metacognitive awareness of strategy use. This model suggests that effective learning strategies should be flexible and adaptive to the place, needs, and goals of individual learners. The bottom line is that *"[e]very learning situation is a unique combination of context and personality"* (Cunningsworth, 1986: 55)

According to Oxford (1990), learning strategies are conscious, deliberate efforts to manage and control one's learning process. She goes further asserting that students who utilize effective strategy will be able to learn independently or autonomously. She states,

> Learning strategies are strategies which contribute to the development of the language system which the learner constructs and affect learning directly. Students who use effective strategies are better able to work outside the classroom by themselves, once the teacher is not around to direct them or provide them with input.
>
> (Oxford, ibid: 09)

On the other hand, Winne and Hadwin (1998) define learning strategies as specific actions or thoughts that learners engage in to regulate their learning. As Cook describes it stating, "*Learning strategy is a choice that the learner makes while learning or using the second language that affects learning*" (2001:126).

Another researcher, Sternberg (2003), highlights that learning strategies could be categorized into three types: memory-based, analytical, and creative strategies. Memory-based strategies focus on the repetition of information, while analytical strategies involve breaking down information into smaller parts to better understand it. Creative strategies, on the other hand, encourage learners to generate new ideas and approaches to learning.

In conclusion, the concept of learning strategies has received extensive attention and research in recent years, with numerous models and frameworks developed to better understand the role and impact of learning strategies on learning outcomes. As language learning is a complex and multi-faceted process, the use of effective strategies is crucial for success.

1.3.3 Language Learning Strategies Definition

Language learning strategies have been the subject of extensive research and investigation in the field of second/foreign language acquisition. These strategies are generally defined as the conscious and deliberate actions that individuals take in order to facilitate their acquisition of a new language. This section is deemed to provide a comprehensive examination of the various definitions and perspectives offered by notable researchers in the language learning strategies arena.

One of the incipient definitions of language learning strategies was provided by Oxford, who defined language learning strategies as *"specific actions, behaviours, steps, or techniques that individuals use to improve their progress in acquiring a second or foreign language"* (1999: 518). This definition highlights the deliberate nature of language learning strategies, emphasizing that they are intentional actions taken by individuals to enhance their language acquisition.

Another prominent researcher in the field of language learning strategies is Rubin (1975), who described these strategies as *"the thoughts and behaviours that individuals use to make sense of new information, retain this information in memory, and use the information in communication"*. This delineation underlines the cognitive and behavioural dimensions of language learning strategies, emphasizing their role in facilitating the mental processes involved in language acquisition. It correlates with Ericsson and Simon's (1993: 357) definition of language learning strategies since they perceive it as *"the specific actions or steps that individuals take to make use of their resources in order to achieve a particular goal"*. It underscores the practical and goal-oriented nature of language learning strategies and their role in facilitating the achievement of specific language-related goals.

Skehan (1998) additionally provided a contemporary perspective on language learning strategies, stating that they are *"the particular thoughts, behaviours, and actions that individuals use to enhance their own development of second language skills"* (ibid: 122). This statement accentuates the individualistic nature of language learning strategies, stressing that they are solely for each individual and might vary depending on personal goals, learning styles, and other factors.

The following sections encompass a more detailed examination of the various language learning strategies, including definitions, categorizations, and empirical evidence supporting their efficiency.

1.3.4 Language Learning Strategies Classification

Numerous researchers endeavoured to convene a coherent classification system for language learning strategies (LLS). Rubin (1981) for instance, categorized LLS into two broad groups, *direct* and *indirect* strategies. The direct strategies break down into six strategies namely clarification/verification, monitoring, memorization, guessing/ inductive, inference/deductive reasoning, and practice. The indirect strategies embody two strategies: creating opportunities for practice and production tricks. Another classification implied by Brown and Palinscar (1982) consists of *metacognitive* and *cognitive* strategies. Infused by this system, O'Malley and Chamot (1990) have added another category named socio-affective strategies.

Nevertheless, an outstanding recognized prominent researcher in the arena of language acquisition is Rebecca Oxford (1990), who established a profoundly comprehensive and complete overview with a hierarchical ordering of language learning strategies which became the basis for the development of the commonly-used Strategy Inventory for Language Learning, or SILL survey (Oxford, 1986, 1990). She identified two main groups of language learning (*direct* and *indirect*) that broke down into six major categories of language learning strategies (cognitive, metacognitive, memory, compensation, affective, and social). Direct strategies are bluntly utilized to learn a target language, and indirect strategies are used indirectly and support learning without involving the target language directly. This classification has been broadly used in language learning inquiry and has been expanded upon in recent years.

The figure below elucidates the interrelationships between the groups (direct and indirect), and the categories:

Memory strategies
(direct)

Cognitive strategies
(direct)

Affective strategies
(indirect)

Compensation
strategies (direct)

Social strategies
(indirect)

Metacognitive
strategies (indirect)
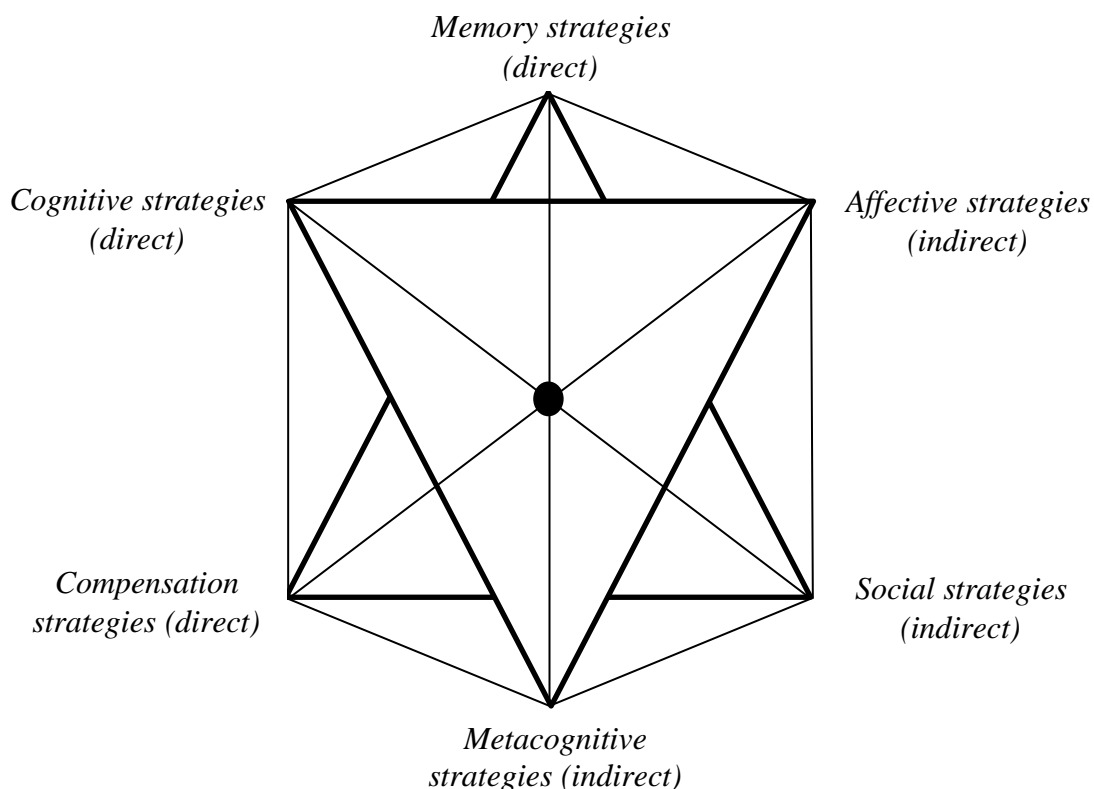
Figure 1.2: Language Learning Strategies Taxonomy (Oxford, 1990:15)

According to Oxford (1990), language learning strategies are behaviours or actions learners use to create active, self-directed involvement and develop communicative competence so that language learning becomes more successful and enjoyable. Hereafter, she classified and defined the categories of language learning strategies as follows:

1. *Cognitive strategies (direct)* enable the learner to use the language material in direct ways, understand, and produce new language by many different means.

2. *Metacognitive strategies (indirect)* are utilized to manage the learning process. They allow learners to control their cognition to coordinate the learning process.

3. *Memory strategies (direct)* help students store and retrieve new information.

4. *Compensation strategies (direct)* allow students to overcome their knowledge gaps to continue communication.

5. *Affective strategies (indirect)* help learners in regulating their emotions, motivation, and attitudes.

6. *Social strategies (indirect)* enable learning through interacting with others and understanding the target culture.

(Oxford, ibid: 09)

Cognitive strategies are a set of deliberate and conscious mental processes that individuals use to process information effectively and efficiently. These tools are used to think, learn, and solve problems. One of the nucleus cognitive strategies is elaboration, which involves elaborating information by linking new gen to existing knowledge. It assists learners in making connections between new information and what they already know, thereby improving comprehension and memory.

Another noteworthy strategy is summarization, which is summarizing information into a shorter form such as a summary or an outline. It endorses the retention of useful data and filter out unnecessary details. The use of mnemonic devices, such as acronyms, songs, or rhyming phrases is another common cognitive strategy. These memory aids strengthen learner's remembrance by using simple, easily recollected associations.

The organization is also a notable cognitive strategy, as it implicates arranging information in a meaningful and logical manner to understand and recall it afterwards more easily. For example, creating an outline, categorizing information, or grouping related information are all effective organizational strategies.

Last, metacognition or thinking about thinking is strategy that consists of being aware of one's thought processes and adjusting them as needed. For instance, learners could use metacognition to assess their understanding of a topic, identify areas that need improvement, and determine the most effective strategies for learning new information.

Succinctly, cognitive strategies play a compulsory role in the ability to think, learn, and process information. By using these strategies productively, learners will improve their memory, comprehension, and problem-solving skills. Understanding and applying these strategies will significantly enhance one's ability to process and retain information.

Metacognitive strategies, on the other hand, are conscious and deliberate mental processes that individuals use to regulate and monitor their learning and thinking.

These strategies help individuals to think about their thinking and adjust their cognitive processes as needed. Planning is a requisite strategy that embroils setting goals and creating a plan for reaching it. It also involves breaking down complex tasks into smaller, more manageable parts and determining the steps required to complete each part. Moreover, it determines the resources and required time to complete an allocated task.

Another imperative metacognitive strategy is monitoring; paying attention to one's thought processes and determining whether they are effective. For example, learners might monitor their understanding of a topic, assess the progress of a task, or reflect on their learning style. It endorses individuals to identify areas that demand improvement and make necessary adjustments. Correspondingly, self-evaluation is evaluating strategy of one's performance and progress. It involves probing questions such as, "What did I do right?" and "How can I do better?" and using the responses to apprise future pursuance.

Finally, the regulation strategy is adjusting one's thinking processes when necessary. It encompasses selecting appropriate strategies, setting goals, and monitoring progress. For instance, if learners are struggling to understand a topic, they ought to adjust their approach by seeking external resources or seeking feedback from others.

Conclusively, metacognitive strategies are nameable for effective learning and problem-solving. Accordingly, using these strategies will regulate learners' can thinking and learning processes, monitor their progress, and make required alterations. Understanding and applying metacognitive strategies would significantly heighten one's ability to learn and preserve information.

While cognitive and metacognitive strategies are both internal and emphasize on the learner's thought processes, socio-affective strategies are external and center on the social and emotional aspects of learning. Socio-affective strategies refer to the social and emotional processes that learners deploy to regulate their deeds and emotions. These strategies are prominent to auspiciously interact with others, cope with stress and adversity, and maintain positive relationships. A series of strategies are selected to be tackled throughout the examination.

First, communication strategy is expressing oneself vividly and heeding to others. It includes both verbal and nonverbal communication and is paramount for constructing and upholding relationships. Effective communication embroils understanding and respecting others' perspectives, as well as being able to clearly articulate one's thoughts and feelings.

A second relevant socio-affective strategy is empathy, which is about understanding and recognizing the emotions and perspectives of others. It helps learners bond affinity, establish positive relationships, and commendably respond to others' claims and reactions. Third, self-regulation strategy is managing emotions and behaviours. It untangles coping with stress and adversity, managing negative vibes, and sustaining a positive appearance. Self-regulation encompasses using techniques such as mindfulness, deep breathing, and visualization to manage pressure and feelings.

Last, collaboration is an essential socio-affective strategy, as it funds working effectively with others to achieve common goals. It entails sharing ideas, compromising, and resolving conflicts in positively and productively. Collaboration also consists of valuing and respecting others' contributions and recognizing the importance of teamwork.

Laconically, socio-affective strategies are pertinent in learner's ability to interact meritoriously with others, uphold positive relationships, and cope with stress and difficulties. Learners will ultimately improve their interpersonal skills, build positive relationships, and have a fulfilling life by resorting to them.

Transcending the differences between these three types of language learning strategies, learners can choose the strategies that are most effective for them and implement them in their language-learning journey. By using a combination of cognitive, metacognitive, and socio-affective strategies, learners maximize their learning potential and achieve their learning goals.

The table below expounds Oxford's taxonomy from *direct* to *indirect* strategies, its categories, subcategories, and set of specific strategies:

Categories	Subcategories	Set of strategies
Memory Strategies	**a.** Creating mental linkage	**1.** Grouning
		2. Associating/Elaborating
		3. Placing new words into a context
	b. Applying images and sounds	**1.** Using imaginary
		2. Semantic mapping
		3. Using key words
		4. Representing sounds in memory.
	c. Reviewing well	**1.** Structured review
	d. Employing action	**1.** Using physical response or sensation
		2. Using mechanical technique
Cognitive Strategies	**a.** Practicing	**1.** Repeating
		2. Formally practicing with sounds and writing systems
		3. Recognizing and using formulas and patterns
		4. Recombining
		5. Practicing naturalistically
	b. Receiving and sending messages	**1.** Getting the idea quickly
		2. Using resources for receiving and sending messages
	c. Analyzing and reasoning	**1.** Reasoning deductively
		2. Analyzing expressions
		3. Analyzing contrastively (across languages)
		4. Translating
		5. Transferring
	d. Creating structure for input and output	**1.** Taking notes
		2. Summarizing
		3. Highlighting
Compensation Strategies	**a.** Guessing intelligently	**1.** Using linguistic clues
		2. Using other clues
	b. Overcoming limitations in speaking and writing	**1.** Switching to the mother tongue
		2. Getting help
		3. Using mime or gestures
		4. Avoiding communication partially of totally
		5. Selecting the topic
		6. Adjusting or approximating the message
		7. Coining words
		8. Using a circumlocution or synonym
		1. Overviewing and lining with already known material

	a. Centering your learning	2. Paying attention
Metacognitive Strategies		3. Delaying speech
	b. Arranging and planning your learning	1. Finding out about language learning
		2. Organizing
		3. Setting goals and objectives
		4. Identifying the purpose of language task (purposeful listening /reading/ speaking/ writing)
		5. Planning your task
		6. Seeking practice opportunities
	c. Evaluating your learning	1. Self-monitoring
		2. Self-evaluating
Affective Strategies	a. Lowering your anxiety	1. Using progressive relaxation, deep breathing, or mediation
		2. Using music
		3. Using laughter
	b. Encouraging yourself	1. Making positive statements
		2. Taking risks wisely
		3. Rewarding yourself
	c. Taking your emotional temperature	1. Listening to your body
		2. Using checklist
		3.Writing a language learning diary
		4. Discussing your feelings with someone else.
Social Strategies	a. Asking questions	1. Asking for clarification or verification
		2. Asking for correction
	b. Cooperating with others	1. Cooperating with peers
		2. Cooperating with proficient users of the new language
	c. Empathizing with others	1. Developing cultural understanding
		2. Becoming aware of others' thoughts and feelings

Table 1.1: Language Learning Strategies Taxonomy (Oxford, 1990:17)

Having a clear understanding of language learning strategies is mandatory to portray vocabulary learning strategies in the overall language acquisition process. While language learning strategies encompass a broad range of approaches used by language learners to develop their language skills, vocabulary learning strategies stress explicitly the acquisition and retention of vocabulary. The next section excavates into vocabulary learning strategies and explores how they fit into the broader context of language learning strategies.

1.4 Vocabulary Learning Strategies

In the field of language learning, vocabulary knowledge is the main component for successful communication and of the essence for language learners. As Zimmerman assigned, *"vocabulary is central to language and of critical importance to the typical language learner''* (1997: 05). This section focuses on the utilized strategies to acquire vocabulary. It begins with smallest chunks first then move through larger units. The definition of vocabulary is primarily presented, then a shift from neglected vocabulary to recognition is explored, and the importance of vocabulary learning is underlined. Finally, the different types of vocabulary learning strategies are deliberated, including direct and indirect methods, the balance between acquiring breadth and depth of vocabulary, intentional and incidental methods as well as productive and receptive skills.

1.4.1 Vocabulary Definition

Vocabulary is defined as a set of words used in a particular language or subject. Likewise, Barcroft, Sunderman, and Schmitt assert that it *"refers to all the words in a language, including single items and phrases which covey a particular meaning"* (2011:571). In the scope of language learning, vocabulary is frequently considered one of the most imperative components of language acquisition.

The study of vocabulary has a long history in linguistic and language teaching research, dating back to the early 20th century. Back in the 1930s, linguists Edward Thorndike and L.L. Thurstone proclaimed that vocabulary size was a key factor in determining language proficiency. Later, in the 1960s and 1970s, vocabulary acquisition was studied within the framework of cognitive psychology, which highlighted the importance of the mental processes intricate in vocabulary learning. In recent years, vocabulary learning has been studied from a more pedagogical perspective, with attention on the strategies and methods that learners use to expand their vocabulary knowledge.

Researchers have debated the preeminent methods for vocabulary learning, and different approaches have been designated. Some researchers argue that intentional vocabulary learning through deliberate study and memorization is the most functional

method, while others recommended incidental vocabulary learning through exposure to the target language in authentic contexts as the finest approach.

Regardless of the deployed method, vocabulary size is an obsolete factor in determining language proficiency, as the large vocabulary array learners acquire the more ingenious they become in language learning. Studies have also been conducted on the relationship between vocabulary size and the four language skills; reading, writing, listening, and speaking, in addition to the distinction between productive and receptive vocabulary learning.

Conferring with Nation (2001), vocabulary knowledge is perceived as the cornerstone of language proficiency. He added that large vocabulary size is decisive in shaping learners' ability to prosperously communicate. Conferring to Cobb (2007), vocabulary is the *"knowledge of words, including word forms, meanings, collocations, and phrases, as well as the knowledge of how words combine to form sentences"* (ibid: 136). He stresses the significance of vocabulary in fruitful interaction and highpoints that vocabulary size is positively related to reading comprehension and writing ability.

Accordingly, Schmitt (2000) argues that vocabulary extent is generally a good standard of language expertise. Equally advocated by Wilkins, *". . . while without grammar very little can be conveyed, without vocabulary nothing can be conveyed"* (1972: 111-112), in which he emphasises the burden of vocabulary in empowering effective language conversation. In order to bring the discussion to a close, vocabulary is part and parcel of language learning though its Cinderella status at the outset.

1.4.2 Vocabulary from Neglect to Recognition

Vocabulary has not always been given the same level of recognition and emphasis in language learning throughout history. It was identified as something that could be learned naturally by simply being exposed to substantial amounts of language through rote memorization of word lists (Nation, 2001), or through reading (Harold B. Allen, 1958). Back in the early days of language teaching, grammar and syntax were the primary focus for researchers, with little attention paid to vocabulary. In the Grammar-Translation Method, which was popular in the 19th and early 20th centuries, students

learned the rules of grammar and emphasized translation for accuracy besides mastering vocabulary range (Earl W. Stevick, 1963).

In contrast, a finite number of scholars advocated the significance of explicit vocabulary learning. Harold Palmer (1921) argued that students could correctly conjugate verbs in all tenses; however, the exclusion of vocabulary will hinder their correct use in a sentence. Furthermore, Charles Fries (1945) criticized the renown of grammar and translation in foreign language learning, which demoted the acquisition of the indubitable language, i.e.; vocabulary.

It was until the 1960s and 1970s researchers began to certify the standing of vocabulary in language learning, where a transition occurred. There was a shift towards a more communicative approach to language teaching, which placed greater emphasis on the development of learners' ability to use language for meaningful communication (McCarthy and Carter, 1994; Nation, 2001; Meara, 2005). Henceforward, vocabulary instruction came to be a central component in this approach (Schmitt, 2000), with a focus on teaching high-frequency vocabulary, vocabulary learning strategies so that learners would become effective communicators (Keith Folse, 2006).

In conclusion, the shift from neglect to recognition of the pivotal position of vocabulary in language learning led to the expansion of innovative approaches to vocabulary acquisition. Nevertheless, it should be accentuated that vocabulary learning is more than studying words individually and is generally measured by the following dimensions.

1.4.3 Vocabulary Learning

Learning vocabulary pervades all areas of communication and comprehension in any target language. Researchers have registered various approaches and methods to facilitate vocabulary learning by offering adequate techniques for better vocabulary retention. The deliberations embrace the multiple learning extensions that might affect vocabulary acquisition. These connotations have to be covered in this subdivision before lodging to vocabulary learning strategies (VLSs). Learning dimensions are

closely discussed; including the distinction between incidental and intentional vocabulary learning, the optimal equilibrium between breadth and depth, direct and indirect, plus receptive and productive learning skills.

1.4.3.1 Incidental Vs. Intentional

According to Tomlinson (1998), language learning is either explicit; where learners are aware of what they are learning and when they are learning it, or implicit; where they are not responsive. Ellis (1994) has identified four hypotheses regarding implicit and explicit vocabulary learning positioned on a spectrum:

1. A strong implicit hypothesis suggests that vocabulary is mainly acquired unconsciously.
2. A weak implicit hypothesis proposes that vocabulary cannot be learned without some level of conscious awareness.
3. A weak explicit hypothesis states that learners are active processors of information and employ a range of strategies to deduce the meaning of words within context.
4. A strong explicit hypothesis argues that metacognitive strategies are essential for vocabulary learning, and the more depth of processing involved, the stronger the learning will be in the long term due to more connections being established between new words and the learner's vocabulary.

Ellis (ibid: 136)

Regarding the acuminated insight, it appears that the first hypothesis of strong implicit vocabulary learning could be more applicable to L1/L2 acquisition during childhood. The second and third hypotheses balance conscious awareness of used strategies and offer a compromise for vocabulary learning. The fourth hypothesis, with its strong emphasis on strategies, might only be suitable for advanced language learners who are familiar with language learning and teaching techniques. As proficiency in a language increases, learners ought to be more conscious of its patterns and usage (Tomlinson 1998). However, beyond a certain level of proficiency, vocabulary progress generally occurs implicitly or incidentally (Carter, 1998). It might appear paradoxical, but advanced language learners habitually possess a conscious understanding of language through their implicit vocabulary evolution.

The denotation of implicit vocabulary learning cannot be marginalized since it has a leading position in word acquisition and does not require explicit teaching. However, it is also acknowledged that learners might expand their vocabulary through self-taught methods like extensive reading. The question arises if instructional intervention could enhance this process and make it more efficient. Reading involves guessing unknown words in context, which could be a slow and error-prone process that does not grant long-term retention (Schmitt & McCarthy, 1997). The consensus is not to replace incidental learning with intentional learning, but to supplement it with intentional learning practices (Hulstijn, Hollander & Greidanus, 1996). There is still much to be explored regarding incidental vocabulary learning (Cook & Singleton, 2014).

The distinction between implicit and explicit language learning has been effusively debated among scholars, where some view it as completely separate processes, while others identify it as complementary. The earliest interpretations of language learning concentrated on explicit teaching, known as the grammar-translation method. Nevertheless, in the course of time, the pendulum amended towards incidental or implicit learning through the communicative approach. Today, the agreement among educators is that an amalgamation of both approaches is effective in language instruction. The present hindrance is finding a suitable manner to implement this combination in the classroom context. According to Rieder (2004), the terms explicit and implicit have inconsistent delineations and usages in literature declaring, *"Inconsistent uses and definitions of the basic terms in literature"* (ibid: 24).

Additionally, Randall (2007) affirms that there is no clear cut between implicit and explicit learning since both have crosscutting roles and could be grasped as complementary rather than opposite. The aggregation of explicit and incidental learning methods has proven to be effective in language acquisition with definite instruction to make patterns more noticeable and easier to acquire (Schmitt & McCarthy, 1997; Sonbul & Schmitt, 2010). The current trend in vocabulary instruction is moving towards a balance between implicit and explicit learning, yet the question of how to best implement it in the classroom still needs to be investigated (Sökmen, Schmitt & McCarthy, 1997).

Schmitt (2000) acclaims that vocabulary acquisition occurs through two processes; explicit learning which focuses on the study of words, and incidental learning which happens through exposure while centering on language use rather than the learning process. However, incidental learning in linguistics refers to a situation where subjects are not informed in advance and will be tested on retention (Hulstijn et al. 2009). For clarity, this dissertation employs the terms 'incidental/implicit' and 'intentional/explicit' interchangeably, with the latter implying direct teaching and strategies use. It is acknowledged that learners cannot solely rely on classroom instruction to acquire all the necessary vocabulary and require more assistance to learn vocabulary independently (Schmitt & McCarthy, 1997). These proclamations arouse discussions on vocabulary self-directed learning.

In language learning, vocabulary presentation is the first stage where a learner is introduced to new items. There are various ways to present vocabulary such as lists of words with translations, grids, visuals, and text. There is a debate on whether vocabulary should be learned in isolation (static approach) or context (dynamic approach). Henceforth, it is believed that both approaches should be taken into consideration due to their imperative impression. The following stages of learning vocabulary are practice and free production with different levels of control and processing involved. The involvement load hypothesis postulates that the bigger the embroilment load, the better the retention. Exercises could be grouped into five categories, from selective attention to production, with a gradual move from form and meaning to appropriate use in context. Furthermore, coursebooks should ideally contain a variety of exercises with different degrees of control. If motivated students still fail in language learning progression, they would assuredly benefit from strategy instruction such as vocabulary learning strategies.

Considering whether the learning is intentional or incidental is one way to categorize vocabulary learning. Intentional learning entails actively seeking out new vocabulary, whereas incidental learning occurs as a side effect of exposure to the language in context as formerly discoursed. Another considerable vocabulary learning dimension is breadth versus depth.

1.4.3.2 Breadth vs. Depth

It is the lexical space utilized to denote the procedure vocabulary is acquired and stored. Some elongations might increase the global number of familiar words, while others concentrate on a deeper understanding of a smaller set of lexis. These two dimensions of vocabulary learning, breadth and depth, interact and influence each other, inducing learners' vocabulary expansion once electing the right aggregated strategies to reach fluency. This triangulation is better demonstrated in Daller, Milton, and Treffers-Daller's graph.
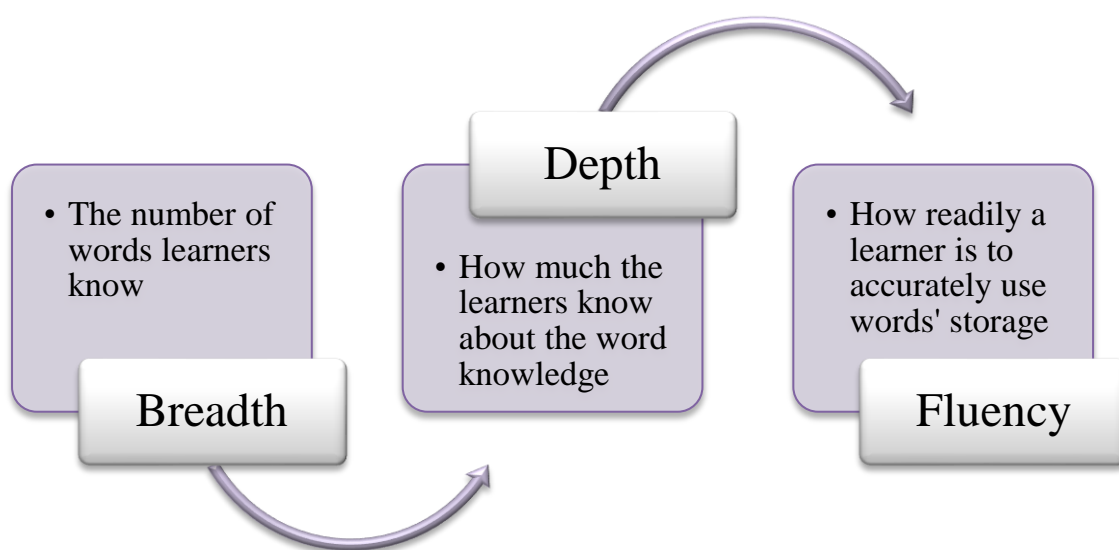
Figure 1.3: Lexical Space (Daller, Milton and Treffers-Daller, 2007: 8)

The breadth represents the number of words learners cognize, regardless of their knowing extent (Milton, 2009). Exploration centers on the size of the English vocabulary, and the table below parades the estimated vocabulary size of English learners according to Schmitt (2000: 142; ibid: 6).

Vocabulary Size Description	Number of Word Familiarities
Basic vocabulary for communication	2000-300
Survival list for simple communication	2000-3000
Minimum for daily conversation	6000
Intermediate level for general understanding	8000-10,000
Advanced level for fluent communication	12,000-16,000
Native-like proficiency	Above 16,000
Professional level in a specific field	20,000-30,000
Total estimated vocabulary size in English	100,000+

Table 1.2: Learner's English Vocabulary Size - Number of Word Families

As displayed in table 1.2, a basic vocabulary size of 2000-3000 word families is sufficient for communication, which is known as *"the threshold where learners can start to learn from context"* (Schmitt & McCarthy, 1997: 11). A survival list (Schmitt, 2000: 142) delivers a foundation for simple communication, likely accompanied by gestures. A minimum of 6000-word families is necessary for daily conversation, and for native-like proficiency, a learner is expected to know over 16,000-word families. It is important to note that each word family includes a headword and several derivatives and inflected forms, making vocabulary learning a challenging task for English learners.

The total estimation of vocabulary in the English language varies seriously. For example, Webster's Third New International Dictionary contains approximately 54,000-word families (Schmitt, 2000: 3). These numbers are not relevant to this research, as neither native speakers nor learners could ever learn all the words in the English language. However, it is central to understand that vocabulary is considered an open system due to its large number, and human memory has limited capacity where mastering this system requires time and effort, in addition to vocabulary's everlasting continuous progression (McCarthy, O'Keefee & Walsh, 2010).

On the other hand, vocabulary depth refers to a wide variety of word characteristics and how much the learners know about the word knowledge. It is elements of referents such as its meaning, pronunciation, grammatical functions, collocations, and connotations (Milton, 2009). The figure below illustrates nine aspects of word knowledge that were identified by Nation (2001).

- Meaning
- Pronunciation
- Form
- Collocation
- Grammar
- Discourse
- Sociolinguistics
- Culture
- Words in Use
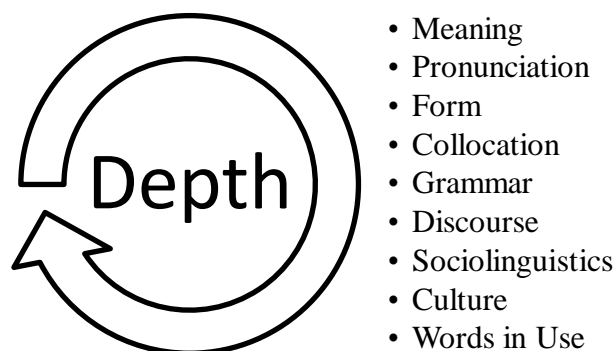
Figure 1.4: Vocabulary Depth (Nation, 2001)

Therefore, vocabulary depth includes a deeper understanding and mastery of a word beyond simply knowing its definition. It implies that words are linked to other lexical items and concepts which will enable learners to choose wisely and well.

Difficulties in learning a new word in language learning are not only related to the quantity of vocabulary but also to the quality of knowledge (vocabulary depth). The amount of effort required to learn a word is referred to as the learning burden. Other factors could affect word learnability, such as morphology, the similarity of lexical forms, pronunciation, orthography, and semantic features of the word. Research has shown that words which are easier to imagine are more readily learnable than those that are not. Regarding the massive number of lexical items and their variations in a language, vocabulary learning could be a significant challenge in TL learning.

1.4.3.3 Direct Vs. Indirect

The term direct vocabulary learning refers to the intentional efforts made by language learners to acquire vocabulary through methods like memorization, repetition, or reading comprehension. Nagy and Anderson (1984); and Nation (1990) have consistently shown that direct instruction is a highly useful scheme for vocabulary

collection. It is largely because it emphasizes a limited number of high-frequency words, allowing learners to have a deep and thorough understanding of these words. This type of instruction typically includes opportunities for learners to practice and use this lexicon in context, besides enhancing their understanding and retention.

Despite the effectiveness of direct instruction, it does have some limitations according to Schmitt (1997), Laufer and Nation (1999). One of the most confronted hurdles is that it can only administer a limited number of words. Furthermore, it typically focuses on high-frequency words, and there is a limit to the number of words that could be taught in this manner. Consequently, learners might not have enough exposure to the target language to acquire additional vocabulary through direct instruction alone.

Researchers and experts in the field of language acquisition have different opinions on the role of direct instruction in vocabulary learning. For instance, James Nation (2001) argues that direct vocabulary learning is compelling for language acquisition as it provides learners with a solid foundation of high-frequency words that are paramount for communication. Besides emphasizing the importance of indirect vocabulary learning in language education, Paul Nation (1990: 3) suggests that learners should have a genuine interest in the language message to facilitate this type of learning. The message should contain vocabulary items that are slightly beyond the learners' current proficiency and vocabulary knowledge, but still comprehensible from the context. Furthermore, he recommends allocating more time to indirect vocabulary learning compared to direct vocabulary learning activities.

Conversely, Paul Meara (2003) claims that direct instruction is only effective in the short term and might not be sufficient for long-term vocabulary acquisition. In his research, Meara found that learners who learned lexis through direct instruction alone were less likely to retain that vocabulary in the long term, compared to those who acquired it through more authentic language exposure.

In deduction, direct vocabulary learning is an effective way of acquiring vocabulary, yet restricted to the number of words that are taught. It requires supplementary exhibition to the target language so that learners would develop a more comprehensive vocabulary learning strategy.

On the other hand, indirect vocabulary learning offers a more flexible approach, allowing learners to acquire a broader range of vocabulary through exposure to the language in context. It occurs when vocabulary is acquired incidentally through conversations, listening, and other forms (Swain and Lapkin, 2000). The advantage of this approach is having an expanded vocabulary array, though acquired lexical items might not be as well-known as those acquired through direct instruction.

Nation (2001) supports the idea that indirect vocabulary learning is a valuable way to build vocabulary in language acquisition. He found that indirect vocabulary acquisition could be just as effective as direct instruction, and, it might be more effective in some cases. It is mostly because learners are exposed to a wider range of vocabulary through indirect methods such as interacting with a mate, and they have the ability to conveniently understand the words being used in context.

However, some researchers contend that while indirect vocabulary acquisition is a valuable way to expand vocabulary, it is not as advantageous as direct instruction in terms of building a deep understanding of vocabulary (Schmitt & McCarthy, 1997). They further proclaimed that direct instruction allows learners to have a complete comprehension of the words being taught, and will likely conserve it longer.

Despite these divergent opinions, researchers acquiesce that both direct and indirect vocabulary acquisition techniques have their strengths and weaknesses, and both are imminent in building vocabulary in a foreign language.

1.4.3.4 Productive Vs. Receptive Skills

The correlation of the four language skills; reading, writing, listening, and speaking with vocabulary learning was extensively studied. Researchers have dissonant settlement on the preeminent approaches to vocabulary learning and the relationship between productive and receptive vocabulary skills.

Productive Skills
- Reading
- Writing

Receptive Skills
- Listening
- Speaking

Figure 1.5: Receptive and Productive Skills

Reading and writing are known as the receptive skills; they are meant to receive and process language input. On the other hand, listening and speaking are known as the productive skills for producing and using language in real-time communication.

a. Vocabulary Learning through Reading

Reading is regarded as an efficient method for language learners to specifically acquire new vocabulary (R. Anderson, 1985), as it exposes diverse contexts and language structures enabling them to have a profound apprehension of word meanings and usage (E.D. Hirsch Jr, 2016). The cosmic majority of studies concerning vocabulary learning through incidental means were mainly centered on reading.

According to synthesis studies conducted by Waring and Takaki (2003), Waring and Nation (2004), it was observed that vocabulary learning improvements through reading vary notably and depend on various factors such as the specific words tested, the methods of measurement, and the type of word knowledge evaluated. Thereupon, they concluded that the use of multiple methods is necessary to have a prevalent word knowledge development from reading. Nation (2006) also stated that extensive reading foster indirect vocabulary learning by providing learners with ample exposure to a variety of words in context. This exposure not only enables learners develop their reading skills but also offers them opportunities to practice different vocabulary

learning strategies.

Correspondingly, Waring and Takaki (2003) investigated the usefulness of vocabulary learning through reading among 15 Japanese university students across five frequency bands using three measures; form recognition, meaning recognition, and meaning recall in an immediate post-test and two delayed post-tests. The results indicated that learners were able to recognize the form of the target words for the majority of the cases, while the recognition and recall of the meaning were relatively lower. Despite the low learning rate at the recall level, it was discovered that the frequency of occurrence of the selected items in the text had a substantial imprint on the results. Words that appeared more frequently had a higher chance of being remembered in form and/or meaning three months later.

Pigada and Schmitt (2006) also conducted a one-month case study on vocabulary learning from graded readers involving a Greek learner of French who read four graded readers containing 113 French target words. Learners were tested on form recall, meaning recall, and grammatical knowledge in pre and post-test interviews. The outcomes revealed that the vocabulary rate improved significantly with the majority of occurred words was encountered in a reading way. More specifically, form recall improved by about a quarter, while meaning recall and grammatical knowledge showed improvement as well with a lower extent. The effect of occurrence frequency on form recall is not entirely discernible, but it appears to be linearly related to meaning recall and grammatical understanding.

Another noteworthy investigation directed by Pellicer-Sánchez and Schmitt (2010) about the effect of reading an authentic novel on advanced English language learners' acquisition of target words from the Nigerian language Ibo. The study concern is students' meaning and form recognition, recall of the meaning and word class. The findings showed that students made considerable progress in all four measures, with the highest rate of improvement being in meaning recognition, followed by form recognition, recall of word class, and meaning recall. The occurrence frequency had a significant result on all measures, with words incurred more than 10 times having a higher recognition rate for meaning and spelling, and recall rate for word class.

In addition, Haastrup (2008) examined the lexical inferencing success of Danish learners of English in their L1 and L2, and compares the performance of three groups of learners. It brought to close that age and educational level have a positive impact on lexical inferencing capability in both languages. The results unveiled that 10th-grade students performed better than 7th-grade students in L1 lexical inferencing, and university students performed better than 10th-grade students in both L1 and L2 lexical inferencing. It also revealed that all groups had lower performance in L2 lexical inferencing compared to L1 and the differences between the groups were statistically significant. These findings inferred that educational level and age are pressing factors in improving lexical inferencing skills in language learners, and could potentially influence incidental learning in other populations.

On the other hand, Elgort and Warren (2014) tested implicit and explicit knowledge of 48 pseudo words inserted in five chapters of a book on economics among 48 international students in pre-university English courses in New Zealand. The conclusions revealed that while there were modest upsurge on the meaning recall test, no stable effects were found using semantic or form priming for implicit knowledge. They concluded that contextual word learning is a slow incremental process and students might take some time to fully acquire new words from reading.

The above outcomes uncovered that reading spawns the acquisition of various forms of word knowledge. The extent of learning depends on the type of measured knowledge stressing meaning recognition and form recognition compared to meaning and form recall. Research has also explored the incidental learning of collocations and lexical inferencing indicating that both L1 and L2 users will positively contribute to vocabulary acquisition, particularly in regards to meaning. The works on lexical inferencing have found that L2 readers ought to guess words from context while reading, pouring to incidental vocabulary learning as shown by minor but noticeable increases in word knowledge, yet not guaranteed (Elgort, 2017; Pulido, 2007; Wesche & Paribakht, 2010). It has also been revealed that prior vocabulary knowledge has an impression on lexical inferencing and word learning. As Haastrup (2008) demonstrated through the effect of cognitive maturity, language proficiency, and

vocabulary knowledge on lexical inferencing success inducing its increase with age and education level.

b. Vocabulary Learning through Writing

The role of writing in vocabulary learning has been widely debated and several studies were conducted to explore the effectiveness of writing activities on vocabulary retention. Writing enables learners to concentrate on the form and meaning which are main elements in vocabulary learning (Nation, 2001). When learners write down the words, they are more likely to concentrate on the form of the words and the way they are used in a memorable context.

In addition, employing new words in writing activities mentor learners' recall and solidify the retention of words' meanings as they have to actively retrieve and steadily use the learned lexicon (Schmitt, 2001). A conspicuous writing-based vocabulary learning strategy is repetition. It provides ample opportunities for learners to repeat the use of new words and phrases in a variety of contexts. Repeated acquaintance to lexical items through writing activities is likely to strengthen learners' word storage. For instance, learners who wrote lexical items multiple times were found to have a better recall of the words than those who only wrote them for a finite phase. Ellis (2008) affirmed that learners who engage in multiple writing exercises using newly encountered words are keen to remember them more effectively.

Comparatively, Han and Park (2010) implemented a think-aloud protocol to generate accurate intuition on deployed participants' strategies while completing the writing task using allocated words. The results showed that learners were able to retain the new acquired words and also employed it in other writing tasks. Besides, it revealed that they exploited a range of strategies to support their vocabulary retention, such as re-reading the words and looking up definitions.

In the meantime, other researchers assessed the productive skills' performance; reading and writing. For example, Koda (2005) compared their effectiveness of to determine the suitable approach for low-frequency and abstract vocabulary acquisition. L2 English learners were assigned a task to write about a given topic including listed

words. The participants' target words recognition and production were then examined. The results showed that writing was more effective for vocabulary acquisition compared to reading. The writing task allowed the participants to actively engage with the learned words, encode their meaning, and form the words more successfully. Moreover, it was found out that writing was particularly beneficial for acquiring low-frequency and subtle words, which are more challenging to learn through reading alone. These findings exposed valuable insight about incorporating writing activities into the language curriculum to enhance students' vocabulary learning outcomes.

Similarly, McCracken and Vogel (2011) examined the role of writing with reading and reading-plus-writing. The English inspected language learners were attributed a collection of words and then participated in three different tasks: reading, writing, and reading-plus-writing. The results showed that writing and the reading-plus-writing group were more beneficial in learning vocabulary compared to the reading group alone. They culminated that the act of writing words and using them in context is valuable for vocabulary acquisition and for learners' lexical consolidation.

Dekeyser (2015) reprised the previous study by dividing participants into three groups: a writing-only group, a reading-only group, and a writing-plus-reading group. The learners in the writing-only group engaged in writing activities, those in the reading-only group immersed in reading activities, and the participants in the writing-plus-reading group dived in both writing and reading activities. It was resolved that the writing-only group highly performed on a vocabulary test than the reading-only group. Furthermore, the writing-plus-reading group performed much better than the writing-only group, inferring that the interaction between writing and reading has a positive outcome on vocabulary acquisition.

Last, Lai and Wang (2018) investigated an analogous study where participants performed three distinct tasks: reading, writing, and writing with feedback. The results revealed that the task of writing with feedback was the most worthwhile. It also elucidated the significance of written output and advantages of providing feedback into the writing chore. Constructive feedback is valuable instruction for language learners and educators alike, as it deciphers the prominence of writing as a learning

tool and the impact that could have on vocabulary acquisition.

c. Vocabulary Learning through Listening

Acquiring new words and phrases through listening to spoken language, such as conversations, lectures, podcasts, audiobooks, or songs, is known as vocabulary learning through listening. This method is highly advantageous as it exposes learners to a broad array of vocabulary in context, thereby facilitating the meaning comprehension and words usage in real-life scenarios (Nation & Newton, 2009).

Studies exploring the effect of listening on vocabulary learning are limited. Therefore, the presented investigations are comparing the words' consolidation through reading and listening.

Waring and Donkaewbua (2008) implemented a study with three groups of Japanese university students who were exposed to the same three stories containing 28 pseudo words in three different ways: reading, listening, and reading while listening. The findings revealed that the listening-only mode was the least effective for recognition and recall, whereas the reading-while-listening mode resulted in the prevalent gains. They concluded that vocabulary acquisition is much more difficult through listening and could be relevant only than combined with reading or reading while listening.

Brown et al. (2008) compared vocabulary learning from reading, listening, and reading-while-listening with Japanese university students. They found that reading-while-listening was highly useful, trailed by reading, and a trivial benefit from listening. It also indicated that retrieving words' knowledge declines more quickly than recognition knowledge. Learners are more likely to recognize a word when they encounter it again rather than actively recalling it from memory. Additionally, the study highlighted the importance of occurrence frequency in vocabulary retention. Words that were encountered more frequently in the reading and reading-while-listening conditions were more easily renowned than the less faced in listening.

Correspondingly, Vidal (2011) compared vocabulary acquisition through reading and listening in an academic context with first-year students in Spain. The results showed that reading had higher outcomes than listening across all dimensions of vocabulary

learning. However, the difference between the two methods decreased with the increase of English proficiency. Frequency of occurrence was found to be the most useful factor for reading, while word parts was more influential for listening. Consequently, learners with higher English proficiency benefit more from listening-based activities and vary depending on the used method.

Van Zeeland and Schmitt (2013) explored the idea of learning vocabulary incidentally while listening to sources that learners might encounter outside of school. Four audio passages taken from TV talk shows, interviews, and a lecture were used and all centering around the theme of crime. To assess the extent of incidental vocabulary acquisition, the researchers replaced 24 target words in the passages with pseudo words. 30 postgraduate students listened to the altered passages and were then tested on their recognition of the lexicon in terms of form, grammar, and meaning recall. 20 participants were tested immediately after the treatment while the remaining 10 were tested two weeks later. The results from the immediate post-test revealed that a portion of the assigned words were acquired, with form recognition being learned best tracked by grammar recognition, whereas meaning recall was only successful for a small percentage. The fallouts from the delayed post-test demonstrated a similar pattern but with inferior scores for form recognition and grammar recognition, with no significant difference in meaning recall between the immediate and delayed post-test.

The enquiry outcomes did not determine a strong relationship between frequency of occurrence and vocabulary learning, but disclosed an impact of concreteness and part of speech on the listed learned words. It supports the conclusions drawn from earlier studies comparing reading and listening, which suggests that while it is unlikely for language learners to solely learn the meaning of new vocabulary through listening; it could be effective in establishing recognition of form level knowledge.

A year later, Van Zeeland (2014) conducted a study exploring the lexical inferencing in vocabulary learning from listening. It included a total 77 postgraduate participants, 47 of whom were native English speakers and 30 were non-native speakers. Learners listened to two passages on familiar and unfamiliar topics that each contained 10 pseudo words. Their ability to infer the meaning of the pseudo words was measured

through a one-on-one interview and a second task where they identified unfamiliar words by pressing a button. It exposed that native English speakers were more successful in learning vocabulary from listening compared to non-native speakers. They performed better when relying on local cues and if having higher background knowledge of the topic. Nevertheless, non-native speakers thinly noticed the target words and made fewer correct inferences when they did realize them.

It could be concluded that although vocabulary learning from listening is less effective than reading, the influence of background knowledge, clue type, and vocabulary size remains consistent in both modes.

d. Vocabulary Learning through Speaking

Speaking is a productive skill that learners could exploit to build up their vocabulary bucket and consolidate the retention of new words (Schmitt, 1997).

Swain's study (1985) investigated the effectiveness of communicative activities as a medium of vocabulary acquisition in comparison to the traditional method of vocabulary study in isolation. The results showed that learners were more likely to retain newly learned lexical items when engaging in communicative exercises. They were able to use afresh assimilated words in context and receive immediate feedback from native speakers. By providing learners with opportunities to practice new retained vocabulary in a communicative setting, they will be able to internalize the words and make them part of their active collection. Furthermore, the immediate feedback received from native speakers enable learners to correct any errors and fine-tune their pronunciation.

In the same token, Lightbown and Spada (1999) examined the impression of incorporating communicative tasks into language instruction to promote vocabulary acquisition. They declared that when learners were given opportunities to use new vocabulary in authentic situations, such as role-plays or simulations, their vocabulary acquisition significantly improved. They noted that this type of language use allow learners to receive immediate feedback and practice vocabulary in a more natural way. Accordingly, MacIntyre and Legault (2006) advocated the use of social interaction to

deepen the processing of vocabulary. By engaging in conversations and debates, learners are suited to apply the lexicon in situational contexts to prevail vocabulary usage and understanding.

From a teaching perspective, Huang and van Patten (2010) performed a study that explored the effectiveness of Task-Based Language Teaching (TBLT) in promoting vocabulary acquisition through speaking. Participants were engaged in various TBLT, such as playacting and impersonation, enquiring them to use new vocabulary in communication where they received instant comment from their peers and teacher. The results disseminated that TBLT was an effective method for vocabulary acquisition that increases learners' motivation and inspire collaborative learning.

The chart below recapitulates the key points deliberated above:

Reading
•Exposure to new words
•Contextual learning
•Strengthening existing vocabulary
•Spelling improvement

Writing
•Practice using collocation
•Encode thoughts into written form
•Vocabulary selection
•Feedback

Listening
•Exposure to different accent
•Encode the meaning of audio string
•Practice pronunciation
•Situational learning

Speaking
•Learn through conversation
•Encode thoughts into oral form
•Inspire collocation
•Prevail vocabulary usage

Figure 1.6: Vocabulary Learning and Language Skills

In conclusion, studies imparted that engaging in communicative activities provides learners with opportunities to use new vocabulary in meaningful and authentic situations, leading to superior vocabulary acquisition (Lightbown & Spada, 1999).

Additionally, the use of technology such as computer-mediated communication was also deemed beneficial by González-Lloret (2003) in promoting learners' vocabulary through speaking, as it allows them to engage naturally in language interaction.

1.4.4 Vocabulary Teaching

Vocabulary teaching represents a cardinal segment of language instruction that endorses word retention in language learning. The process of vocabulary teaching comprises imparting knowledge and skills that enable learners to effectively communicate and comprehend the target language. There is an ongoing debate among researchers about suitable methods for teaching vocabulary, and various approaches have been discussed.

According to Nation (1990), some teachers believe that there is no need to teach vocabulary since it is naturally acquired through exposure to language. They also argue that learners enlarge their vocabulary repertoire in a similar way to native speakers. Moreover, Aalto (1994) points out that vocabulary is frequently overlooked in language learning and teaching, despite the assent that effective communication is unbearable without a sufficient grasp of words. Nonetheless, the teaching of vocabulary has remained stagnant and learning new words frequently encompasses rote memorization of word lists in a behavioristic manner.

According to Nation (2006), promoting learner autonomy to a prosperous vocabulary learning where learners have to take in charge their learning process and be accountable for it, which entails knowing what to learn, how to learn it, and staying motivated throughout the process. Ultimately, learners will inherently apply their acquired vocabulary knowledge in real-life situations. Therefore, language teaching and the actions made by the teacher could promptly effects on the learners' approach towards their language learning.

On the other side, Cook (2001) presented a common approach in vocabulary teaching that prioritizes the teaching of high-frequency words; those words that are most frequently used in the target language. The rationale behind this approach is that learners will benefit more from learning words that they are likely to encounter

regularly, rather than words that are rare or specific to certain contexts. Cook also notes that the definition of high-frequency might fluctuate depending on the learners' needs and ambitions, in addition to the used sources that determine word frequency. Consequently, while the teaching of high-frequency vocabulary is considered a useful starting point, it should be complemented by a more nuanced consideration of the learners' linguistic and communicative requests.

Nonetheless, it might make quite a difference whether teaching is organized in large groups or more individually. According to Willis and Willis (2007), pair work and group work were found to be more effective in promoting deeper vocabulary acquisition compared to individual work. Group activities offer more opportunities for learners to receive feedback from their peers, engage in meaningful conversations, and practice using the vocabulary in context. The social and interactive nature of group work allows learners to experience a greater sense of ease, enthusiasm, and feel more engaged in the learning process.

In conclusion, vocabulary teaching is a complex process that requires the acquisition, retention of words and phrases of a given language. There is an ongoing debate amongst researchers about the most effective methods and approaches for vocabulary teaching. Experts in the field concluded that a balanced approach that takes into account learners' goals, needs, then combines intentional and incidental vocabulary learning is highly recommended.

In the next section, various vocabulary learning strategies that individuals use to support their language learning process are thoroughly discussed.

1.4.5 Vocabulary Learning Strategies Definition

Vocabulary learning strategies are indubitably allied to language learning strategies, as stated by Nation, "*Vocabulary learning strategies are a part of language learning strategies which in turn are a part of general learning strategies''* (2001: 217). Scholars define VLS as techniques or approaches used to facilitate the acquisition and retention of vocabulary knowledge. These strategies include methods such as repetition, elaboration, and organization.

Nagy and Anderson (1984) conducted research on vocabulary acquisition and identified several key strategies, including:

- Word consciousness: being aware of and focusing on the importance of vocabulary knowledge
- Word meanings: acquiring and using word meanings in context
- Word forms: becoming familiar with the forms and structure of words
- Word associations: using associations and connections to remember words
- Word-learning strategies: using a variety of strategies to facilitate vocabulary acquisition and retention

Schmitt (1997) relates the definition of vocabulary learning strategies to learning process. He claims that learning is ''*the process by which information is obtained, stored, retrieved and used… therefore vocabulary learning strategies could be any which affect this broadly defined process"* (ibid: 203). He also deduced through his research on vocabulary learning strategies that more effective strategies have to include:

- Repetition: repeating words and phrases to promote memorization
- Use in context: using new vocabulary in context to promote understanding and retention
- Association with prior knowledge: linking new vocabulary with prior knowledge and experiences to facilitate retention
- Variety of learning activities: using a variety of learning activities to promote retention and recall

Inclusively, vocabulary learning strategies use depends on the goals and needs of the learner, as well as the instructional context. A combination of direct and indirect strategies and a variety of learning activities is often recommended for effective vocabulary acquisition.

1.5 The Importance of Vocabulary Learning strategies

Vocabulary learning strategies refer to the specific useful techniques used by language learners to acquire and retain new lexical items or phrases which correspondingly instigated their performance (Ellis, 1997; Schmitt, 1997). Additionally, Hulstijn (2001) redeemed the importance of vocabulary retention, arguing that vocabulary knowledge is fragile and learners need to use wilful strategies to ensure that newly acquired vocabulary is not repressed. On the other hand, Laufer and Rozovski-Roitblat (2011) identified that learners who used self-initiated vocabulary learning strategies had better vocabulary retention and were more successful in their vocabulary learning compared to those who did not deploy the aforementioned strategies.

Case in point, Al-Jarf's (2009) investigated the effect of explicit vocabulary instruction and VLSs on vocabulary acquisition and retention among second language learners. The study involved 44 intermediate-level students who were divided into two groups: one group received explicit vocabulary instruction with an emphasis on using vocabulary learning strategies, while the other one received only implicit vocabulary instruction without any further instruction. The findings communicated that learners who received explicit vocabulary training and used VLSs outperformed those who did not. The learners in the explicit instruction group also demonstrated higher levels of motivation and engagement with the vocabulary learning process. It concluded that explicit vocabulary instruction combined with the VLSs use is an advantageous approach for enhancing learners' vocabulary acquisition and remembrance.

Similarly, Paul Schmitt and Diane Schmitt (2014) reviewed the effectiveness of vocabulary learning strategies instruction on learners' vocabulary knowledge and reading comprehension in a foreign language context. The results exposed that learners who received VLSs instruction achieved higher vocabulary knowledge and reading comprehension scores than those who were not instructed in such strategies. Furthermore, Zhang (2018) performed an analogous study which involved 60 intermediate-level Chinese EFL learners who were randomly divided into two groups; a control and an experimental group. Whereas the latter received instruction on vocabulary learning strategies, the former did not. The fallouts disclosed that the

learners who received VLSs instruction manifested a substantial headway compared to the ones of the control group. They also demonstrated a higher level of learning autonomy, were able to accurately manage their learning, and apply the strategies they learned to new vocabulary.

In the same matter, Lin and Chen (2019) piloted a study on two inspected groups. The training group received a VLSs training program that included instruction on various strategies such as word cards, guessing from context, and using mnemonics. The control group, on the other hand, received no training and continued with their regular vocabulary learning practices. The results exposed that the experimental learners group had a considerable progression and a positive effect on their attitude towards vocabulary learning.

Thereby, the use of VLSs has fuel efficiency on learners' vocabulary acquisition and impressive yield on vocabulary learning awareness by being more involved and self-directed.

1.6 Taxonomies of Vocabulary Learning Strategies

In the context of vocabulary learning strategies, taxonomies refer to a system of classification or organization that categorizes the strategies used by language learners to acquire new vocabulary. There have been several VLSs taxonomies propounded by researchers in the field of second and foreign language acquisition.

1.6.1 Cohen's Taxonomy

Cohen (1990) developed a taxonomy that classifies vocabulary learning strategies into three groups; word retention, meaning dissolution, and vocabulary rehearsal.

The first category includes the use of rote repetition as well as mnemonic associations, such as linking the word to the sound of a word in the native language or another language being learned, attending to the meaning of the word, noting its structure, visualizing it, or associating it with a situation, a physical sensation, or a keyword. The second category consist of semantic strategies; thinking of synonyms to create a network of interlinked concepts, clustering words by topic group or type of word, and linking the word to the sentence in which it was encountered or to another one.

Last, the third category involves analyzing the word's roots, affixes, and inflections to comprehend its meaning, learning cognates, using a dictionary, flashcards, grouping words, and studying vocabulary cumulatively.

The following charts draw a comprehensive representation of the different categories outlined in Cohen taxonomy (1990) and concrete examples are stated about the way it could be applied in vocabulary acquisition.

CATEGORY 2 SEMANTIC STRATEGIES:

Thinking of synonyms so as to build a network of interlinking concepts

Clustering words by topic group or type of word

•Linking the word to the sentence in which it was found or to another sentence

CATEGORY 3 VOCABULARY LEARNING AND PRACTICING STRATEGIES

Word and Structure Analysis (analyze the word according to its roots, affixes, and inflections as a way to understand its meaning)

The Learning of Cognates (words in two languages which are from the same source)

Using a Dictionary

The Learning of Cognates (words in two languages which are from the same source)

The Use of Flash Cards

Grouping

Cumulative Vocabulary Study

Table 1.3: Cohen's Taxonomy (1990)

Cohen's VLS taxonomy (1990) provides a useful framework to understand language learners' use of strategies to procure vocabulary. It highlights the position of decrypting the word's meaning, consolidating it for retrieve after an elapsed period of time, as well as the impending benefits of using eclectic approaches.

1.6.2 Rubin and Thompson's Taxonomy

Rubin and Thompson (1994) offered a similar taxonomy with a slightly different emphasis. It consists of three categories; direct strategies, mnemonics, and indirect strategies which strengthen the consolidation of words.

The table below delivers a comprehensive representation of the different strategies delineated by Rubin and Thompson (1994) with concrete examples.

Direct strategies
- Put the words and their definitions on individual cards
- Say the words aloud or write them over and over again as they study
- Compose sentences with the words they are studying
- Tape record the words and their definition, if they prefer to learn through the ear
- Color-code words by parts of speech, if they prefer to learn through the eye

Mnemonics
- Use rhyming
- Use alliteration
- Associate words with the physical world
- Associate words with their functions
- Use natural word associations, such as opposites
- Learn classes of words
- Learn related words
- Group words by grammatical class
- Associate words with context.

Indirect strategies
- Read a series of texts on a related topic
- Guess the meaning of words from context
- Break up the word into components

Rubin and Thompson Taxonomy

Table 1.4: Rubin and Thomson's Taxonomy (1994)

The above taxonomy consists of elaboration strategies (forming connections between new vocabulary and existing knowledge), rehearsal strategies (repeating and practicing vocabulary items), organization strategies (grouping words), and metacognitive strategies (using higher-order thinking skills to plan and reflect on vocabulary learning). Results demonstrated that using a combination of different VLSs is more expedient in vocabulary learning instead of relying singly on one type of strategy (Oxford & Nyikos, 1989). Moreover, meta-cognitive strategies are deemed particularly propitious in promoting vocabulary retention and transfer to new contexts (Schmitt, 1997).

1.6.3 Stoffer's Taxonomy

Stoffer (1995) conducted an extensive vocabulary-learning study with foreign language students of Russian, Japanese, German, and Spanish at a major US university. Stoffer developed a questionnaire called the Vocabulary Learning Strategy Inventory (VOLSI) to identify the most frequently utilized vocabulary learning strategies by the participants. The VOLSI questionnaire comprises 53 strategies organized into nine categories.
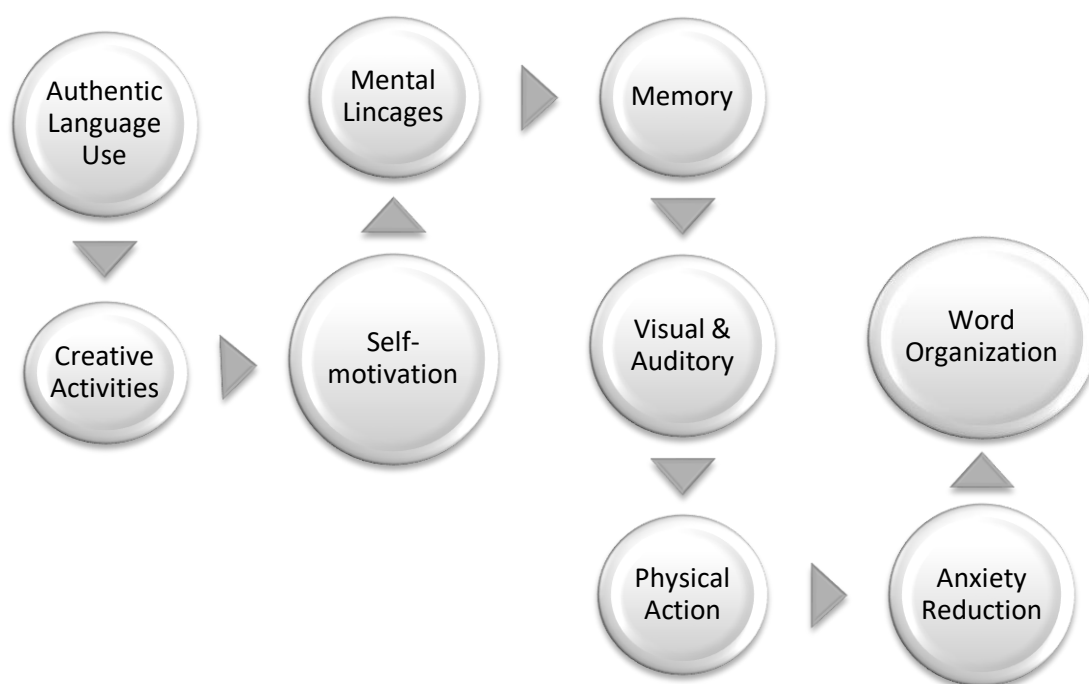
Figure 1.7: Stoffer's VLSs Taxonomy (1995)

Stoffer's VLSs taxonomy (1995) provides a comprehensive delineation to determine the various approaches deployed by language learners while learning vocabulary and approaches the development of vocabulary learning strategies taxonomy from a different perspective by focusing on the nature of the learning process itself.

1.6.4 Gu and Johnson's Taxonomy

Gu and Johnson (1996) investigation concentrated on the relationship between strategies, vocabulary size and language proficiency. They used a questionnaire to study the VLSs of 850 non-English major Chinese students at the University of

Beijing that included a total of 91 vocabulary learning strategies divided into eight dimensions as exposed below.

Dimensions	*Categories*
Beliefs about Vocabulary Learning	- Identify different attributes about vocabulary learning - Ability to learn languages
Metacognitive Regulation	- Selective attention - Self-initiation
Guessing strategies	- Using background knowledge/wider context - Using linguistic cues/immediate context
Dictionary Strategies	- Dictionary strategies for comprehension - Extended dictionary strategies - Looking-up strategies
Note-taking Strategies	- Meaning-oriented note-taking strategies - Usage-oriented note-taking strategies
Rehearsal Strategies	- Using word lists - Oral repetition - Visual repetition
Encoding Strategies	- Association/Elaboration - Imagery - Visual encoding - Auditory encoding - Using word-structure - Semantic encoding - Contextual encoding
Activation Strategies	- Using new words in different contexts - Remembering lists by picturing them In specific locations.

Table 1.5: Gu and Johnson's VLS Dimensions (1996)

The taxonomy consists of four categories of strategies: metacognitive, cognitive, memory, and activation. Metacognitive strategies refer to learners' awareness and their control over vocabulary learning, such as the desire to communicate effectively or the urge for success in a language course. Cognitive strategies are mental attempts to deliberately learn vocabulary, such as using dictionaries, note-taking or guessing. In contrast, memory strategies are used techniques to encrypt, stock, and retrieve lexical items language, such as repetition and encoding the meaning of written or oral string.

Activation strategies involve the stimulation of prior knowledge and connecting new vocabulary with the existing one.
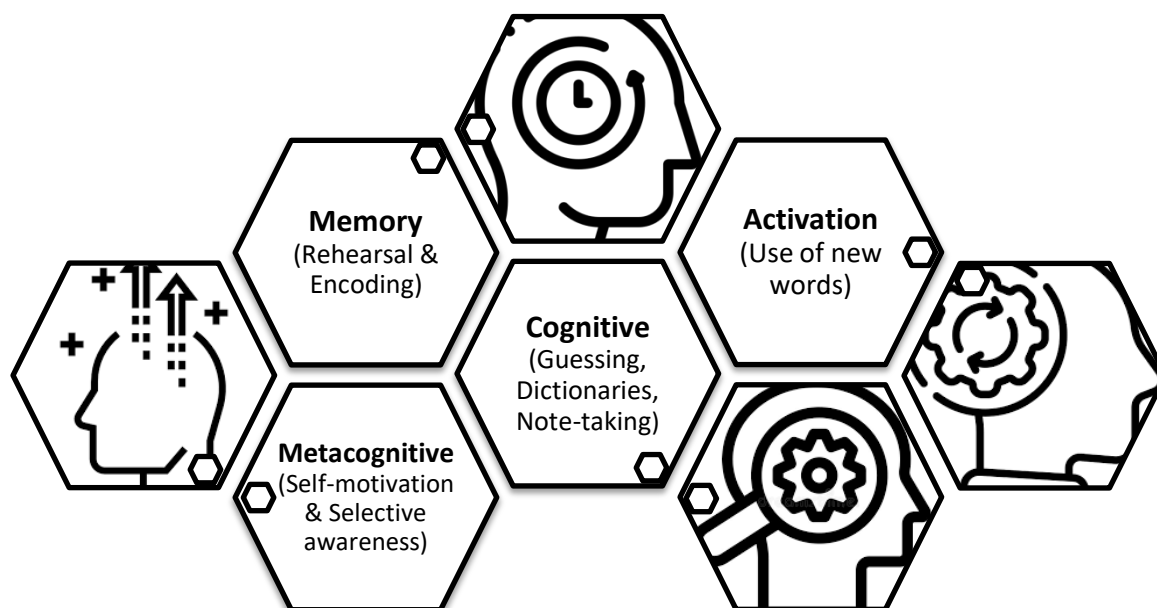
Figure 1.8: Gu and Johnson's VLSs Categories (1996)

Subsequently, the principal objective of Gu and Johnson's (1996) research was the students' attitude towards vocabulary learning, their praised strategies as well as the relationship between the strategy use and learning outcomes in English. By examining the different strategies, they concluded that learners use a wide range of strategies and exposed more insight about English learners' strengths and weaknesses.

1.6.5 Lawson and Hogben's Taxonomy

In 1996, Lawson and Hogben recommended another VLSs taxonomy that consists of six categories; social, affective, memory, cognitive, metacognitive, and compensation.

Social strategies are acquiring vocabulary through social interaction, such as participating in language exchange programs or talking to native speakers. Affective strategies are the emotional aspects of vocabulary acquisition, such as sustaining a positive attitude and enthusiasm. Memory strategies store and retain lexicon, such as repetition and the use of mnemonics. Cognitive strategies are active processing of vocabulary, such as using textual hints or generating mental imageries. Metacognitive strategies implicate self-assessment on one's learning course, such monitoring their

learning pace. Finally, compensation strategies employ outer resources to cover the lack of lexis by using synonyms or opposites.

Repetition	• 1. Reading of related words. • 2. Simple word rehearsal. • 3. Writing word and meaning. • 4. Cumulative Rehearsal. • 5. Testing
Word Feature Analysis	• 6. Spelling • 7. Word Classification • 8. Use of suffixes • 9. Sentence translation
Simple Elaboration	• 10. Simple use of context • 11. Appearance similarity • 12. Sound Link
Complex Elaboration	• 13. Complex use of context • 14. Paraphrase • 15. Mnemonis use

Figure 1.9: Lawson and Hogben's Taxonomy (1996)

Lawson and Hogben's taxonomy deduced that language learners are capable of developing a more well-rounded approach to vocabulary acquisition by using a range of strategies in vocabulary acquisition, as each category addresses different aspects of the learning process.

1.6.6 Nation's Taxonomy

Differently from the above listed VLSs classifications, Nation's taxonomy (2001) does not derive from any research results and is purely based on theory. Besides being practical and easy for learners to comprehend and use, it reduces the complexity by separating aspects of knowing a word from vocabulary learning sources and processes. Additionally, it raises learners' awareness and choices of strategies that they

ought to select in enhancing their vocabulary repertoire. It encompasses three broad categories namely; planning, source, and processes as shown below.

Planning: Choosing where, when, and what to focus on		
- Choosing words - Choosing the aspects of word knowledge - Choosing strategies - Planning repetion	**Source:** Finding information about words - Analying the word - Using context - Consulting a reference source in L1 & L2 - Using parallels in L1 & L2	**Process:** Establishing knowledge - Noticing - Retrieving - Generating
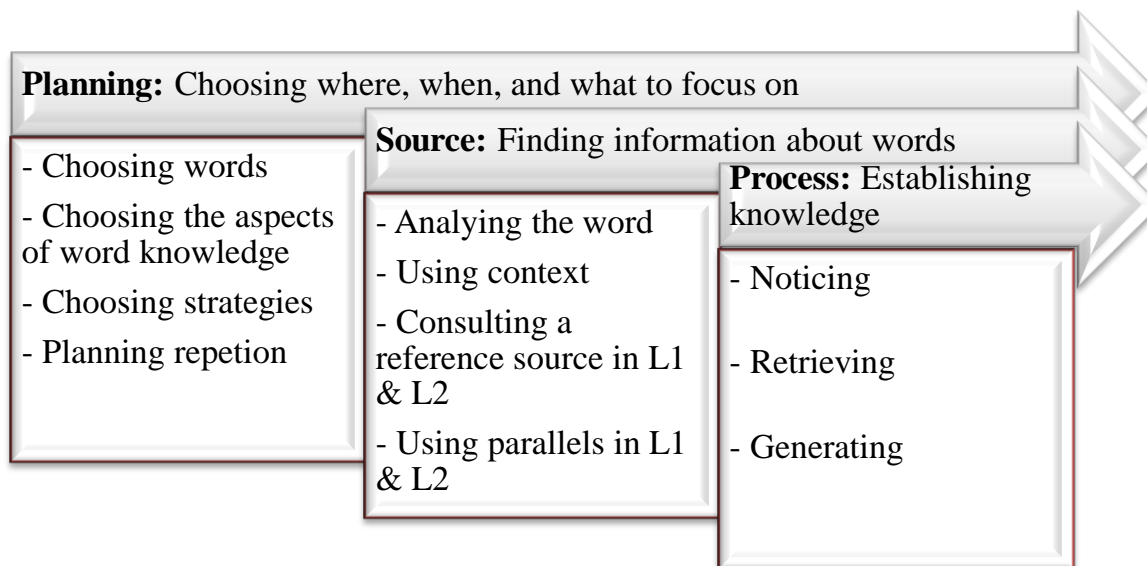
Figure 1.10: Nation's VLSs Categories (2001)

1. *The planning category* involves deciding on where, how, and how often to focus attention on the vocabulary item. O'Malley and Chamot declared, "*Planning is a key metacognitive strategy for second language acquisition…*" (1990: 47).

2. *The source category* entails getting information about the word and comprises four strategies; analysing words, using context, consulting a reference source, and using parallels in L1 and L2. The first two strategies help learners guess the meaning of unfamiliar words. The third strategy involves both animated (e.g. teachers, classmates) and unanimated references such as dictionaries or glossaries. The last strategy implies using the structure and cognate words of L1 to remember the target words.

3. *The process category* includes establishing word knowledge through noticing, retrieving, and generating strategies. Noticing is related to recording strategies such as writing a word down in a notebook, repeating the word orally or visually. Retrieving, on the other hand, is perceived as superior to noticing. It embroils recalling

items met before and that are learned earlier. Meanwhile, generating deals with word analysis, semantic mapping, creating context and collocations.

Furthermore, Nation's taxonomy consists of four categories; direct, indirect, incidental, and intentional. Direct strategies are explicit and conscious attempts to learn vocabulary, such as using dictionaries or memorizing word lists, whereas indirect strategies are implicit learning by being acquainted with the language, such as reading or watching movies. Regarding incidental strategies, it refers to the acquisition of vocabulary that occurs without conscious effort, such as through listening to the learned language. Conversely, Intentional strategies are those tactics that language learners consciously engage in for the purpose of acquiring vocabulary, such as using guessing from context or using vocabulary-rich materials.

Category	Description	Example
Direct	Strategies that involve explicit and conscious attempts to learn vocabulary	Using dictionaries, memorizing word lists
Indirect	Strategies that involve implicit acquisition through exposure to the target language	Reading, watching movies
Incidental	Acquisition of vocabulary that occurs without conscious effort	Listening to the target language
Intentionnel	Strategies consciously engaged in for the purpose of vocabulary acquisition	Using context clues, using vocabulary-rich materials

Table 1.6: Nation's Taxonomy (2001)

In summary, Nation's taxonomy underscores the importance of balanced steps to vocabulary acquisition since each category addresses different aspects of the learning process. By understanding the different types of strategies and the role they play in lexicon learning, language learners would genuinely develop a more inclusive and practical methodology to vocabulary learning.

1.6.7 Intaraprasert's Taxonomy

Intaraprasert (2004) developed an inventory of vocabulary learning strategies in English as a second language (L2) based on self-reported data collected from 133 ESL

students. It included 31 individual strategies classified based on students' specific purpose. These techniques embody the discovery of new vocabulary meaning, storing the significance of newly-learned words, and expansion of vocabulary knowledge as illustrated below.

Discovery Category	- Thai-English dictionary - English-Thai dictionary - English-English dictionary - On-line or electronic dictionary - Guessing the meaning from the context - Asking one's classmate or friend - Asking one's teacher - Asking someone other than one's teacher, classmate or friend - Looking at the word roots, prefixes or suffixes
Retention Category	- Memorizing with or without a word list - Keeping a vocabulary notebook - Grouping words (synonym or antonym) - Associating new words with the already-learned ones - Using new words in writing - Using new words to converse with peers Speaking Thai with English loan-words Keeping words as the computer background Keeping word cards or word charts in one's bedroom - Keeping words as rhymes or songs and Using pictures
Expansion Category	- Listening to a radio - Watching a television - Surfing the Internet - Reading (leaflets, brochures, textbooks or newspapers) - Playing games in English (crossword, or hangman) Practice translating from Thai into English and vice versa - Watching an English-speaking film with Thai-narrated scripts - Attending classes of every module regularly Listening to English songs - Doing extra vocabulary exercises from different sources, e.g. book, or newspapers.

Table 1.7: Intaraprasert's Taxonomy (2004)

Intaraprasert's primary objective in developing the VLSs taxonomy was to provide ESL learners with a scaffold template for understanding and improving their vocabulary acquisition and retention. By categorizing and describing different types of strategies, learners will become more aware of their learning processes and might find what works best for them through exploiting the different strategies. Additionally, Intaraprasert delivered language teachers with certified tools for an elevated teaching that would support students' vocabulary expansion. Inclusively, Intaraprasert's taxonomy empowered ESL learners to take an active role in their own learning and to support teachers in facilitating that process.

1.6.8 Winke and Abbuhl's Taxonomy

Winke and Abbuhl's VLSs taxonomy (2007) accentuates the need for a flexible, heterogeneous approach to vocabulary learning and offered a new tripartite taxonomy: Input-based, output-based, and cognition-based strategies constructed upon Long's (1996) interaction hypothesis.
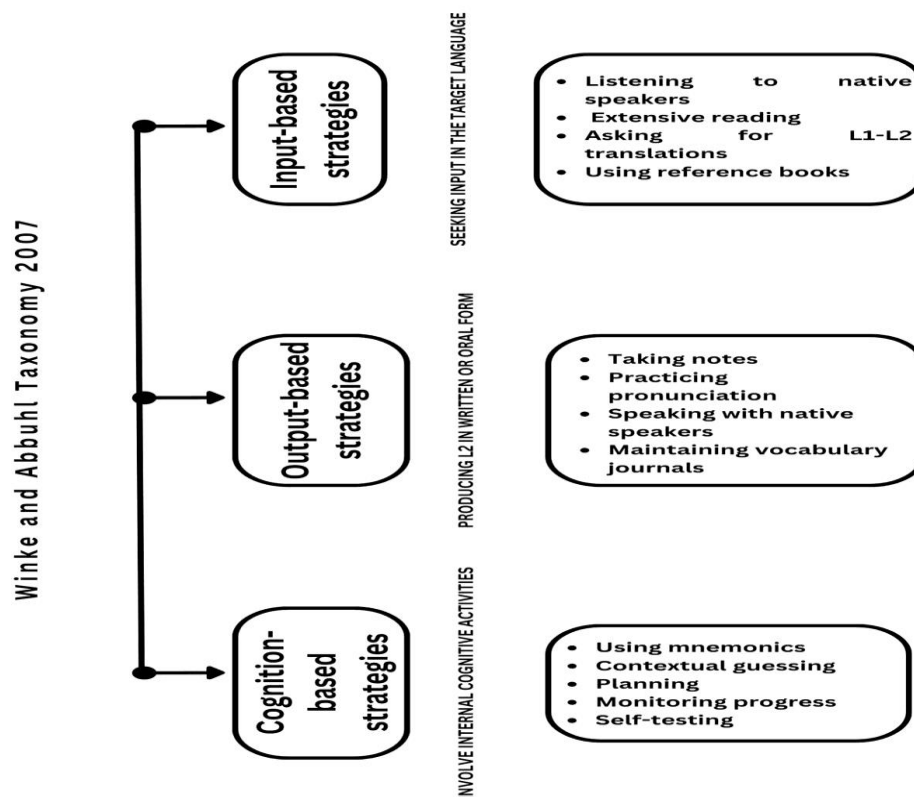
Table 1.8: Winke and Abbuhl's Taxonomy (2007)

In conclusion, the field of vocabulary learning strategies has witnessed a significant amount of research and investigation. Numeral taxonomies have been suggested to categorize and describe the various strategies used by language learners. From Cohen's (1990) taxonomy, to Nation's (2001) and the most recent, Winke and Abbuhl's (2007), each one provides an exclusive perspective on vocabulary learning strategies and enlightens the complexities and nuances of the language acquisition process. With these taxonomies serving as the enquiry's foundation, the next section delves deeper into the detailed types of VLSs that were identified.

1.7 Types of Vocabulary Learning Strategies

Vocabulary Learning Strategies is a subset of language learning strategies which have been studied extensively since the late 1970s. Various researchers have identified and strained to classify the VLSs outnumber types. Some prominent ones have been selected to be defined as each strategy has a specific function and influence according to student's personal approach and the assignment nature.

The present study's types of vocabulary learning strategies are derived from Oxford's (1990) categorization of language learning strategies, which includes direct (memory, cognitive, and compensation) and indirect (metacognitive, affective, and social) strategies. Schmitt (1997) further developed this by identifying vocabulary learning strategies from Oxford's general learning strategies and grouping them into four categories: Social strategies (collaborating with others), Cognitive strategies (language manipulation or transformation), Metacognitive strategies (regulate the learning process), and Memory strategies (linking new words to previously learned knowledge).

1.7.1 Determination Strategies

According to Farouk (2007), the discovery strategy involves both determination and social strategies that aid learners in discovering the meaning of new words when they faced for the first time. Determination strategies, in particular, facilitate the acquisition of knowledge of a new word through four initial options: (i) guessing from a cognate in one's first language, (ii) guessing from context, (iii) using reference materials, or

(iv) asking someone for help. Learners might use the word's part of speech to aid in the guessing process, as noted by Oxford (2003).

1.7.1.1 Translation

The use of translation as a cognitive strategy in language learning entails referencing one's mother tongue to comprehend, remember, and produce the target language (O'Malley at Al, 1985; Prince, 1996; Horwitz, 1998). It is also viewed as a time-saving facilitator in the language learning process for both teachers and learners.

However, Gairns and Redman (1986) affirmed that solely relying on translation to learn vocabulary is not always an effective strategy for learning a foreign language. Additionally, there is no equivalent translation in the learner's mother tongue, as demonstrated in Oxford's example (Oxford, 1990:85) of the words *"beau-frère"* and *"belle-sœur"* in French. Attempting a literal translation would produce *"handsome brother"* and *"beautiful sister",* when the true meaning is "brother-in-law" and "sister-in-law". Moreover, the excessive reliance on one's mother tongue may hinder the development of an independent L2 lexicon, resulting in learners always dependence on their L1 equivalents rather than directly stirring in L2 words (Thornbury, 2002).

Despite its limitations, translation still useful for vocabulary learning once employed genuinely, such as in explaining cultural differences, polysemy, or syntactic structures.

1.7.1.2 Dictionary Use

Using dictionaries as a language learning strategy in a receptive or productive manner primarily enables learners to decode and encode the vocabulary of the target language (Chen, 2008). It is beneficial in assisting comprehension while reading and listening, and improve the production while writing and speaking.

Nation (2001), on the other hand, identified three primary objectives for dictionary use. The first is comprehension (decoding); probing new words met while listening, reading or translating. The second is production (encoding); searching new words for speaking, writing or translating. The third is learning; selecting new words to study. There exist two distinct categories of dictionaries;

Monolingual Dictionaries are designed specifically for learners of a foreign language. They afford definitions and explanations of words in the same language and provide clear, accurate definitions that are easy to grasp. Furthermore, a monolingual dictionary usually includes additional information such as word origin and usage notes. It also offers guidance on grammar, collocation, and pronunciation (Nation & Webb, 2011). Nevertheless, monolingual dictionaries are overwhelming for beginners because of the amount of presented information and their deficient proficiency language level.

Conversely, **bilingual dictionaries** provide words with similar meanings in different languages by translating the word from one language to another. According to Nation and Webb (2011), the bilingual dictionary remains the most commonly used type of dictionaries, and the most often recommended for language learners. It is also used as a reliable resource to confirm meanings of unfamiliar words and to find accurate translations and contextual explanations. Moreover, it provides extensive coverage of a particular language and offers a diversified range of definitions and prearranged examples enabling user to explore the nuances of a word's meaning within a specific cultural or linguistic context. However, a bilingual dictionary might not present a comprehensive variability of meanings for each word. It does not include regional variations in language use, which could be confusing for users in different parts of the world. It also promotes reliance on translations rather than encouraging the development of the user's foreign language skills.

1.7.1.3 Guessing from Context

In the reading process, guessing from context is a prominent strategy that involves inferring the meaning of a word based on its use in a given text. According to Anderson (as cited in O'Malley & Chamot, 1990), guessing is a response to ambiguity in language comprehension, where an individual selects the best possible interpretation of a message based on available information. This strategy is considered notably efficient for developing vocabulary as it qualifies learners to learn the meaning of a word in a natural and efficient way. For instance, providing learners with information about the topic or context of a passage in which an unfamiliar word has been used

could significantly increase their ability to guess the meaning of unacquainted words (Adams, 1982). In addition, Nation (2001) emphasizes the value of the context-based approach, prompting lecturers and learners to devote time and effort to develop their ability to guess the meaning of words from context.

Nagy (1997) suggested three types of knowledge for successful guessing namely, linguistic, world, and strategic knowledge. The Linguistic type is related to students' language proficiency, and higher proficiency instigates a better guessing ability. The world knowledge refers to acquaintance of the topic and its conceptual structure. Finally, the strategic knowledge embroils training students in the skill of guessing from context.

However, several studies have indicated that learners might make incorrect guesses while attempting to infer the meaning of unknown words due to their overreliance on word form (Laufer & Sim, 1985). Laufer identified four factors that make the guessing process of unknown words laborious for students:

> (1) The absence of contextual clues.
> (2) The presence of contextual clues that are not applicable to the unknown words.
> (3) The provision of misleading or incomplete clues that lead to incorrect or general guesses
> (4) The suppression of clues that do not align with the reader's background knowledge of the topic
>
> (Laufer, 1985: 28)

Furthermore, Sökmen (1997) identified several possible drawbacks associated with the guessing strategy; its slow pace which could lead to mistakes and the lack of assurance that newly learned words will be retained in long-term memory. Nation (2001) suggested that training learners to postpone relying on word form cues until after they have utilized contextual cues would be remedial. Additionally, Nation and Coady (1988) presented several steps that students should follow while checking their guesses; ensuring that the part of speech matches the unknown word, analyzing the lexical item's parts to see whether it relates to the guess, substituting the guess for the unfamiliar word to see if it makes sense in context, and consulting a dictionary.

1.7.2 Social Strategies

The social strategy presents another approach where individuals exchange information or confer with a person to uncover the meaning of an unfamiliar word. Cooperative learning has been demonstrated to yield advantages that arouse self-esteem, confidence, enjoyment, accelerate progress, and enhance respect for the teacher, the school, and the subject (Oxford, 1990). A student encountering a new word might likely request an explanation from the teacher or a peer.

1.7.2.1 Asking Teacher

Teachers frequently assume this role in various ways, such as providing the L1 translation, offering a synonym, presenting a paraphrased definition, or using the new word in context. Besides, most students approach their teacher to clarify the meaning of unfamiliar words. It might be favoured over seeking assistance from classmates due to the trust placed in the teacher's knowledge and authority. A student encountering a new word could request a teacher assistance or a peer support, and it is advisable to provide enough contextual information to comprehend the target word (Gairns & Redman, 1986). Among these recourses, L1 translations are particularly advantageous as they are quick, easily comprehensible to students, and enable the transfer of all associated knowledge of the L1 term (e.g., collocations, associations) to the L2 equivalent.

Regarding Martin's analysis (1984), one of the drawbacks of using L1 translations to understand new words is that the teacher ought to be proficient in the learners' native language, which may not always be feasible. Additionally, most translation pairs are not strictly equivalent, which may result in the transfer of incorrect information.

Scholfield (1980) suggests that effective paraphrasing entails comparable levels of complexity as other language learning activities. While the meaning of new words is sought from peers and friends using any of the previously mentioned methods, for the sake of simplicity, the broader category of "asking classmates for meaning" is presented. Furthermore, group activities facilitate the acquisition of new vocabulary items and their meanings, as noted in the same source.

1.7.2.2 Asking Classmate

This approach might entail having a long-term study partner or forming ad hoc small groups. One potential challenge is managing tendencies towards competitiveness and rivalry in such settings (Oxford, 1990). In addition, some English language learners prefer to ask their classmates for help in understanding new concepts for its simplicity and peers string connection compared to teachers.

1.7.2.3 Asking Native Speaker

The term native speaker refers to someone who speaks a language as their first language or mother tongue, particularly in the EFL context. Krashen (1982) asserted that interacting with native speakers is an effective medium of expanding vocabulary. Although it might be difficult to establish this through empirical research, Milton and Meara (1995) discovered that one group of non-native speakers enrolled in a British university acquired an average of 1325 new words every six months, compared to a previous average of 275 assimilated words in their home countries.

1.7.3 Memory Strategies

The classification of memory strategies is generally divided into two categories; rehearsal and encoding. Rehearsal strategies involve repetition, memorization of word lists, and imitation of others' pronunciation of words. On the other hand, encoding strategies entail association, imagery, visual, auditory, semantic, contextual encoding, and word-structure. These strategies relate the newly learned lexicon to previously acquired one through imagery or grouping. Memory strategies, also known as mnemonics, work by creating a retrieval plan during encoding and utilizing both visual and verbal mental imagery. According to Thompson (1987), they operate by utilizing well-known principles of psychology which facilitate faster learning and better recall by aiding the integration of new material into existing cognitive units and providing retrieval cues.

1.7.3.1 Using Images

The acquisition of new words could be facilitated by studying them with images that represent their meanings, instead of using definitions. Research revealed that pairing

second language (L2) words with pictures is more effective than pairing them with their equivalents in the learner's first language (L1). Alternatively, learners create mental images to represent a word's meaning, rather than mere repetition for reading passages and sentences. Personal experiences might also be associated with new words, such as connecting the word "ball" to a memory of playing ground.

1.7.3.2 Linking Words

Similarly, it is possible to connect new vocabulary to L2 words already known by establishing a sense relationship such as coordination (e.g., Necklace and other types of jewellery such as earrings or rings), synonymy (e.g. delighted and thrilled), or antonymy (e.g. happy and sad). According to Aitchison's research (1987) on word association, coordinating vocabulary tends to have particularly strong connections. However, while synonyms share similar meanings, students ought to possess knowledge of the relevant collocations, stylistic nuances, and syntactic variations to apply them effectively in a productive manner.

These sense relationships, comprising hyponymy and meronymy, could be visually represented on semantic maps, which are commonly employed to reinforce vocabulary acquisition (Oxford, 1990). Semantic mapping is further clarified in chapter two.

1.7.4 Cognitive Strategies

The use of cognitive strategies in language learning encompasses guessing strategies, use of dictionaries, and note-taking. Repetition and the use of mechanical aids like word lists, flashcards, and vocabulary notebooks are also part of this category. While similar to memory strategies, cognitive strategies do not solely focus on mental processing and might include the use of repetition and mechanical aids.

1.7.4.1 Repetition

According to O'Malley and Chamot (1990), repeatedly writing or saying a word is a worldwide common cognitive strategy and students might be resistant to trying other strategies due to its familiarity. The process of repeating information could be consolidated in short-term memory and then transferred to long-term memory. This technique is utilized when individuals have to remember records via aural approach or

by noting them down, such as note-taking.

1.7.4.2 Taking Notes

Note-taking permits learners to create their tailored charter for newly learned vocabulary and additional exposure during review. Using study aids such as special vocabulary sections in textbooks and taping L2 labels onto physical objects can also make L2 words more salient. For those who prefer an aural approach to learning, making a tape recording of word lists or vocabulary material and studying by listening is another effective strategy.

1.7.5 Metacognitive Strategies

According to Oxford (1990), metacognitive strategies refer to actions that enable learners to manage their learning using selective attention and self-initiation. Selective attention incorporates recognizing the significance of words that contribute to comprehension. According to Farouk (2007), learners who use self-initiation strategies employ various methods to clarify the meaning of new vocabulary items. Nation's studies (1990) investigated the number of exposures required to learn a new word, varying results were produced ranging from 5 to 16 or more. Therefore, learners have to practice mindfulness to foster selective attention; paying attention to the present moment and being aware of any distractions that might arise. Accordingly, self-initiation refers to learner's initiative practice for seeking out new words, such as learning a certain number of words per week or using new words in writing or speaking exercises.

1.7.5.1 Monitoring

O'Malley and Chamot (1990) defined monitoring as being aware of one's mental processes and bringing them under conscious scrutiny which would promote one's control over them. Monitoring involves setting learning goals and utilizing alternative strategies when the objective is not achieved (Weinstein and Mayer 1986). They also presented evidence that supports the central role monitoring plays in constructive learning and the responsiveness to strategy training. Oxford (1990) reported that learners sometimes have difficulty realistically monitoring their errors, which would

lead to being traumatized by their mistakes, and failing to learn from them.

1.7.5.2 Decision-Making

Schmitt (2000) explained that metacognitive strategies require a deliberate examination of the learning process to determine the most effective approach to plan, monitor, and evaluate one's studying while acquiring vocabulary. In addition, learners ought to make sentient decisions on which words to store considering factors such as frequency of use, relevance to their language goals, and personal interests. They also have to consistently engage with the language and perseverate in learning these words to fortify their remembrance.

1.7.5.3 Assessment

To assess their vocabulary learning advancement in a foreign language, learners could evaluate their improvement in various areas, such as reading speed and comprehension. For instance, they might track their reading pace by timing how long it takes to complete a given text or passage. Learners gauge their progress in terms of increased reading fluency over time and evaluate their comprehension skills by examining their ability to grasp the main ideas, infer meanings, as well as comprehending detailed information within texts. Additionally, learners might appraise their spoken language understanding through the amount of conversation they discern while conversing with native speakers for instance, or by listening to authentic audio resources. This process is known as self-evaluation and could be useful in determining learners' strengths and weaknesses (Oxford, 1990).

Conclusion

Chapter one examined the most relevant theoretical works by introducing the communicative approach first as it galvanizes the vocabulary eruption. A comprehensive overview of language learning strategies was initially discussed stating some major definitions and classifications, primarily Oxford taxonomy. Vocabulary learning strategies were then discussed, eliciting the vocabulary status from being the Cinderella of language learning to having an imminent role in language proficiency.

The definition of vocabulary learning was thoroughly discoursed by shedding light on the different acquisition dimensions; direct vs. indirect, breadth vs. depth, and intentional vs. incidental methods. The correlation between vocabulary learning with productive and receptive skills was also tackled. Henceforth, the importance of vocabulary learning in language acquisition was highlighted. In the end, fundamental vocabulary learning strategies taxonomies and types were explored along with pioneer researchers' previous works. This chapter aimed to provide a sturdy foundation for the second chapter that delves into the main reasons for carrying out this inquiry, research design, and methodological procedure.

Introduction

Chapter two provides a comprehensive overview of the research design and methodology adapted in this study which investigates the variation in vocabulary learning strategies use by EFL students, and its correlation with the gender factor. This chapter encompasses three parts. The first one introduces the major research questions and elicits the main objectives. It presents the population sampling from undergraduate students to university lecturers, the academic program, including English linguistic situation in Algeria and in higher Algerian Education. It also frames the variables affecting vocabulary learning strategies choice in general and gender in particular.

The second part lists the instruments and criteria used in collecting data namely, students' and teachers' questionnaires, classroom observation, think-aloud process, vocabulary levels test, pre-posttest, focus group and vocabulary learning strategies survey. A mixed method was implemented for the corpus. While the qualitative method centers on gathering data from the classroom observation and think-aloud process, the qualitative method collected data from the questionnaires, pre and post vocabulary learning test and survey.

The third part concludes by thoroughly examining the leading theories relied on in this study. These theories are respectively Schmitt's taxonomy (1997, 2000) on vocabulary learning strategies (VLSs), Sanaoui's classification (1995), Clouston's research (1996) on vocabulary approaches, and last Catalán's investigation (2003) on gender.

2.1 Research Questions and Objectives

It is imperative to understand the use and usefulness of vocabulary learning strategies and the related variables while acquiring vocabulary, yet few studies have explored this area among Algerian University students.

Previous researches (section 2.6.3.5) have demonstrated that students with more frequent VLSs use have better chances to become more proficient language learners particularly when it comes to female learners. It raised attention towards students' reaction as they are better performers when engaged in a wider range of strategies, and

the selection of strategies generally depends on the learning tasks. Subsequently, teachers are urged to implicitly present these assortment of strategies for students to optionally select the most suitable to feature their personality and relevant to their education chores. Introducing VLSs is highly significant for undergraduate students, particularly for intermediate learners with low and average foreign language marks. It would be fundamental to motivate and inspire beginners to discover multiple techniques to enrich their vocabulary array and skills in foreign languages and find opportunities to express their thoughts and engage in different topics.

The present research primarily investigates the use and useful of VLSs, the approaches adopted by undergraduate EFL students of Algiers 2 University heeding the gender variable and year of study while answering the following questions:

1. What are the most/least used VLSs by EFL undergraduate students?

   1.1 What are the most/least used VLSs by **first-**year students?
   1.2 What are the most/least used VLSs by **second**-year students?
   1.3 What are the most/least used VLSs by **third-**year students?

2. What are the most and least useful VLSs according to students' perception?

   2.1 Which VLSs do **first-year** students perceive useful?
   2.2 Which VLSs do **second-year** students perceive useful?
   2.3 Which VLSs do **third-year** students perceive useful?

3. Do **male** and **female** students use and perceive as useful the same VLSs?

4. Do EFL undergraduate students resort to different VLSs during their academic cursus from first, second to third-year?

5. Which **approach** do EFL undergraduate students adopt while learning vocabulary?

   5.1 Which approach do first-year students adopt?
   5.2 Which approach do second-year students adopt?
   5.3 Which approach do third-year students adopt?

6. Do **male** and **female** students adopt the **same approach** to learn vocabulary?

Previous language learning experience also plays an essential role in the choice of vocabulary learning strategies used by students. Researchers have found that students who had prior experience with foreign language learning might have a different

approach to vocabulary learning compared to students who are new to the target language learning. For instance, a study conducted by Nguyen (2019) found that students with prior language learning experience were more likely to use a wider range of vocabulary learning strategies, including contextualization, personalization, and the use of technology such as language learning apps. On the other hand, students with little or no prior language learning experience were found to be more reliant on rote memorization and repetition.

Similarly, a study directed by Kim (2021) established that students with prior language learning experience were more likely to be strategic in their approach to vocabulary learning, using a variety of techniques and constantly evaluating their effectiveness. Conversely, learners with limited language learning experience tended to have a more passive approach, relying on exposure to the language through reading and listening. Nevertheless, vocabulary learning strategies are generally implicitly taught in most EFL classes (Oxford & Crookall, 1990). Further, EFL teachers argue that vocabulary acquisition will in fact take care of itself (Krashen, 1987) and there is no need to teach it explicitly or individually. Hence, students are left alone dealing and wandering with the vocabulary learning process.

The principal objective of the present study is, therefore, to determine the most and least exploited vocabulary learning strategies by EFL undergraduate students majoring in English at Algiers 2 University. The study also aims at identifying the most and least useful vocabulary learning strategies according to students' perception. Schmitt's taxonomy (1997, 2000) is the first theory relied on to designate the deployed and practicality of VLSs.

Furthermore, the research elicits the approaches adopted by students while dealing with the vocabulary learning process. Students' approaches are classified according to Sanaoui's classification (1995) and Clouston's research (1996). It ends up by investigating the prospective influence of gender on students' VLSs selections, and then the obtained results are compared to Catalán's investigation. Finally, it explores the differences and similarities between first, second, and third-year students. Ultimately, the findings deliver insights into whether gender and the year of study

have an impression on the selection of vocabulary learning strategies and vocabulary acquisition approach. Nonetheless, it is requisite to denote that the present study targets a limited population of Algerian learners and the obtained results cannot be generalized over all undergraduate EFL students. It does not treat the way language educators and instructional designers should be teaching lexical items, nor how to develop a diverse and flexible set of vocabulary learning strategies that cater students' needs and objectives.

2.2 The Participants Sample

The data collected for this research seeks was generated from two different informants mainly EFL undergraduate students and English university lecturers from the department of English, university of Algiers 2 (Abu elKacem Saàd Allah). Students were invited to fill in the questionnaire, vocabulary test and survey designed for them prior to experiment, and teachers were requested to answer a structured questionnaire. The participants read a standard explanation about guidelines and provided their consent for the collected data to be anonymously used for publications.

2.2.1 Students

The participants in this study were 150 undergraduate EFL students with mixed English proficiency levels from the English department at Algiers 2 University, Algeria. All the students are Algerian, coming from different cities and secondary schools, but share the same academic instructions. Their age range was between 17 to 25 years old, their streams differ from literary to scientific, and their first and second languages are respectively Arabic and French. The population sampling included students of varied abilities who were in the process of learning English for at least seven years, starting from four years in middle school, and three years in high school till their B.A at Algiers 2 University to accomplish their License degree.

The students were selected through a stratified sampling to ensure a representative sample, with a focus on including a diverse group of students in terms of gender variable. The sample group included 50 students from each year of study, with an equal gender representation of 25 female and 25 male students. One of the difficulties

encountered in this study was obtaining feedback from male participants, as they were not as numerous and collaborative as female learners.

In Algeria, the education system is based on the credit hours system (LMD system), which stands for **L**icense-**M**aster-**D**octorate. Undergraduate students usually study a variety of subjects, including mathematics, science, humanities, and social sciences, among others. The number of subjects that students learn each year can vary depending on the university and the program they are enrolled in. However, in general, students are required to earn a certain number of credits each year in order to progress to the next level and eventually graduate.
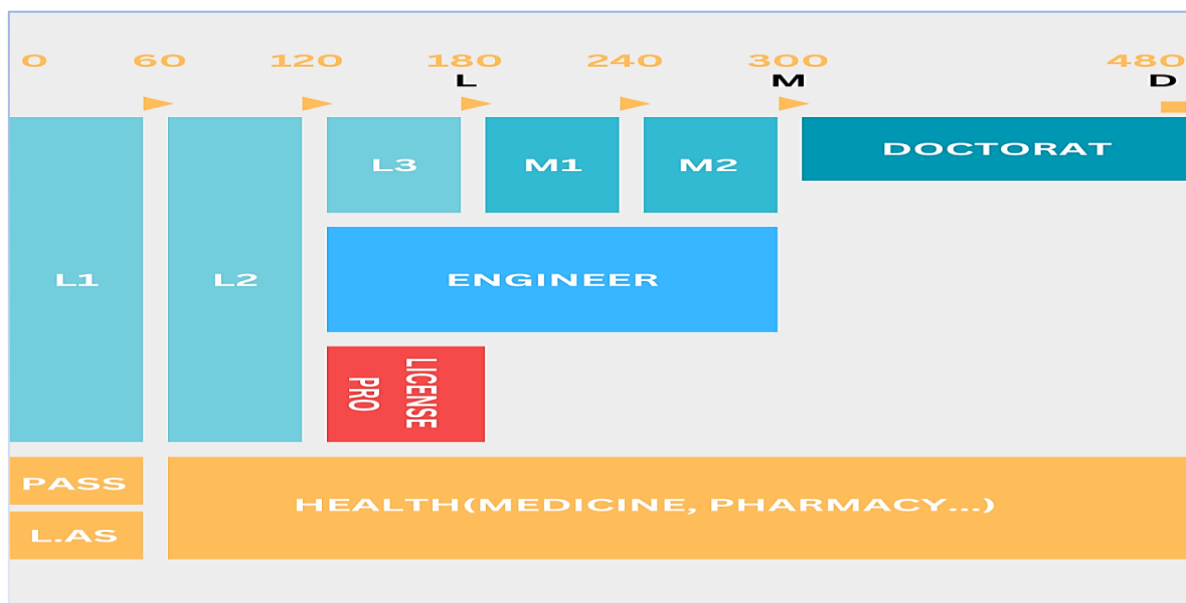
Figure 2.1: Algerian LMD System

As for the coefficient, it is a numerical value assigned to each subject that determines its weight in the final calculation of a student's **G**rade **P**oint **A**verage (GPA). For example, a subject with a coefficient of 4 would be worth four times as much as a subject with a coefficient of 1 in the calculation of the student's GPA.

English major students at Algiers 2 university typically study a wide range of subjects related to language, literature, civilization and communication. The curriculum is designed to provide a solid foundation in the English language, as well as an understanding of the cultural, historical, and literary context of English-speaking countries. The curriculum is designed to promote the development of critical thinking, writing, research skills, and is structured to support students' ongoing growth and

expansion as language learners and scholars. By the end of their studies, English major students are expected to have acquired a high level of proficiency in that language, as well as the skills and knowledge necessary to pursue advanced studies or professional careers in the field.

2.2.1.1 First Year

The first year of the English License program at Algiers2 University is structured into two semesters that covers a range of subjects aiming to deliver students with a strong foundation and a comprehensive understanding of the English language. The curriculum of the first and second semesters comprises identical modules, albeit with different content emphases, in which the modules of the two semesters complement and build upon each other. First year English major students, also referred to as freshmen, have four major units and study a total of 294 hours over the courses of each semester with a 14 weekly classes, earning a total of 30 credits. The program is structured into several units of teaching that are evaluated through continuous assessment and final exams.

The fundamental unit includes three primary subunits, and seven subjects, which cover the use, description, literature and culture of English in various contexts to endorse students become more confident in expressing themselves, develop their critical thinking and communication skills. The first subunit entitled the *use of English* encompasses two subjects; reading/writing, and listening/speaking with the highest amount credits of 10. In the reading and writing subject, students are expected to promote their learning language skills through creative writing, express their opinions, improve their comprehension and increase their knowledge by reading a variety of topics. Listening and speaking subject support students practice their pronunciation, understand and interpret spoken language.

The *description of English* is the second subunit that tackles the basic notions of English language, including grammar, phonetics, and linguistic concepts. This unit value is 8 credits and 4 coefficients. Students should be able to identify different structures of English grammar, make appropriate grammatical choices to express

intended meanings, and produce accurate and appropriate grammatical structures in discourse. Phonetics is about recognizing and producing English speech sounds with accuracy, transcribe words using symbols, and demonstrate awareness of basic aspects of connected speech. The linguistic concepts, which is the third studied subject in FTU2, is concerned about the ideas and theories that form the basis of language study such as syntax, semantics, pragmatics, and discourse analysis. Understanding the previously mentioned concepts ascend students' awareness of how language works and how to use it effectively.

Concerning the third subunit, *literature and culture,* includes two modules on literary genres and Anglophone cultures. It is worth 4 credits and 2 coefficients, both modules have 2 credits and only one coefficient. During the first subject, students will have a good understanding of literary genres such as poetry, short stories, or novels and become acquainted with the different writing styles. They should be able to recognize the characteristics of each genre through the study of literary texts and analyze them using appropriate literary terminology. In the second subject, the cultures that use English as their principal language as the United States or the United Kingdom are discussed. Students will discover the characteristics and developments of Anglophone cultures throughout history and diverse background.

The program, additionally, has a methodology unit that deals with the *study skills* for 4 credits and 1 coefficient. By applying the study skills; time management, note-taking, active listening, and test-taking strategies, first-year students will be fortified with the adequate techniques and strategies to become more successful in their academic pursuits. The discovery unit includes one module as well which is about human science titled *sociology*, assets 2 credits and 1 coefficient. First-year students will understand the human behaviour and social structure. They will examine the way individuals and groups interact, societies are organized, and social changes occur. They will also learn new concepts on sociology that can be used in academic writing to improve the level of texts, particularly scientific texts. Finally, students study *foreign languages* as part of the transversals teaching unit, which is worth 2 credits and 1 coefficient. Learning a foreign language has many benefits, like improving job

prospects and increasing cultural consciousness. The table below demonstrates better all the administered subjects.

Teaching Units	STV	Coefficient	Credit Points
Fundamental Teaching Unit			
FTU1: Use of English			
Subject 1: Reading & Writing	4h30x14	4	6
Subject 2: Listening & Speaking	3hx14	2	4
FTU2: Description of English			
Subject 1: English Grammar	3hx14	2	4
Subject 2: Phonetics	1h30x14	1	2
Subject 3: Linguistic Concepts	1h30x14	1	2
FTU3: Literature & Culture			
Subject 1: Literary Genres	1h30x14	1	2
Subject 2: Anglophone Cultures	1h30x14	1	2
Methodology Teaching Unit			
MTU1: Study Skills			
Subject 1: Study Skills	1h30x14	1	4
Discovery Teaching Unit			
DTU1: Human Science			
Subject: Sociology	1h30x14	1	2
Transversals Teaching Unit			
TTU1: Foreign Language			
Subject: Foreign Language	1h30x14	1	2
Total Semester	**294h**	**15**	**30**

Table 2.1: First Year Semester

In the second semester, first-year students continue to develop their language skills and broaden their knowledge in various areas. They study the same labelled modules with altered syllabus divided into likewise mentioned units of study; fundamentals, methodology, discovery, and transversals unit. The total number of class is also 294 hours, with a total of 30 credits. The evaluation mode for the modules is a combination of continuous assessment, written exams, and practical exams.

The two semesters comprise a total of 588 hours of instruction and study time. The weekly volume of study time for each subject is 1 hour and 30 minutes except for listening/speaking and grammar which is respectively 3h and 4h30 for reading and writing as well. Overall, the first-year of the English License program at Algiers 2 University endeavours an extensive ray of subjects about the English language in

general, literature, and related skills. The customized structure of the syllabus countenances students to develop gradually their skills over the courses of the semester, with each module building on the knowledge and skills gained in the previous one.

2.2.1.2 Second Year

Concerning the second year students, also called sophomores, study the third and fourth semesters which are comprised of 14 weeks of classes each, with a total of 588 hours of tutorials spread across various teaching units. The subjects studied during the two semesters can be divided into four prominent units: fundamentals, methodology, discovery and transversals.

Regarding the fundamental unit, the major one as it embraces six key subjects with 11 coefficients and 20 credits, assessed through the combination of continuous evaluation and final exam. Second-year students are required to study 63 hours of *reading and writing* tutorials with coefficient 4 and 6 credits. Learners will improve their ability to interpret academic texts by using critical reading techniques and accurately utilize the writing steps; prewrite, draft, and revise. The second subject is *listening and speaking*, with a total of 42 hours allocated study time, coefficient 2, 4 credits and an on-going assessment. The two skills are essential for a successful communication since sophomores have to understand and produce relevant instances of discourse.

English grammar is the third subject with similar studying time allocation, coefficient and credits as the later. Learners have to demonstrate the ability to make appropriate grammatical structures and choices to express the intended meanings. The fourth subject is *linguistic theories* with 22.5 hours of lectures, 1 coefficient and 2 credits. The second year students will learn the concepts of modern linguistics, the principles of the main European and American linguistic theories and schools. Finally, *Anglophone literature* and *Anglophone cultures* with 22.5 hours each, coefficient 1 and 2 credits. The former main interest is dealing with the literature evolution and exploring the withstood changes by studying the altered literary movements that appeared in the British and American literatures. The latter, which is culture, explains

the present history in the light of the past one, and endorses students' western civilization acquaintance.

The methodology unit comprises one subject labeled *study skills*, aiming to develop students' academic work skills that are crucial to enhance their understanding of research concepts and differences between specialties. Students will widen their research process knowledge and will have a standing mastery of terminology. The discovery unit has one subject as well designated *initiation to translation.* It introduces students to the basics of translation where they exploit it as an expedient tool for distinguishing between Arabic and English structural and cultural equivalences. Ultimately, the transversals unit stresses the importance of *foreign language* proficiency and *information and communication technology* (ICT) literacy in today's interconnected world by accustoming students with technology in communication.

The fourth semester consists of similar teaching units and the course workload is structured in a weekly manner, with 14 weeks of classes and 294 hours in total. The course credit is calculated based on the number of hours spent in class, independent study, and evaluation methods. The course evaluation is commonly based on continuous assessment, final examination, and other modes as specified in the outlined program. The following table demonstrates in details the studied lectures.

Teaching Units	STV	Coefficient	Credit
Fundamentals Teaching Unit			
Subject 1: Reading & Writing	4h30x14	4	6
Subject 2: Listening & Speaking	03hx14	2	4
Subject 3: English Grammar	03hx14	2	4
Subject 4: Linguistic Theories	01h30x14	1	2
Subject 5: Anglophone Literatures	01h30x14	1	2
Subject 6: Anglophone Cultures	01h30x14	1	2
Methodology Teaching Unit			
Subject: Study Skills	01h30x14	1	4
Discovery Teaching Unit			
Subject: Translation	01h30x14	1	4
Transversals Teaching Unit			
Subject 1: Foreign Language	01h30x14	1	1
Subject 2: Information & Communication Technology (ICT)	01h30x14	1	1
Total	**294h**	**15**	**30**

Table 2.2: Second year Semester

By the end of the second-year course, students are expected to achieve a broad range of learning objectives across the various offered modules. Upon successful completion of the course, they will be able to apply critical reading techniques to interpret academic texts, utilize the steps of the writing process to effectively compose essays in various rhetorical modes. They will also be able to demonstrate their ability to understand connected speech, analyze and evaluate data, produce accurate and relevant discourse in both spoken and written formats.

Furthermore, second-year students will promote effective communication and critical thinking skills, as well as improved their teamwork abilities. Additionally, they will gain a comprehensive understanding of the principles and concepts of English grammar and will be able to make appropriate grammatical choices in discourse. They will also have the ability to differentiate between scientific and pre-scientific study of language and understand the principles of various linguistic theories and schools. In the Anglophone Literatures subject, students will analyze a variety of literary texts in order to illustrate the characteristics of each movement, including Romanticism, the Gothic, Realism, and Naturalism.

Accordingly, the second-year is a challenging and an intensive period of study offering students a deep dive into the complexities of language, and preparing them for the rigors of advanced study in their field. Having completed the first and second years of study, attention is directed towards the final year, which marks the culmination and coronation of the academic program.

2.2.1.3 Third Year

During the fifth semester, the course structure consists of 382 hours and 30 minutes with a total of 16 coefficients and 30 credits, and several units of study namely: fundamental, methodology, discovery, and transversal. Every unit has its bundle of subjects and respective details as demonstrated further down:

Teaching Units	STV	Coeff	Credit
Fundamental Teaching Units			
FTU1: Study of Language			
Subject 1: Sociolinguistics	45h	2	4
Subject 2: Study of Literary Texts	45h	2	4

S5: British & American Literature			
S6: African Literature			
Subject 3: Study of Civilization Texts	45h	2	4
FTU2: Practice of Language			
Subject 1: Written Comprehension & Production	22h30	1	2
Subject 2: Oral Comprehension & Production	22h30	1	2
FTU3: Language & Use			
Subject 1: Introduction to Didactics	22h30	1	2
Subject 2: Introduction to ESP	22h30	1	2
Methodology Unit			
Subject 1: Research Methodology	45h	2	4
Subject 2: ICT	45h	1	2
Discovery Unit			
Subject 1: Cognitive Psychology	22h30	1	2
Subject 2: Translation & Interpreting	22h30	1	1
Transversal Unit			
Subject: Foreign Language	22h30	1	1
Total	**382h30**	**16**	**30**

Table 2.3: Third year Semester

Fundamental Unit consists of three subunits and seven subjects, including study of language (FTU1), practice of language (FTU2), language and use (FTU3) with a total of 12 credits and coefficient 6. During the first FTU, junior students study *sociolinguistics,* literary and civilization texts of British and American era. Each of these subjects has 4 credits and coefficient 2 within 1 hour and 30 minutes of weekly course and tutorial classes. Students are acquainted in the first subject with the principal concepts of language varieties, social factors, and linguistic situations such as bilingualism. The second subject main objective is modernism where juniors are presents to a set of American/British literary works from short story, novel, to poetry. Conversely, the study of *civilization texts* offers a compilation of syllabus that highpoints the structure and organization of British/American societies. Students will have an insight on the industrial revolution, the Victorian period, and the age of Imperialism.

The second FTU consists of two modules; written/oral comprehension and production, carries 4 credits and has a coefficient of 2. The weekly volume of study time for each subject is 1 hour and 30 minutes of tutorials, and the evaluation mode is 50% for

continuous assessment and 50% final exam. Students are expected to build their skills in critical thinking and logical reasoning by reading texts and writing argumentative responses or essays. They will further learn how to discuss issues from opening to closing conversation, turn-taking, focusing on pronunciation, intonation and body language. Presentation skills are imparted as well, facing and informing an audience with clarity, conciseness and eye contact.

The third FTU comprises the introduction to *didactics* and *English for Specific Purposes* (ESP). The weekly volume of time allocation is respectively 1 hour and 30 minutes for lectures with a final exam evaluation and 1 hour and 30 minutes for tutorials with a blended continuous assessment and end term exam. Students are introduced first to traditional and modern teaching methods, then to curriculum development and syllabus design. Furthermore, juniors are initiated to the scope of ESP within ELT, its emergence and course characteristics.

Methodology Unit contains two subjects; *research methodology* with three hours of weekly tutorial sessions, a coefficient of 2 and 4 credits, and *ICT* with 1 hour and 30 minutes for tutorials 2 credits and one coefficient. Students will have to distinguish between research projects and other formal pieces of writing by employing the appropriate offline /online techniques. They will also be able to bring original contributions to the field they are studying through innovative ideas and critical thinking. Information and communication technology subject provides learners with a wide range of digital resources such as online dictionaries, audio and videos supplies.

Discovery Unit consists of two subjects as well; *cognitive psychology* with 1 hour and 30 minutes of lectures and *translation & interpreting* comprising tutorial weekly classes. While the former is solely assessed through a final examination, the latter follows the communal evaluation procedure. Students explore structuralism, functionalism, behaviourism, and memory processes. They also strengthen and deepen the acquired knowledge in the translation theories field.

Transversal Unit covers one subject which is foreign language with 1 credit and coefficient course via Moodle platform and 1 hour and 30 minutes of monthly face to face session. The evaluation method is based on continuous assessment only.

The sixth semester worships the same mechanical program assembly comprising identical units of instruction divided into 15 weekly classes, and concluding with the multiple modes of evaluation.

The **fundamental unit** includes sociolinguistic competence, world Englishes and dialectology. Students will be introduced to African modernist aspects in novels and the socio-historical background. The civilization texts subject bargains discernment on the Monroe Doctrine, slavery, American civil war and industrial revolution. Moreover, juniors will promote their critical writing through brainstorming, outlining, and verbalize their tentative ideas. Didactics will instruct students on lesson planning and classroom management, teaching and assessing the four skills, too. The FTU concludes with conferring the course design process in ESP, needs identification and analysis.

The **methodology unit** emphases the process of re-writing a research paper using quoting, citing, paraphrasing, and avoiding plagiarism. The **discovery unit**, on the other hand, tackles the application of cognitive psychology in the real world, perception, problem solving, and decision making processes. Students will also review literary translation characteristics and practice academic translation through linguistics texts. Lastly, the **transversal unit** embraces the foreign language.

The Algerian academic English program devoted for undergraduate students offer a unique set of subjects that contribute to students' knowledge base and development in their field of study. The first semester provides a strong foundation in the fundamental units, with subjects such as Linguistics and Literature that aim to develop students' consciousness of language and its role in society. The second semester focuses on methodology units, with subjects such as Research Methods that introduce learners to the adequate techniques and appropriate processes involved in conducting an academic research. In the third semester, students are headed to the discovery units, where they are able to apply their acquired knowledge and skills to a Final Project.

The reloaded academic program's progression endeavours students to demonstrate their understanding of the studied subjects and contributes to their professional development. The fourth semester builds on this experience and emphases the

transversal units, with subjects such as ICT and foreign language that broaden students' abilities and acquaintance. During the fifth and sixth semesters, EFL students continue to expand their knowledge in fundamental and methodology units, while enhancing further their expertise in the discovery and transversal units. Through this cursus, undergraduate students have a consensus comprehension of the English language aspects diversity, and buoyantly well-prepared for the professional world.

2.2.2 Teachers

Ten teachers from the English department of Algiers 2 university were kindly requested to take part in the present study by anonymously filling a structured questionnaire. They come from a range of educational backgrounds, different field of research and considerable experience levels. Teachers' diversity teaching techniques and accrued experience provided an affluent pool of data and a substantial acumen to the present study, allowing a thorough examination of the vocabulary learning evolution.

Therefore, teachers' opinions and observations from precedent and continuous interactions with language learners promote the future teachers' attention towards VLSs prominence, and tailor the suitable instructions for the coming years to meet students' needs, raise their autonomy and improve their outcomes.

2.3 English in Algeria

This section provides a comprehensive overview of the research context, by spotting light on the linguistic situation and the role of English in Algeria. The linguistic situation in Algeria is presented first to climax the various languages spoken in the country and its embedded significance. The role of English in Algeria is then explored, examining the importance of the language in education and in the public sphere. This section provides a necessary backdrop to the study, helping to understand the connotation of the research and the context in which it is being conducted.

2.3.1 The Linguistic Situation in Algeria

The linguistic situation in Algeria is complex and multifaceted, reflecting the country's refined cultural rich with its historical heritage. Algeria is a country located in North Africa and has a diverse linguistic landscape, with Arabic being the official language and Berber languages being widely spoken by a significant portion of the population. French is also commonly used, particularly in the fields of education, administration, and commerce.

The Arabic language has a long and illustrious history in Algeria, dating back to the 7th century when the region was conquered by Arab forces. Today, Arabic is the official language of the country and is used in all aspects of daily life, from government and business to religion and education. Berber language, also known as Tamazight comprises several distinct dialects including; Kabyle, Chaouia, and others such as Tagargrent, Tumzabt, and Taznatit. It is indigenous to the region and also locally spoken, particularly in the countryside and among rural communities.

Over the past few years, Tamazight was officially acknowledged as an official language in Algeria, alongside Arabic for several reasons. As reconnoitered by Beloucif (2017), the Berber-speaking communities faced many challenges in Algeria due to the lack of formal recognition of the Berber language leading to the marginalization of these communities. Beloucif argues that the acclamation of Berber as an official language would help to preserve the country's linguistic and cultural heritage and promote greater linguistic diversity in Algeria.

Despite the widespread use of Arabic and Berber languages, French has the upmost significant presence in Algeria. It was introduced to the country during the colonial era and remains broadly used in education, administration, and commerce. The prevalent use of French led to a distinctive linguistic situation in Algeria, with many people being able to speak both French and Arabic fluently.

The linguistic situation in Algeria is a topic that received momentous attention from linguists and researchers. A study conducted by the linguist Bouabdallah (2015) confirms the aforementioned statements, revealing that the linguistic situation mirrors

the country's diverse cultural and historical legacy. In addition to the French language which continues to have a central occurrence in the Algerian territory, Arabic is the official language and the Berber languages are provincially spoken in bucolic areas.

In recent times, there has been a growing interest regarding the English position in Algeria where many researchers explored the emergent importance of the language and its impact on the country's linguistic landscape. Case in point, Bouchareb's conducted study (2019) delivered that English is becoming a progressively prevalent language for Algerians to learn and perceived it as a prized language for young people to acquire as they navigate a rapidly globalizing world.

2.3.2 The Role of English in Algeria

English is a foreign language that plays a crucial role in Algeria, predominantly in the fields of education, business, and international relations. Despite being a non-native language, its usage has expanded significantly in recent years and this growing eminence is due in part to the aggregated globalization of business and trade, as well as the English language status in today's world instigating Algerians to communicate with people from different countries and cultures. The role of English in Algeria could be cognized in various aspects of society, including education, the workplace, and even daily life situations. Studies confirmed that English proficiency enhances employment opportunities and professional development for individuals (Zafar, 2019). As a result, the government placed the English language in Education as a priority by being instructed from primary school to the University level (El Hout and Belabed, 2020).

Furthermore, English became a prevailing language in Algerians' standard of living. It can be heard in shops, cafes, and other public spaces, and many young people in the country are striving to learn the language to access a wider range of international resources, such as movies, books, and websites (Benachour and Benyahia, 2020). Conclusively, the role of English in Algeria is transcending and continues to blossom as the country becomes more open and connected to the global community. The government's emphasis on English education and its pervasive usage in various aspects of society are evidence to the language's increasing prominence in the country

2.3.2.1 English in Education

English is considered one of the most requested foreign languages in Algeria, and its status is highly recognized in the field of education. In recent years, the Algerian government made efforts to integrate English in the three levels of education from primary, middle, to secondary schools where it is taught as a compulsory subject and emphasizes the communicative skills such as speaking, listening, reading, and writing. Henceafter, the government went further by launching the decision of adapting the English language instead of French as the instructional language in Higher Education.

The use of English in education has several benefits for the students. It provides them with the opportunity to communicate with countless people from different cultures, which would extend their perspectives and improve their understanding of the world. Additionally, it is extensively used as a lingua-franca in the global arena, especially in fields of science, technology, and business, making it a golden ticket for students who aspire to pursue careers in those areas.

Aissaoui (2018) deduced that English education in Algeria has a positive impact on students' communicative skills. The directed study involved a sample of high school students in Algeria and concluded that they were able to improve their speaking, listening, reading, and writing skills through the English language education they received.

Despite the determination to integrate English in education, there are several hurdles that hindered its effectiveness. One of the cardinal hurdles is the dearth of native English teachers in schools. The vast majority of Algerian teachers are not native speakers, and their English is hindered by the Algerian accent, while others may not possess the necessary skills to teach the language effectively. Moreover, the teaching methods and materials used in schools may not be up to date, which would result in students not being able to properly acquire the targeted language.

A study conducted by Benoudjit (2020) investigated the current state of English language in the Algerian education and identified the hindrances. It clinched that despite the efforts done by the Algerian government to incorporate the English

language in institutions, there were still several depicted defies in the educational system. The first challenge identified in Benoudjit's research was the scarce of qualified English teachers. Algerian teachers are not native speakers, and they may not have the compulsory skills and training to effectively teach the language. The second reason was the use of outdated teaching methods and materials. Numerous teaching methods and materials applied in schools were not modern and did not sufficiently reflect current best practices in language education. Additionally, there were limited resources available for language learning in Algeria, which would deter the effectiveness of English education in the country. Succinctly, Benoudjit's study (2020) concluded that the Algerian government, educational institutions, and other stakeholders deem to work together to provide the necessary resources and support for language learning.

Amri (2022) suggested that the integration of technology into English language education in Algeria would help to overcome some of these challenges. The researcher resolved that the use of technology, such as online language learning platforms and digital language teaching materials would ominously amplify students' access to resources and support their language learning process. It would also equip students with personalized learning experiences and enables them to interact with native speakers, thereby improving their communicative skills. Additionally, the use of technology would supply teachers with updated tools and resources to effectively teach the language, such as interactive multimedia materials, online assessments, and real-time feedback.

Consequently, the role of English in the Algerian education is significantly sprouting, and its integration in the school curriculum has several benefits for students. However, there are still challenges that need to be resolved to provide students with the necessary resources to acquire the language effectively.

2.3.2.2 English in the Public Sphere

English is acknowledged as a global language and its influence extends any borders and cultures. In many countries, including Algeria, English is increasingly present in

the public sphere, playing a vigorous role in various aspects of life. In Algeria, English is often viewed as a perilous tool for personal and professional development. Many people learn English in order to further their education, careers, or travel opportunities. Consequently, there is a growing demand for English classes and resources, both in schools and outside classrooms. English is used in multiple fields from industries, business to medicine or technology, making it tremendously valuable for individuals seeking fulfillment in their careers.

In the business sector, English is broadly used as a medium of communication between Algerian companies and the international counterparts. The language is also fundamental for Algerian professionals who wish to participate in international business conferences and negotiations, as it is often the transcendent language in business communication. Research suggests that companies that use English as a common language for communication with international corporations have a competitive advantage in the global market (Alam, 2018).

Nevertheless, despite its position, the acquisition of English vocabulary beyond the walls of classroom is very challenging. In the public sphere, learners face numerous factors that influence their vocabulary learning, including the level of exposure to the language, the availability of resources and materials, their motivation and attitudes towards learning. For example, those who live in provinces with limited access to English language resources, such as books, media, or internet, will have more difficulties acquiring new vocabulary compared to those who live in big cities with abundant resources. Additionally, learners who have low motivation to learn English or a negative attitude towards the language may struggle to retain new words.

Subsequently, English language learning is not restricted to the traditional classroom setting and might takes place in various contexts beyond the school environment. The public sphere provides ample opportunities for English language exposure, interaction, and practice for language learners.

2.4 Type of Research

The current study is experimental in a general sense and quasi-experimental in particular as it delves into the pre and post-test design. It measures the dependant variable (i.e VLS) for both experimental and control group before and after the intervention. As defined by the physicist Planck, *"An experiment is a question which science poses to Nature, and its recording answer is measurement"* (1949: 110). It comprises the manipulation of one or more independent variables to measure the consequence on the dependent ones. It represents the most valid scientific method to the solution of educational problems by being both practical and theoretical, and to the advancement of education as a science (John Stuart Mill, 19th). Further, it could be used to test theories, identify the underlying causes of social phenomena and help researchers to draw more unambiguous conclusions as to causal relationship between two variables (Marshall and Torgerson, 2006).

The present research is consequently a quasi-experimental study that focuses on vocabulary learning strategies use, usefulness and the intervention of gender and year of study. Therefore, to lay out the circumstances presence and logical results connection of the two variables, the following hypotheses were spawned from previous studies to be tested:

1. It is expected that the most deployed VLSs that EFL undergraduate students resort to is dictionary use and the least used is interacting with native speakers.

2. It is predicted that connecting words to personal experience is perceived as highly useful by undergraduate students, and verbal/written repetition is the least supposed useful.

3. It is presumed that male and female students use and perceive as useful the same VLSs.

4. There is a significant difference in use and usefulness between first, second, and third-year students.

5. It is forecasted that the majority of EFL learners adopt the structured approach to enlarge their vocabulary repertoire.

6. Female students are more likely to be organized compared to male participants.

The study incorporated a mixed-method design that combines both quantitative and qualitative approaches to be complementary, reduce errors and identify best the suggested hypotheses. Johnson and Onwuegbuzie (2004) define mixed-method research as *"the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study"* (ibid:17). As a result, mixed method approach would deliver detailed information and in-depth understanding of students' VLSs practices about Academic Learning (AL). This approach not only endorsed to explore the statistical trends and patterns but also the rich narratives and personal perspectives of the participants.

2.5 The Corpus

The frame time devoted to collect sufficient data and forecast a detailed and in-depth analysis for this study was approximately three years, from Oct 2016 till 2019. The data collection process involved administering questionnaires for students and teachers, a classroom observation, a vocabulary levels test, pre-post test, focus group, a think-aloud protocol, and a vocabulary survey. The targeted number of participants remained at 150, selected based on stratified sampling criteria ensuing ethical protocols. Scheduling the instruments used at a convenient time was a priority for students as it is the core concern and compulsory for teachers. The abundant collected data was then analyzed holistically and inductively, taking the participants' perspectives into account and considering any emergent patterns, issues, or themes related to the research questions.

The data collection initiated with students by administrating a close-ended questionnaire and a structured vocabulary survey which were individually completed either on or off campus. The questionnaire prompted general information about the participants' personal profile, linguistic background, attitudes, and vocabulary learning experience. It was trailed by classroom observations, a vocabulary level test and task session, where the participants had to endeavour an oral/written activity designed to

assess their vocabulary acquisition and refill the vocabulary test to monitor their learning strategies practice. A think aloud process deemed compulsory to endorse the participants' results.

Finally, supplementary data was collected through the teachers' responses to a structured questionnaire. The obtained records were additional insight to the students' vocabulary learning process. The combination of these data collection methods fortifies findings credibility, engenders a comprehensive understanding of the phenomenon of vocabulary learning process and unveils any gender differences.

2.5.1 The Questionnaires

A questionnaire is perceived as a far piece to track respondents' viewpoint (Brace, 2004). Besides making questions engaging and varied, it aims at gaining insight into the opinions, attitudes and behaviour of a specific population (Nation, 1997). In this study, the questionnaire is used as the first step of data collection because it is amenable to analysis and minimizes bias in formulating and asking questions.

Considering the entangled relationship mutual sharing between students and teachers at the level of language learning, two questionnaires were designed: students' questionnaire and teachers' questionnaire.

2.5.1.1 Students' Questionnaire

The structured questionnaire (appendix n°1) was designed to gather information about the students' background, language learning experiences, and their perception of the vocabulary learning strategies they use. The questionnaire consisted of a series of 22 structured and closed-ended questions that was administered to 150 participants. No open question was quested to avoid any eccentricity and misunderstanding.

The questionnaire comprises three sections with dichotomous questions for necessary validation answers with a checkbox system. The first section dealt with learners' background and generated general information. It included three questions, from their duration of English study, motives for majoring in English to their feeling once in tub. The second section had six questions about students' attitude towards English. It

measured student's opinion about English prominence, their level of proficiency, and depicted the most relevant components to ensure an effective communication. The third and last section entitled students' attitude towards vocabulary leaning included six questions as well centring over the process of lexical items acquisition and students' perceptions regarding VLSs. It also scrutinized students' classroom interaction pace.

2.5.1.2 Teachers' Questionnaire

The second questionnaire (appendix n°2) was randomly dispensed to ten EFL teachers from the Department of English at Algiers 2 University to get levered insight and further comprehension on learners' use of VLSs and gender correlation. The questionnaire is composed of three sections with 20 closed-ended and open-ended questions in order to get a broader array of responses and teachers would genuinely express their opinions and share their valuable experiences.

The first section enquired about teachers' background teaching experience. It aimed at knowing teachers' academic qualification, job title position, their teaching year, experience, and the subjects taught.

The second section investigated teachers' opinion towards vocabulary. From teachers' perspective, question six aimed at knowing the importance of vocabulary to undergraduate EFL learners, and question seven assessed students' vocabulary level. The eighth question reconnoitred whether instigating new lexical items was teachers' concern. Question nine pored over the role of motivation and self-esteem in prompting students' vocabulary acquisition, then finally approving whether English resources availability beyond the classroom walls would be advantageous.

The third section inquiries about teaching methodology and strategy use which contains five closed-ended questions following the checkbox scaled-responses, and five polar questions *(yes* or *no* answer).

❖ Question eleven examined the administration of new lexical items during classroom courses to support students' vocabulary acquisition.

❖ Question twelve uncovered whether the instructors devoted time to explain unfamiliar items.

❖ Question thirteen investigated whether teachers deliberately instruct VLSs.

❖ Questions fourteen dived into teachers' techniques in incorporating vocabulary learning tasks.

❖ Question fifteen inspected the consistency of students' participation.

❖ Question sixteen revealed the principal motives behind students' interaction.

❖ Question seventeen probed teachers' vocabulary assessment procedure.

❖ Question eighteen listed the dominant VLSs according to teachers' perception.

❖ Question nineteen explored whether male and female students had significant differences in English vocabulary use.

❖ Question twenty surveyed whether first, second, and third year students resorted to the same amount of VLSs

2.5.2 Classroom Observation

Classroom observation (appendix n°3) or systematic observation is a popular approach in studying language use and classroom events. The aim is to gather data and information without interfering with the natural flow of events. It is considered as a traditional method of data collection in which the situation of interest is scrutinized and the relevant behaviours, actions and facts are verbatim (Lake, 2011). The method is frequently used in linguistic and educational research to study language use and classroom activities.

According to Richards et al. (1992), observation is an effective medium of collecting data on subjects such as culture and lifestyle, as seen in the study of hill-tribe ways of life. Direct observation in the classroom is beneficial because the researcher can directly observe and gather data on various factors, without having to rely on verbal reports from language learners. This directness, as noted by Robson (2002), provides a clear view of the facts during the situation being studied.

Classroom observation is also recognized for its ease of use and ability to be conducted both formally and informally, as per Oxford and Burry-Stock (1995). However, Cohen and Aphek (1981) contend that observation may not be the most

productive method, as it fails to provide much insight into the learning strategies employed by students. It spotlights researchers' attention on the strengths and limitations of observational methods and promotes combined methods employment, if necessary, to obtain a comprehensive understanding of the subject being studied.

The grid below was utterly employed to accurately track the targeted evident points using validated answers **F.E**, **S.E**, and **St.E** for *'few evidence', 'some evidence', 'strong evidence'*, plus the comments section.

Identification data

Date & Time	Disciplinary field	Year, Cycle of study

Teacher Performance & Commitment

	F.E	S.E	St.E	Comments
Communication skills (accuracy, articulation & proficiency)				
Behaviour engagement				
VLSs instructions				
Use of ICT materials				
Vocabulary time management				
Focus on students				

Students' Behaviour, Engagement, & Attitudes

Commitment	F.E	S.E	St.E	Comments
Participation rate				
Initiative (engaging, making questions)				
Active vocabulary				
Use of VLSs				
Gender interference				

Table 2.4: Observation grid

In a nutshell, observational methods are valuable tools for data collection in language and educational research. The directness of the data collected has the ability to observe events and behaviours as they occur make it an effective approach. However, it is important to consider the limitations of this method and to employ a combination of methods, if necessary, to obtain a more comprehensive understanding of the subject being studied.

2.5.3 Vocabulary Levels Test

In addition to what was observed and the administered questionnaires, a vocabulary levels test (appendix n°4) was conducted. A test is a means of trial intended to measure one's ability and knowledge in a given area (Seliger & Shohamy, 1989: 176). From a testing standpoint, several researchers such as Schmitt (2000) and Nation (2001) tried to develop efficient techniques of measuring vocabulary learning.

In the present study, Nation standardized vocabulary levels test (2001) was selected to be used since it assesses learners' vocabulary knowledge at several frequency levels (1,000; 2,000 and 3,000 levels). Furthermore, it estimates how many words learners know and how well those words are known, as Nation asserted, *"the original purpose of this test is to indicate whether high-frequency words have been learned as well as measuring the low-frequency words learning"* (ibid: 21).

The test originally included 140 items and determines the learners' vocabulary size in a range of 0 to 14000. Every lexical item in the test was attributed a score value of 100. In this study, each item receives a score value of 1 instead of 100. However, it is important to mention that Nation's test has been redrafted and reduced in this research. The 1,000 level which is in a different format was not included in this test as the designed questions were for beginner learners and the investigated participants have a higher level. The 2,000 and 3,000 levels questions were also restrained, because students discarded it when administering it for the first time due to its lengthened size. The designated words employed in this present test were meticulously selected in terms of occurrence in classes and students' familiarities.

Nation's test was based on a stratified sampling considering the year of study and gender. It was handed out to 150 students, from Oct 2016 to Feb 2019 terms. The students were presented with five series of sentences; each had groups of six words, three of which have to be matched to their definitions.

The following figure is an illustrated sample from the conducted level test:

```
1 business
2 clock     _____ part of a house
3 horse     _____ animal with four legs
4 pencil    _____ something used for writing
5 shoe
6 walls
```
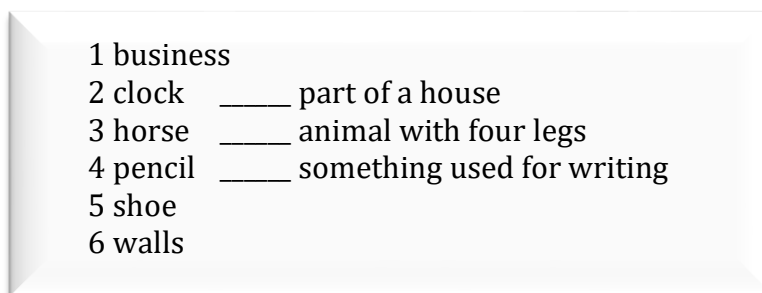
Figure 2.2: A Sample of Nation's Vocabulary Levels Test (2001)

The vocabulary levels test was used to assess the students' vocabulary size and their ability to use vocabulary in context. The test consisted of a series of sentences that was administered to 75 male and 75 female participants. The outcomes derived from the test were not only used to measure the students' vocabulary acquisition but also compared the effectiveness of the vocabulary learning strategies used by the two formed groups (control vs experimental) of students.

2.5.4 Pre and Post Test

Pre-test and *post-test* designs are the most advocated method to measure and compare the degree of change in the selected group. The purpose of this tool is to provide extra empirical data about the correlation of gender and study year when using vocabulary learning strategies and EFL learners' final achievement. For a laminar comprehension, two groups (control versus experimental) were created. In order to ensure a balanced representation of gender, equal numerical depiction of males and females, with 25 of each, was achieved in both groups.

The control group served as a baseline or reference for comparison to the experimental group. While the first group did not received any VLSs instructions, the second one in which the independent variable was manipulated to observe its effect on another variable and its impact on vocabulary learning was measured. In this case, the independent variable is gender and the dependent variable is vocabulary learning strategies. The experimental group received different vocabulary instructions, a VLSs inventory to compel vocabulary learning more appealing and accessible.

The vocabulary levels test (appendix n° 3) was typically administered before and after the intervention to determine the impact of the intervention on vocabulary learning.

The pre and post-test comprised three stages. The first was a pre-instruction stage which was the initial step where the two groups were given the test with no purposive guidance. The second stage was the while instruction stage where the selected group were guided by the VLSs instructions. The third and the final stage was the post instruction stage which was the last session of the training, where students had to retake the test and perform a writing/oral task using the words of the VLT.

2.5.4.1 Pre-instruction Stage

The pre-instruction stage is a research scheme where a subject of a single or multiple groups is selected to receive a purposive treatment. Both control and experimental groups were given a pre-test (appendix n° 3) at the beginning of a course to determine their initial understanding of VLSs by match vocabulary words to definitions and measure their recognition of the words themselves.

2.5.4.2 While Instruction Stage

The experimental group received thorough instructions of two hours, by presenting vocabulary learning strategies in depth which was not part of students' academic program. Visual aids, such as images, videos, flashcards, word lists and reading comprehension exercises were utilized to help EFL undergraduate students retain the vocabulary words and their meanings.

First, EFL students were trained on how to learn and recall new vocabulary using cognitive strategies. Second, a meta-cognitive strategy was used to encourage students to think about their own thinking. The third category was dedicated to the social strategy where they learn to cooperate with one another. The fourth category involved memorizing information using the memory strategy such as elaborating their mental imaginary and rehearsal. In the fifth category, affective strategy was used to stimulate learners' thinking skills and emphasize compliance in responding. The sixth category, compensation strategy, abetted students identify meanings or find synonyms from the reading context and rely on non-verbal communication.

2.5.4.3 Post-instruction Stage

In this final stage of the training, the same assessment measure (appendix n°4) was given to the experimental group participants as a post-test just after completion of the above session to gauge what they have learned and record the impact of any changes that could be attributed. The students were also requested to present written sentences using the test's lexical items. Moreover, a focus group discussion was designed to express their opinions concerning the whole course, to get more discernment and spawn a definite explanation on what they truly think about the impact of VLSs.

2.5.5 Focus Group

At the end of the training session, students were group interviewed as they completed their post-test. They were asked in a focus group discussion (appendix n°5) to answer in turns three main questions relating to their opinion on the effect of the whole process. Those questions are:

Question 1: How effective was the vocabulary strategy training?
Question 2: What do you find most challenging about learning new vocabulary?
Question 3: What tips would you suggest for others trying to learn new words?

The focus group discussion provided extra empirical data as the study second main topic was exploring the correlation between vocabulary learning strategies and the gender factor.

2.5.6 Think Aloud Protocol

Think Aloud is a commonly used research method in cognitive psychology, education and linguistics to study thinking processes and problem-solving behaviour for exploring language learning strategies (Chamot & Kupper, 1989; Oxford & Nyikos, 1989). It involves having the participants verbalize their thoughts as they solve a task, usually in real-time. This technique provides researchers with direct insight into the participants' decision-making, metacognitive, cognitive, affective processes and mental representations during language learning (Schmitt & McCarthy, 1997).

In the context of language learning and vocabulary acquisition, the think aloud method could be used to study the strategies used by the participants to learn new words and the cognitive processes involved. For example, while participants filled in a questionnaire and perform the vocabulary levels test, they verbalized their thoughts as they complete the task. This would provide a rich and detailed picture of the participants' strategies and considered processes, enabling the researcher to have a deeper understanding of the vocabulary learning course. Furthermore, it identifies impending hurdles and areas that hinder the vocabulary improvement.

Conclusively, the think aloud protocol is a useful tool for researchers to gain insight into the mental processes involved in vocabulary acquisition and language learning, how individuals approach vocabulary learning and what strategies they use to support their learning and identify effective learning strategies that can be taught to other learners.

2.5.7 Vocabulary Survey

Besides the precedent mentioned instruments, a vocabulary learning strategies survey (appendix n° 6) adapted from Bennet (2006) was purposively dispensed to 150 undergraduate students to deepen the VLSs use and usefulness investigation. According to Scheuren,

> …the word 'survey' is used most often to describe a method of gathering information from a sample of individuals, in order to learn something about the larger population from which the sample has been drawn…

(2004: 09)

A survey elicits the collocation of a large amount of data in a relatively short period of time and ensures validity and reliability.

The vocabulary survey is a questionnaire designed to investigate individuals' self-reported use of various strategies for learning new English words. It was largely based on two previous works, Schmitt (1997) and Fan (2003). Fan for instance, presented learners with a list of 60 VLSs and asked them to answer the following questions:

1) How frequently do you use the strategy stated?

2) To what extent do you think the strategy is or may be useful to you?

The participants were asked to select their responses from five-point scales. The available answers were: *never*, *seldom*, *sometimes*, *often* and *very often*; and *not useful*, *not sure it is useful*, *quite useful*, *very useful*, and *extremely useful*.

The survey contains 38 items classified under five different categories namely, determination (A), social (B), memory (C), cognitive (D), and metacognitive (E), each asking the participants to rate their frequency of use and perceived usefulness of a particular strategy on a 5-point scale where 1 represents '*never*', 5 represents '*very often*', and the points in between represent levels of increasing frequency. Similarly, the points represent levels of usefulness, with 1 being '*not useful*' and 5 being '*extremely useful*'.

The first eight items focusing on discovering the strategies individuals used when encountering a new word. These strategies included: checking the form of the word, looking for word parts that are familiar, using pictures or gestures to guess the meaning, guessing from context, using bilingual dictionaries, and asking the teacher or classmates for the definition.

The next 30 items focusing on consolidating the strategies individuals use to remember and build their vocabulary. These strategies included: studying the word with classmates, asking the teacher to check their understanding, talking with native speakers, drawing pictures, making mental images, connecting the word to personal experiences, grouping words together, using new words in sentences, studying spelling and sound, saying words aloud, and remembering words using their parts.

The survey not only offers a reasonable variety of responses but is simple for learners to answer as well. It provides a comprehensive look at the strategies individuals use for learning and remembering new vocabulary, and allows practicable examination of any gender differences in strategy usage.

Succinctly, the perfect combination of the above instruments was vigorous in gathering comprehensive data on the vocabulary learning strategies used by EFL learners, gender interference and would also draw accurate findings.

2.6 Factors Affecting Vocabulary Learning

Several research studies investigated the multiple factors that affect the utilization of vocabulary learning strategies by learners. These factors engender differences in the type and frequency of VLSs employment. In this section, several categories of factors that might distress learners' utilization of VLSs are discussed, as presented by Ellis's framework (1994).

2.6.1 Learner Individual Differences

The utilization of VLSs varies depending on individual differences among learners, such as their beliefs, attitudes, motivation, and previous experience with language learning.

2.6.1.1 Belief

Beliefs are identified as a significant factor that influences learners' use of VLSs. Gu and Johnson (1996) conducted a study that revealed Chinese university students' preference for meaning-oriented strategies over rote memorization strategies. Additionally, Si-xiang and Srikhao (2009) found that Miao students who believed in utilizing and applying learned vocabulary employed a wider range of VLSs. These studies suggested that learners' beliefs are linked to their strategy use. However, Wei's (2007) research produced contradictory results indicating that students' beliefs did not necessarily correspond to their actual VLS use. In Wei's study, students believed that knowing a word meant being able to use it appropriately, but they focused excessively on memorizing the form and meaning of words in isolation and for short-term retention.

The research inclusively suggests that learners' beliefs are pervading factor that influences their VLSs use. Learners who believe in the importance of vocabulary and use meaning-oriented strategies are more likely to employ VLSs effectively. However, it is substantial to note that beliefs do not always correspond to actual VLSs utilization and that other factors might also affect learners' VLSs use.

2.6.1.2 Attitude

Attitude is another individual difference factor that appears to be positively related to learners' utilization of VLSs. Wei (2007) considered attitude along with belief as a factor that affects learners' VLS use. The study found that Chinese college students who had a positive attitude towards vocabulary learning employed VLSs more frequently than those with negative attitudes in four categories: dictionary, activation, guessing, and management. Zhi-liang's (2010) study further supported these findings, showing that Chinese students with positive attitudes tended to use a wide range of VLSs to either discover the meaning of new words or to reinforce their use. Therefore, a positive attitude towards vocabulary learning prompts more frequent and effective VLSs use, which ultimately induces vocabulary acquisition.

2.6.1.3 Motivation

Motivation is the third factor that appears to be positively correlated with learners' utilization of VLSs. Fu's (2003) study found that inherent interest motivation (i.e., learners' natural interest in vocabulary learning) was positively associated with students' use of VLSs. This natural interest in learning new words may motivate learners to seek out resources and tools that can help them expand their vocabulary, such as flashcards, word lists, or online dictionaries.

In addition to inherent interest, other types of motivation have also been shown to be related to learners' VLS use. For example, extrinsic motivation, such as the desire to earn good grades or meet language proficiency requirements, may lead learners to use VLSs as a means to an end (Kojic-Sabo & Lightbown, 1999). On the other hand, intrinsic motivation, such as the enjoyment of learning for its own sake, may encourage learners to use VLSs as part of a broader language learning journey (Dörnyei, 2005). Furthermore, Marttinen's (2008) research confirmed the relationship between learners' VLS use and motivation, showing that Finnish ESL students with high motivation employed a broader range of VLSs compared to those with low motivation.

Succinctly, these findings point the important role that motivation plays in learners' utilization of VLSs. Educators and language learning professionals may consider ways to cultivate learners' interest and motivation in vocabulary learning, such as providing engaging materials, offering opportunities for self-directed learning, and fostering a positive and supportive classroom environment.

2.6.1.4 Experience

Apart from motivation, language learning experience is also considered as a stamping factor that influences learners' strategy deployment. For instance, Porte's study (1988) disclosed that EFL students studying in language schools in London used the VLSs they had employed in their native countries. Similarly, Stoffer (1995) discovered that EFL students' VLS use was significantly associated with their previous language learning experience. In the Thai context, Siriwan (2007) investigated the relationship between students' VLSs use and their language learning experience, finding that the experienced students used VLSs more frequently than less experienced ones.

It is noteworthy to point out that language learning experience is one of numerous factors that influence learners' use of VLSs. Motivation, access to technology, and language proficiency are also important factors to consider (Marttinen, 2008; Sert, 2018). Therefore, educators should take a holistic approach when promoting VLS use among language learners and consider various factors that can influence their utilization of these tools.

2.6.2 Learners' Learning Outcomes

Various researchers use different methods to predict learners' learning outcomes, including measures such as language achievement, language proficiency, and vocabulary knowledge.

2.6.2.1 Achievement

Previous studies demonstrated a positive correlation between students' language learning achievement and their use of VLSs. For instance, Gidey (2008) discovered that high-achieving students employed VLSs more frequently than low-achieving

students. This outcome was supported by Suppasetseree and Saitakham (2008) observed a difference in VLS use between high- and low-achieving EFL Thai university students studying English as their major. These findings concluded that VLSs use is a key factor contributing to learners' language learning achievement. EFL instructors should consider incorporating VLSs training and instructions into their language learning curricula in order to promote better language learning outcomes.

2.6.2.2 Proficiency

Numerous studies investigated the relationship between students' language proficiency and VLSs use. Loucky's (2003) study indicated that Japanese college students with high language proficiency used VLSs more frequently than those with low proficiency. Similar results were found in studies conducted by Kung and Chen (2004), Nemati (2008), Chang Tsai and Chang (2009), and Celik and Toptas (2010), which revealed that students' use of VLSs positively correlated with their language proficiency level. Moreover, the types of VLSs used by high and low proficient students were found to differ. For instance, Lachine's (2008) findings indicated that certain types of VLSs, such as "creative" strategies, were highly correlated with the participants' proficiency levels. These results were consistent with Mizumoto and Takeuchi's (2011) study, which demonstrated that some types of VLSs were highly correlated with students' TOEIC scores.

Additionally, Wang and Cheng (2005) found that Taiwanese EFL learners with higher language proficiency levels tended to use more VLSs than those with lower proficiency levels. Similarly, Jiang and Zhang (2011) observed that Chinese university students with higher language proficiency levels tended to use more cognitive and metacognitive strategies, which are types of VLSs, than those with lower proficiency levels.

Consequently, the positive lateral of the correlation between language proficiency and VLSs use is that learners would be more proficient in the language, and become more aware of the limitations of their vocabulary and the importance of expanding it. Learners would be more motivated to employ VLSs to assist their vocabulary learning.

Higher proficiency levels may allow learners to effectively utilize VLSs, as they develop a better understanding of how to apply them according to their learning process.

2.6.2.3 Vocabulary knowledge

Investigated studies employed vocabulary size as a measure of vocabulary knowledge and unveiled a standing correlation between students' vocabulary size and VLSs usage. Tilfarlioglu and Bozgeyikli (2012) discovered that students who used frequently VLSs tended to have a larger vocabulary size. These findings were consistent with previous studies, namely Ahmed (1989), Gu and Johnson (1996), Lawson and Hogben (1996), Fan (2003), Cusen (2005), Hamzah, Kalifpour and Abdullah (2009), Kafipour, Yazdi, Soori and Shokrpour (2011), Komol and Sripetpun (2011), and Waldvogel (2011).

In addition, researchers have investigated the relationship between the specific types of VLSs used and students' vocabulary knowledge. For instance, Mokhtari and Reichard (2002) found that students who used more elaboration strategies, such as associating new words with familiar ones or creating mental images, had a larger vocabulary size than those who did not use these strategies as frequently.

2.6.3 Social and Situational Factors

Social and situational factors are external factors that can impact learners' use of VLSs. These factors include the learners' field of study, the type of course they are taking, their class level, gender, and language learning environment.

2.6.3.1 Field of Study

There is substantial evidence supporting the connection between a learner's field of study and VLSs deployment. Gu's research (2002) exhibited that science students were more inclined to use visual coding strategies than arts students. It aligns with Mingsakoon's discovery (2002) that science and arts students employ VLSs differently. The usage of VLSs by English and non-English major students was also

examined. Liao's examination (2004) induced that the previously cited groups used VLSs in different ways, concord with Chiang's (2004) and Zhang's (2009) findings.

Furthermore, Bernardo and Gonzales (2009) concluded that determination and social VLSs use varied significantly among Filipino students across five different disciplines, including Liberal Arts and Education, Computer Science and Engineering, Business Education, Hospitality Management, and Allied Medical Science. Social and situational factors, such as class level, course type, gender, and language learning environment, are also significant sources of influence on learners' VLSs use.

2.6.3.2 Course Type

The influence of course type on learners' VLS use is also significant. Regular and part-time programs are two types of courses that can affect the use of VLSs. A study conducted by Siriwan (2007) examined the relationship between students' course type and their LS use. The results showed that Thai university students enrolled in regular programs made more frequent use of VLSs compared to students in part-time programs. Likewise, Al-Shuwairekh (2001) investigated the VLSs used by learners of Arabic as a foreign language and found that learners enrolled in morning courses employed VLSs more frequently than those in evening courses.

2.6.3.3 Class Level

The level of students in a class is another factor that influences the use of VLSs. Research has consistently revealed that the use of VLSs increases as learners' proficiency levels increase. A study conducted by Palacios and Gamboa (2018) on Peruvian university students of English as a foreign language exposed that intermediate and advanced learners used VLSs more frequently than beginner learners.

Moreover, higher proficiency learners tend to use more sophisticated VLSs than lower proficiency learners. For example, Liang and Liou (2015) found that advanced Chinese EFL learners used more metacognitive and cognitive strategies, such as guessing from context and using dictionaries, than intermediate learners. Therefore,

learners' proficiency levels should be taken into consideration when designing vocabulary instructions and selecting appropriate VLSs.

2.6.3.4 Language Learning Environment

It is imperative to note that while language learning environment may receive less attention from researchers, it still plays a significant role in learners' VLSs routine. Formal language learning environments, such as classrooms and language courses affect VLSs practice through the role of teachers, peers, and the classroom environment. Teachers who encourage vocabulary learning and provide effective strategies for word acquisition positively imprint learners' VLSs exploitation. Informal language learning environments, such as home and community settings, also has an influence on VLSs arrangement. For example, supportive parents could incite learners to employ more strategies for learning new words. On the other hand, unsupportive parents might restrain learners' motivation and reduce the variety of strategies they might achieve to acquire new lexicon.

In addition, the availability and quality of VLSs are principal for learners' willingness to use them. A study directed by Yang (2012) disclosed that learners who perceived their VLSs as being useful and easy to use were more likely to incorporate them into their learning. In contrast, learners who experienced technical difficulties or who felt that the VLSs were not relevant to their needs were less likely to use them.

Another important aspect of the language learning environment is the cultural context in which the learning occurs. Different cultural attitudes towards language learning and vocabulary acquisition could influence the types of VLSs that learners use and how frequently they use them. Gu and Johnson (1996) divulged that Chinese EFL learners tended to rely on rote memorization strategies to learn vocabulary due to cultural values that prioritize memorization and repetition as effective learning methods. In contrast, learners from Western cultures may be more inclined to use VLSs that encourage active engagement with the language, such as word games and interactive exercises.

Accordingly, language learning environment is a complex and multifaceted factor that can influence VLS use in various ways. Future research should continue to explore how different aspects of the learning environment interact with other factors, such as learner motivation and proficiency level, to shape learners' VLSs use.

2.6.3.5 Gender

Last, gender is a primary examined variable in the present study. Investigations have shown that there are some differences in the learning panaches and strategies used by male and female learners and could be a significant factor in language deviation. It is capital to understand the interference of gender on vocabulary learning to develop relevant teaching methods that would be inclusive and effective for language learners.

The literature on this impetus reveals that gender is a widely studied situational and social factor, but its effect on VLS use is still inconclusive. Various studies have explored the relationship between gender and VLS use among language learners. For instance, Gu's (2003) study investigated the use of vocabulary learning strategies by male and female Chinese EFL learners and found significant differences in the frequency of strategy use, with females using more strategies than males.

Similarly, Jones (2006) examined the use of vocabulary learning strategies by male and female Spanish EFL learners and reported significant gender differences in strategy use, with females using more cognitive and metacognitive strategies than males. Siriwan's (2007) study explored the relationship between gender and the use of Computer-Assisted Language Learning (CALL) materials and found that male students showed more positive attitudes toward CALL materials than female students. Marttinen (2008) examined gender differences in attitudes toward mobile-assisted language learning and reported that female students showed more positive attitudes toward mobile learning than male students.

A study steered by Lee (2010) found that male students tended to have a preference for using visual aids such as flashcards and diagrams, while female students were more likely to use mnemonic devices such as rhymes and songs. Seddigh's study (2012) also investigated gender differences in the use of VLS and found that female students used

VLS more frequently than male students. Likewise, Brown (2011) observed that male students may be more likely to use repetition as a strategy for vocabulary learning, while female students may be more likely to rely on contextualization and personalization of new words. These findings support the idea that gender might have an influence on students' VLSs usage.

On the contrary, studies by Chang Tsai and Chen Chang (2009), Fatemeh (2009), Khatib and Hassandeh (2011), and Arjomand (2011) found no significant differences between male and female students in their use of VLS. These studies suggest that gender may not be a significant factor in the use of VLS among language learners.

This present study aims to contribute to this ongoing discussion by examining the impression of gender on VLSs use among language learners in a EFL context. By investigating the relationship between gender and VLSs use, it is anticipated that the results will provide insights into how gender may affect language learning through VLSs and contribute to the development of effective VLS-based language learning practices. However, it is important to note that these gender-based differences in vocabulary learning strategies are not absolute and may vary depending on the individual student, their learning style, and their cultural background. A study directed by Chen (2013) exposed that students from diverse cultural backgrounds have different preferences for vocabulary learning strategies, highlighting the importance of considering individual variances when studying the correlation of gender with vocabulary learning. The table below classifies conducted studies according to gender influence on vocabulary learning strategies use among language learners.

Studies Finding Differences	*Studies Finding Similarities*
Gu (2003)	Chang Tsai and Chen Chang (2009)
Jones (2006)	Fatemeh (2009)
Siriwan (2007)	Khatib and Hassandeh (2011)
Marttinen (2008)	Arjomand (2011)
Seddigh (2012)	

Table 2.5: Previous Gender Studies Findings

Conclusively, while there might be some variations in the use of individual vocabulary learning strategies according to gender, it is significant to avow that every student is unique and may have their own preferences and tendencies when it comes to learning vocabulary. As educators, it is our responsibility to support and encourage the use of a variety of effective vocabulary learning strategies, regardless of gender.

2.7 Research Theories

A research theory is a set of ideas, principles or previous studies that are used to explain a phenomenon or guide a research. It is typically used to provide a framework for understanding the relationships between different variables and make prediction about future outcomes. The present study is principally base on the following research theories which are developed through experimentation and observation.

2.7.1 Schmitt's Taxonomy

Since the present research aims at exploiting the vocabulary learning strategies used and perceived useful by EFL undergraduate students, Schmitt's taxonomy (1997, 2000) is relied on to classify the VLSs obtained from the subjects' responses. The taxonomy was developed by Norman Schmitt, a researcher in the field of language learning and vocabulary acquisition.

There are several significant research studies that have investigated the use and usefulness of vocabulary learning strategies among learners. However, Schmitt's taxonomy is the most elaborate and extensive classification of vocabulary learning strategies to date. Schmitt viewpoints his taxonomy *"as a dynamic working inventory which suggests the major strategies"* (1997: 204). It is also the only taxonomy that clearly illustrates each individual vocabulary learning strategy.

Schmitt's Taxonomy was principally based on two framework systems. The first one was Oxford's (1990) strategy inventory of language learning strategies classification (SILL), for its practicality in categorizing vocabulary learning strategies. He stated, *"Of the more established systems, the one developed by Oxford (op. cit.), seemed best able to capture and organize the wide variety of vocabulary learning strategies*

identified" (1997: 205). The second one was Cook & Mayer (1983), and Nation (1990) research to distinguish between discovery and consolidation strategies.
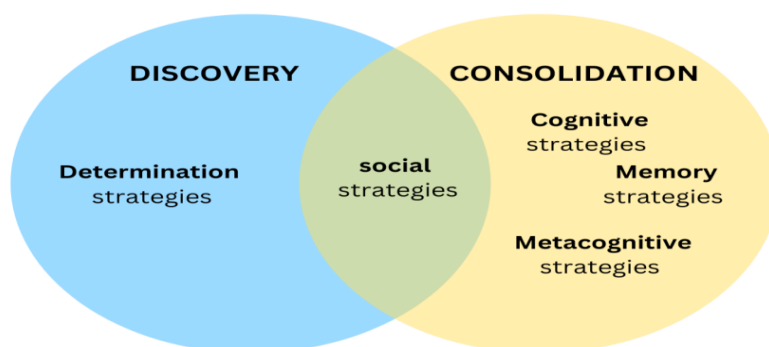
Figure 2.3: Schmitt's Dimensions (1997)

Additionally, Catalán （2003） listed the following advantages of using Schmitt's taxonomy as a research instrument:

- It can be standardized as a test;
- It can be employed to assemble the answers from students deftly;
- It is based on the theory of learning strategies as well as on theories of memory;
- It is technologically simple;
- It can be utilized with all genera of learners minding their ages, target and languages educational backgrounds;
- It is rich and sensitive to the variety of learning strategies;
- It allows comparison with other studies, among them Schmitt's own survey.

Schmitt drew a differentiation between *"the initial discovery of a word's meaning"* and *"remembering that word once it has been introduced"* (1997: 205), and combined the vocabulary learning strategies into two primary dimensions namely discovery and consolidation strategies. These groups embed six categories: determination, social, memory, cognitive, and metacognitive strategies.

The strategies categories further broke down into 58 strategies thoroughly outlined in the table below.

Strategies for the Discovery of a new word's meaning	
DET	Analyse part of speech.
DET	Analyse affixes and roots.
DET	Check for L$_1$ cognate.
DET	Analyse any available pictures or gestures.
DET	Guess from textual context.
DET	Bilingual dictionary.
DET	Monolingual dictionary.
DET	Word lists.
DET	Flash cards.
SOC	Ask teacher for an L$_1$ translation.
SOC	Ask teacher for paraphrase or synonym of new word.
SOC	Ask teacher for sentence including the new word.
SOC	Ask classmate for meaning.
SOC	Discover new meaning through group work activity.

Strategies for consolidating a word once it has been taught	
MEM	Study word with a pictorial representation of its meaning
MEM	Image word's meaning.
MEM	Connect word to a personal experience.
MEM	Associate the word with its coordinates.
MEM	Connect the word to its synonyms and antonyms.
MEM	Use semantic maps.
MEM	Use 'scales' for gradable adjectives.
MEM	Peg Method.
MEM	Loci Method.
MEM	Group words together to study them.
MEM	Group words together spatially on a page.
MEM	Use new words in sentences.
MEM	Group words together within a storyline.
MEM	Study the spelling of a word.
MEM	Study the sound of a word.
MEM	Say new word aloud when studying.
MEM	Image word form.
MEM	Underline initial letter of the word.
MEM	Configuration.
MEM	Use keyword method.
MEM	Affixes and roots (remembering).
MEM	Part of speech (remembering).
MEM	Paraphrase the word's meaning.
MEM	Use cognates in study.
MEM	Learn the words of an idiom together.
MEM	Use physical action when learning a word.
MEM	Use semantic feature grids.
MET	Use English-language media (songs, movies... etc)
MET	Testing oneself with word lists.
MET	Use spaced word practice.
MET	Skip or pass new word.
MET	Continue to study word over time.
SOC	Study and practice meaning in a group.
SOC	Teacher checks students' flash cards for word lists for accuracy.
SOC	Interact with native speakers.

Strategies for consolidating a word once it has been taught	
COG	Verbal repetition.
COG	Written repetition.
COG	Word lists.
COG	Flash cards.
COG	Take notes (in class).
COG	Use vocabulary section in your textbook.
COG	Listen to tape of word lists.
COG	Put English labels in physical objects.
COG	Keep a vocabulary notebook.

Table 2.6: Schmitt's VLSs Taxonomy (1997: 207)

2.7.1.1 Discovery strategies

Discovery strategies are used to obtain initial information and finding out the meaning of a word when encountered for the first time. It consists of two categories namely, determination (knowledge of the language, contextual clues, or reference materials) and social strategies (asking someone else). Interestingly, there are a number of strategies that could be employed for both discovery and consolidation strategies. As a matter of fact, Schmitt (1997) acclaimed that nearly all discovery strategies could be applied as consolidation ones. Nonetheless, the listed strategies in both classifications are merely the most conspicuous ones. The two discovery categories

are defined underneath, and some significant vocabulary learning strategies types are highlighted.

2.7.1.1.1 Determination Strategies

Determination strategies are used to discover a new word's meaning without recourse to another person's expertise (Schmitt, 1997: 205). This category facilitates gaining knowledge of a new word. A frequently deployed tact of learning a new word is analyzing its parts. Nevertheless, the potential risk that learners might encounter is the recipience of an incorrect or inappropriate meaning for the given context. Hence, Clark and Nation (1980) suggested to leave word analysis as the last resort and also recommended breaking the unknown word into prefix, root, and suffix first, if possible.

The strategy of **Word lists** is listed number eighth in this category. There are two kinds of word lists called unpaired list and paired word list. The former is offered alone, without any native language equivalents and the latter includes the L2 words to be remembered and L1 equivalents as well. A number of researchers (Hudson 1982, Carrell 1984, Swaffar 1988) stated that paired lists are inadequate for vocabulary learning because the learners will not be able to use the new words communicatively without further assistance. Nonetheless, Cohen & Aphek (1980), and Carter (1987) claimed that paired lists is particularly helpful for lower- level language learners.

The last presented strategy in the determination category is **Flashcards**. They are useful tools for initial exposure to a new word, and learners usually continue to use them for appraising purposes. Brown (1980) highlights flash cards' benefit for their portability, as they could be carried anywhere and exploited at any time. Additionally, they could be organized in a logical manner to create groups of related words (Gairns and Redman, 1986; Cohen, 1990). Accordingly, Thornbury (2002) certified that the use of word cards is more effective if learners write the target word on one side and the corresponding meaning on the other side.

These cards qualify learners to familiarize with the new word and its meaning. Despite the beneficial use of flashcards, this strategy is limited in value and seldom deployed

by learners. In order to make this strategy more effectively used, Oxford & Crookall (1990) suggested writing the new words in complete within its context (the whole sentence) on the cards.

2.7.1.1.2 Social Strategies

Social strategies entail the use of interaction with other people to improve language learning (Schmitt, 1997). This category is mentioned under both discovery and consolidating groups. Generally, teachers are the ones who provide learners with definition of new words by translating it for instance or providing synonyms and concrete examples. Meanwhile, learners could still seek assistance from their classmates or native speakers.

2.7.1.2 Consolidation strategies

Consolidating strategies help learners memorize the words once it has been taught or encountered. It includes four categories namely, social, memory, cognitive and metacognitive strategies.

2.7.1.2.1 Memory Strategies

Memory strategies, also known as mnemonics have a long dating spinal history according to Oxford (1990). Schmitt defines these strategies as *"approaches which relate new materials to existing knowledge"* (1997: 205). It associates the word's remembrance with the previously acknowledged information. For occurrence, Ahmed (1989) describes these strategies as being purely mechanical (repeating, writing) since they require an "*elaborative mental processing"* (Schmitt, op. cit.: 212).

Fan (2003), from the other hand, divided memory strategies into four groups: repetition, association, grouping and analysis. She dispenses the first group as mechanical techniques and the remaining as 'deep' strategies. Regarding Cohen and Aphek's (1981) views, there are two breeds of memory strategies; mechanical and deep. Schmitt (op. cit.: 201) argues that mechanical strategies (shallower) might be more suitable for beginners whereas the deeper ones could be more beneficial for higher level students.

In memory category, new words are learned by picturing their meaning instead of definitions. By making a word's image meaning, learners create their mental images and even associate new words with a personal experience. According to Webher (1978), this strategy has been shown to be effective.

Semantic mapping, also called grouping, consists of brainstorming associations of a word and presenting it a diagram (Sökmen 1997). Beheydt (1987) and Nation (1990) emphasized that vocabulary should always be presented in a semantic organized way. Schmitt (1997) argues that this strategy endorses learners' vocabulary retention through the different offered schematic sense associations (e.g. synonym, antonym, coordination). According to Sökmen (1997), semantic mapping works better with low frequency vocabulary than high one and ultimately suitable for advanced learners.

Furthermore, the process of semantic mapping involves collaboration between teachers and learners to construct a graphical representation of the connections between ideas on the blackboard. Various approaches are used as starting points for semantic mapping, such as recalling a previously read story, a current event, or learners' general knowledge of a topic. This technique provides several advantages, such as encouraging learners to produce vocabulary and allowing the teacher to guide learners' production. It also reinforces the connections between important vocabulary and could be used as a basis for talks or writing. McCarthy (1990) corroborated that visual presentation tools like maps and grids are not only used as a reference device or recording tool in the vocabulary notebook, but also for gap-filling activities, group work, or comparing results. While such devices do not grant the peak retention or usage of words, they are refined approach compared to traditional word lists organization (synonyms or antonyms).

When using a semantic map, learners have to think about words related to the target word. The mapped words are later listed using a scheme or a map that was derived from the target word which is *classroom* for the exemplified in the figure below.
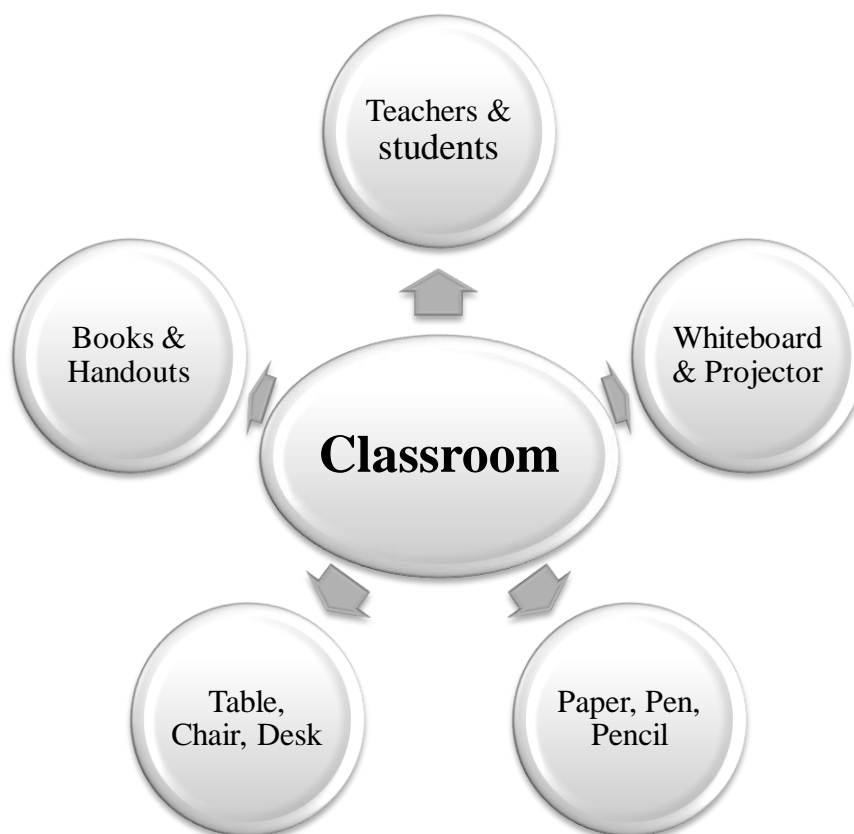
Figure 2.4: Semantic Map (Oxford & Crookall, 1990)

There is also the ***semantic feature analysis*** strategy. It reinforces vocabulary that is essential to understand important concepts in a text (Anders & Bos, 1986). This strategy helps students develop word associations and extends their content knowledge. It can serve as a purpose for reading as well as an activity that allows students to monitor comprehension if used during reading.

The teacher provides students with a grid in which essential vocabulary words are listed vertically and features/ideas are listed horizontally. Students are asked to complete the grid by indicating with a check mark (✓) or minus sign (--) whether each word possesses the mentioned features or is related to the ideas.

The table below is a completed grid that has been used among students where they were asked to read a text about the last three presidents of United States (Conner, 2006).

	Republican	Democrat	Former Governor	Former Vice-President	2 Full Terms in Office
Bush sr.	✓	--	--	✓	--
Clinton	--	✓	✓	--	✓
Bush jr.	✓	--	✓	--	--

Table 2.7: Semantic Grid

The peg method is another memory strategy. It consists of linking unrelated items with a set of 'pegs' or 'hooks' by making them rhyming or digits. This strategy is very useful for memorizing words lists. Then learners have to associate words to be remembered with these "pegs" to form an image. Thompson, I. (1987) and Schmitt (1997) offered the following examples to illustrate best the peg method process. Students are required to remember a rhyme first, e.g. *'bun is one, shoe is two, and tree is three'*. These new words are then needed to be linked with the 'peg' words and create images. For example, if the first word to be remembered is "table", consequently learners may imagine a bun resting on a table. When the rhyme is later recited, this image arouses and comes up with the target words.

The loci method is additional a visual mnemonic device used to remember unrelated words an ordered sequence of items, is effective in assisting recall of unconnected verbal materials (Anderson, 1985; cited in O'Malley and Chamot, 1990). The method of loci involves imagining a fixed path through a familiar area and imagining that the items to be remembered are interacting with well-known fixed objects along the path. This strategy requires learners to picture a familiar place such as a 'room', and then mentally locate the first item to be memorized in the first place (room), the second item in the next place, and so forth. Other items in the list could be associated with other specific locations and actions. To recall the items, learners have to take an imaginary tour around the landmarks, the 'room' for instance, and retrieve the items that were mentally placed there (Wenden & Rubin, 1987). Thompson (1987) proposed another similar grouping strategy called the finger method. It consists of associating new words with fingers.

The scholar Atkinson (1975) developed the strategy of ***keyword method*** which denotes a mother tongue word that sounds like some part of the foreign word. The

memorization passes through two stages when employing keyword strategy. According to Schmitt (1997), students need to find a suitable keyword first (create an acoustic link), then form a mental image linking the two words (create an imagery link).

Gu (2003) provided the following example to illustrate best the keyword method. For instance, if learners want to study the English word '*hippo*', it can be acoustically associated with the Estonian word '*hüppab*' (jumps). Hereafter, learners will create an image of a jumping hippo. Consequently, the stimulus of the foreign language word should activate the keyword sound, which bring up the image created and result in the retrieval of the real meaning.

A number of researchers have proved that the keyword strategy is highly effective for students of different ages at different levels of achievement, mostly for immediate recall of words (Atkinson 1975, Avila & Sadoski 1996, Hulstijn 1997, Nation 2001). Nonetheless, Hall, Wilson, and Patterson (1981) indicated that the keyword method is highly useful to less skillful learners, such as beginners. Avila and Sadoski (1996) and Hulstijn (1997) argued that this strategy works well only with a small number of words (concrete words), whereas Van Hell and Mahn (1997) proclaimed that it is efficient with abstract word.

Affixes and root use is another memory strategy, where an affix is a morpheme that is added to a lexical item to change its function or significance. It encompasses two parts; prefix and suffix. The former means adding a morpheme to the beginning of a word (e.g. impossible→ im- + possible, unlucky→ un- + lucky). The latter, in contrast, comes at the end of a word (e.g. quietly→ quiet + ly, useful→ use + ful).
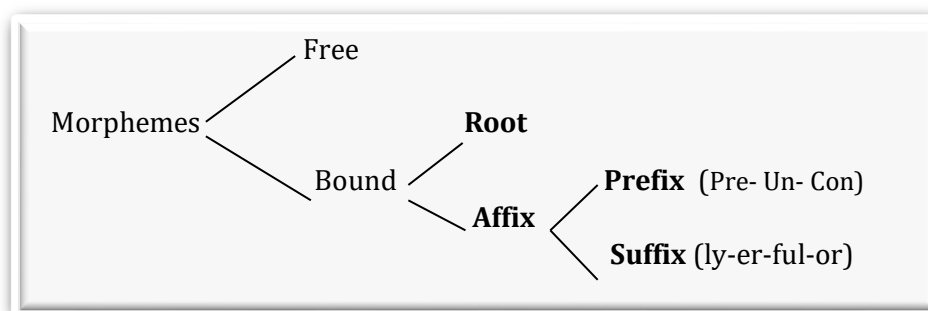
Figure 2.5: Affixes and Root

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The English language contains only prefix and suffix, whereas some other languages have another possibility which is infix. It means insert morphemes in the middle of a word. On the other hand, a root is a lexical content morpheme that cannot be analyzed into smaller parts. The following figure demonstrates morphemes components.

2.7.1.2.2 Cognitive Strategies

Oxford described cognitive strategies as *"manipulation or transformation of the target language by the learner"* (1990: 43). This category encompasses nine vocabulary learning strategies. ***Note-taking*** strategy is one of those strategies. It is a traditional strategy of recording new vocabulary, which is seen suitable for different learners in terms of ages and language levels. In Ahmed's VLSs study (1989), he disclosed that note-taking is a commonly shared strategy by all proficiency levels regardless being 'good' or 'poor' learners. Schmitt (1997) related taking notes to notebook and flash cards strategies. The latter are the two most common forms of note taking.

Another strategy for transcribing records is ***keeping a vocabulary notebook*** which is substantially advocated by many researchers (Gairns & Redman 1986, Lewis 1997, McCarthy 1990). The way words are logged is also primal for potential access. Fowler (2002), on the other hand, concluded that notebooks have proved to be an effective tool not only for supporting students' vocabulary learning but also for promoting learner's independence in using vocabulary learning strategies cluster. McCarthy (2010) states further that learners should be incited to keep vocabulary notebooks. These notepad are not only deployed to record new lexical items and meanings but also enable students to see how many words they learned, which will particularly boost their motivate to keep adding lexicon to their notebook.

There are several ways for noting down words in a vocabulary notebook. For instance, storing target language vocabulary in long lists with their mother tongue equivalence is not recommended. Though it encourages learning words in a fixed order, it discourages the independent recall of every word (Nation 2001). Henceforth, students will memorize words in a certain order and will be eventually unable to recall their meanings if the order is changed.

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List learning does not allow the re- ordering of words or adding more space when needed. Lewis (1997) added that this strategy does not cater for students' needs. Schmitt and Schmitt (1995) provided the following procedure that learners may adopt while using vocabulary notebook strategy. First, word pairs are written down and learned. Second, the translation pairs are enriched by semantic maps for instance, example sentences, illustrations or derivative information. Besides, vocabulary notebooks may come in different formats and organization (by alphabet, theme or topic) to suit learners' needs. It is the teacher's task to expose students to numerous ways of organizing their vocabulary learning notebooks.

The *word cards* strategy is the second form of note-taking. The latter has already been aforementioned and defined in determination category. Nation (2001) listed several benefits for using word cards mainly its focus, effectiveness and certainty. Moreover, the strategy is suitable for learning high and low frequency words. Lee (2005) claimed that utilizing the strategy for learning words individually can also be exploited in classroom conditions as it could be implemented in different activities such as categorizing words, creating oral or written stories, peer-testing, and so forth.

Nonetheless, the word cards strategy has some defects where Nation (2001) reproaches first the lack of wider context which steer into difficult memorization. Second, it cannot be employed in communication nor promote vocabulary growth. However, he did not disallow word cards' compulsory position and put forward the following recommendations:

- Use recall (looks at the word and retrieves its meaning and vice versa).
- First learn receptively (look at the word, recall its meaning), then productively (look at the meaning, recall the word).
- Change the cards order constantly and have more difficult words near the beginning to give them more attention (the words at the beginning and end of a list are remembered better)
- Repeat the words aloud (especially for productive use)
- Use the word in a phrase or sentence as the context gives extra information about the word.
- Process the word deeply and thoughtfully (e.g. by using a mnemonic aid) to ensure long-term retention.

<div align="right">(op. cit.: 305)</div>

2.7.1.2.3 Metacognitive Strategies

Metacognitive strategies are perceived as a conscious overview of the learning process. Oxford argues that metacognitive strategies *"provide a way for learners to coordinate their own learning process"* (1990: 136). According to Schmitt (1997), students use these strategies to make decisions about examining, organizing, or assessing the best approach to learning. He asserted that there are various strategies that learners might deploy to monitor their vocabulary learning process. For instance, learners could enlarge their vocabulary repertoire through exposure to the various resources of foreign language (books, the Internet, films) as well as communicating with native speakers. Students could also test themselves to assess the suitability of the exploited vocabulary learning strategies (Thompson, 1987). Students also have to pay conscious attention in organizing their allocated practice time of words.

According to Nation (2001), **spaced practice** which is also called repetition or expanding rehearsal prompts a secure learning of words than assembled repetition. However, instead of repeating words for *endless minutes,* it would be more beneficial and wiser to spend that time repeating them at intervals. In Schmitt's study (1997), participants classified the strategy of *'continue to study over time'* amid the highly advantageous strategies.

Since the five groups and some strategies of vocabulary learning have been examined, it is noteworthy to mention that some strategies appear under more than one category. For instance, word list and flash card share the value of both determination strategies and cognitive strategies as both strategies have flexible characteristics and assist learners to discover the meaning of a new word, and also to memorize it once encountered or taught.

Schmitt (1997) declared in regard to the practice process of learning strategies execution that it was quite challenging to decide which strategy to deploy considering their copious variations. Consequently, it is construed that a clear-cut of vocabulary learning strategies taxonomy has not been devised. Schmitt's research findings have revealed that the most used and the most beneficial strategies are bilingual dictionary,

verbal/written repetition, saying a new word aloud, studying a word' spelling, and taking notes in class. The second partial result is that the strategy patterns use might change over time from 'shallower' to 'deeper' as the learners grow old or become more proficient in the TL. Learners might also be willing to experience new strategies henceforth being instructed or introduced to them. Consequently, some strategies might prove to be more efficient and popular in certain age groups if deemed to be tested.

Conclusively, Schmitt's taxonomy offers a comprehensive structure for classifying vocabulary learning strategies, which could be beneficial for language lecturers, learners, and researchers. By implementing the taxonomy, teachers could endorse students to autonomously identify their praised strategies and experience a diverse set of strategies besides the accustomed ones while expanding their vocabulary collection.

2.7.2 Sanaoui's Classification

Sanaoui's classification (1995) is the second theory relied on in this research. It is used to identify the approaches that EFL students adopt while learning vocabulary. Sanaoui conducted three consecutive studies (1990, 1992, 1993) using the ethnographic method to comprehensively and accurately record the different strategies that learners use and the various memory techniques they employ to facilitate their lexical learning. She looks at how adult L_2 learners approach the task of vocabulary learning. She also demonstrated the link between vocabulary learning strategies and the success in acquiring and retaining vocabulary items.

In Sanaoui's research, a learner's approach to vocabulary learning was defined as *"a learner's study habits for learning new words or phrases"* (1995:15), whereas mnemonic procedures referred to practices that *"learners applied to a specific lexical tam in order to facilitate its retention"* (ibid.) The objective of her research was to exhibit how strategies might be important pedagogically. If student approaches which led to successful vocabulary learning could be isolated, then this might serve as an important aid to improving vocabulary teaching and learning in the classroom.

The first study that Sanaoui directed was with 50 beginning and advanced ESL university students. The participants were asked to observe their daily vocabulary learning and report the approaches they used. The second study was with four ESL learners while eight FSL students were selected for the third one. The first two studies were administered in an intensive ESL program, a vocabulary course university context. The last study was conducted in a continuing education program, a French conversation course.

Sanaoui's results (1995) showed that students in the above three studies follow two distinct approaches to vocabulary learning, conceptualized *structured* and *unstructured*. The students that use *structured approach* have the tendency to organize their vocabulary learning tasks by keeping systematic records of new words (Višnja Pavi I Taka, 2008). They devoted three or more hours each week to self-directed language study, and actively pursued at least three self-guided learning activities. They meticulously documented the vocabulary items they were learning and frequently reviewed their vocabulary both class-related and self-generated situations. They also set particular goals for themselves and created opportunities for their vocabulary learning such as watching movies or listening to music in English, reading English language magazines, newspapers, and books.

Conversely, students whose study habits did not conform to any of the above criteria were classified as following an *unstructured approach*. They seldom created opportunities for their vocabulary learning and rarely or never reviewed words they learnt. They made minimal written records and rely mainly on the course material. They also spent less than three hours on self-initiated activities (Sanaoui, 1992).

The two approaches differ along five dimensions as it is summarized in the figure below with the main characteristic features.

Structured Approach	*Unstructured Approach*
Opportunities for learning vocabulary	
Self-created	reliance on course
Independent study	minimal independent study
Range of self-initiated activities	
Extensive	restricted
Records of lexical items	
Extensive (tend to be systematic)	minimal (tend to be ad hoc)
Review of lexical items	
Extensive	little or no review
Practice of lexical items	
Self-created opportunities in and outside classroom	Reliance on course

Figure 2.6: Structured Vs. Unstructured Approach (Sanaoui, 1992: 72)

Sanaoui also administered a questionnaire she designed herself to 74 FSL students in order to demonstrate the effect of structured and unstructured approaches on vocabulary knowledge. When comparing students' responses with the approaches they used, the results revealed that learners following structured approach were more successful in learning new lexical items compared to those who adopted the unstructured one. She further argued,

> Learners who had a structured learning approach were more successful in retaining vocabulary taught in their class than learners who had an unstructured learning approach. The research suggests that helping learners gain control over processes for managing their lexis learning is an important phase in vocabulary learning and teaching in the L2 classroom.

(Sanaoui, 1995: 26)

Sanaoui's classification was successful in classifying the majority of students into the two established categories. However, there were four students who exhibited traits of both approaches, and she chose to exclude them from all further analysis. Such a decision may have been triggered by some concerns over data analysis and leaves the reader pondering few unanswered questions. Nonetheless, Sanaoui's classification does not cover the learners' different strategy use patterns. Further, it does not tackle

the question of what if a learner falls in another approach which is neither the structured and nor the unstructured approaches, allowing for any *'middle'* position between the two extremes.

2.7.3 Clouston's Research

In a study replicating the most essential steps of Sanaoui's research, Lessard-Clouston (1996) failed to find any correlation between students' approaches to vocabulary learning and their scores on a vocabulary knowledge measure. The participants of this study were fourteen students learning English in Ontario, Canada. They were enrolled in a TOEFL preparation course trying to advance their English proficiency level to meet the entrance requirements of their prospective universities.

Likewise Sanaoui, Clouston administered a questionnaire to explore the vocabulary learning practices students embraced once outside the L2 classroom walls. He also employed a modified version of Sanaoui's Vocabulary Knowledge Scale for assessing students' vocabulary knowledge. However, unlike Sanaoui, Clouston attempted to avoid any elimination of students from the study. Therefore, he established a middle-of-the-road category named a *semi-structured approach* that incorporated learners who adopted four out of five features characterizing the structured approach. However, apart from not having to leave out students from the analyses, little was achieved by establishing a third category. The mean scores obtained on the vocabulary test were almost identical for the structured, semi-structured and unstructured groups. In other words, students' membership in particular group did not seem to predict their performance on the vocabulary test.

The most interesting results in this study emerged when students' scores on a test of overall language proficiency (the TOEFL test) were compared to their vocabulary learning approach. Contrary to Clouston's expectations, the structured group actually showed the lowest overall proficiency, whereas was the unstructured group received the highest TOEFL scores. Ironically, three out of the four students in the unstructured group received a score of 90% or higher on the TOEFL test, whereas only two out of

the seven students in the semi-structured, and none of the three in the structured group scored that high.

2.7.4 Catalán's Examination

Based on the third explored research objective in this dissertation, the impact of gender on vocabulary learning strategies use and usefulness, Catalán research (2003) was select as a comparative study. Using Schmitt's taxonomy, Catalán (2003) studied gender differences in vocabulary learning strategies used by native Spanish speakers learning Basque and English as a second language (L2) showed that the L2 students tended to use more discovery strategies than consolidation strategies.

The results disclosed that the L2 students tended to focus more on discovering the meaning of unknown words, rather than consolidating their knowledge of those words. This finding led the researcher to hypothesize that L2 students may be neglecting the long-term retention of vocabulary, and that they could benefit from using a more balanced combination of discovery and consolidation strategies. Moreover, this study investigated the relationship between gender and the use of vocabulary learning strategies. The purpose was to determine whether there were any significant differences between male and female L2 students in terms VLSs use.

The findings indicated that there were no significant differences between male and female L2 students in the use of VLS. This outcome concluded that gender did not play a significant role in determining the type of VLS used by the L2 students. In other words, male and female L2 students use similar VLS to acquire and retain new vocabulary. Catalán study is just one of many studies that investigated the influence of gender on VLSs. While the results of her study depicted VLSs similarities, other studies such as Ehrman and Oxford (1989), Oxford and Nyikos (1989) and Graham (1997) corroborated a gender difference of LLSs use and reporting females' significant greater deployment.

Conclusion

In this chapter, the research design and methodology for the study were outlined and discussed in detail. The participants' sample was introduced, including their background, English proficiency, and the criteria for sampling. The purpose of the study and the research context, which focused on English in Algeria, were also explained, providing insight into the significance of the study and the linguistic and cultural environment in which it was conducted. In terms of data collection, various methods were discussed, including questionnaires, classroom observation, vocabulary levels tests, pre and post-tests, focus group, and vocabulary survey. The factors affecting vocabulary learning strategies, mainly gender, year of study, English LMD academic program, and level of vocabulary proficiency, were also discussed.

In conclusion, this chapter provides a comprehensive overview of the research design and methodology for the study. It laid the foundation of the research, providing a clear understanding of the participants, context, and data collection methods. The information presented in this chapter is indispensable for understanding the methodological study design and will guide the analysis and interpretation of the results.

Introduction

Chapter three presents the findings of the study conducted on vocabulary learning strategies use and usefulness and gender interference by undergraduate English language learners. The study employed a range of instruments to achieve this goal namely; questionnaires, classroom observation, a vocabulary levels test, pre and post-test, focus group, think aloud protocol and a vocabulary learning strategy survey.

The chapter begins with an analysis of the results obtained from the questionnaires, which were completed by both students and teachers. The student questionnaire results are presented separately for the first, second, and third year participants. The teacher questionnaire results are also discussed, providing insights about students' vocabulary learning.

The chapter then delves into the results of the classroom observation, which offer a distinctive perspective on the students' actual vocabulary learning inside the classroom. The outcomes of the vocabulary levels pre and post-test and survey are also presented, with a detailed breakdown of the different strategies employed by students to improve their vocabulary knowledge. The vocabulary learning strategy survey results are presented based on Schmitt's taxonomy (1997) of L2 vocabulary learning, which includes determination strategies, social strategies, memory strategies, cognitive strategies, and metacognitive strategies. The multiple linear regression and Pearson correlation analyses were conducted to answer the research questions presented in the previous chapter.

Finally, chapter three concludes with an analysis of think aloud transcription that provides further acumens into the students' perceptions of their own vocabulary learning and the strategies employed. The results of this study have important implications for language teachers, curriculum developers, and foreign language learners.

3.1 The Questionnaires' Results

This section presents the results of the questionnaires undertaken by both students and teachers. The aim of the questionnaires was to gather information about the students'

vocabulary learning experiences and vocabulary feedback. The teachers' questionnaire also delivered valuable acuity about their teaching techniques and observations on students' vocabulary learning process.

3.1.1 The Students' Questionnaire Results

The students' questionnaire findings are displayed in this subdivision, which was conducted to obtain information about their English learning and vocabulary experiences. The questionnaire also identified the different strategies used by male and female students in foreign language vocabulary acquisition. The questionnaire results were collected from participants of the first, second, and third year at the English department of Algiers 2 University.

3.1.1.1 First Year

This section presents the questionnaire outcomes completed by first-year students.

SECTION ONE: Background information

The first section included three questions undertaking students' general educational background.

1. **How long have you been studying English?**

The majority of participants (82%) reported that they had been studying English for 7 years while some students had been studying English for 8 years 10%, others had been studying it for more than 8 years.

2. **Why did you choose to major in the English language?**

The responses to this question varied widely among the participants. Some students reported being directed to study English 05%, while others chose to study it for personal interests 35%. However, the most common reason for studying English was for career advancement 60%.

| Response | Gender | | Total |
	males	females	Percentage of respondents
Personal interests	26%	44%	35%
Career advancement	58%	62%	60%

Directed to	08%	02%	05%

Table 3.1: Reasons for Majoring in English

3. Do you enjoy/appreciate studying English?

The majority of students reported enjoying and appreciating studying English 78%. However, a small percentage of students indicated that they did not enjoy studying English 22%. No gender difference was noted.

SECTION TWO: Students' attitude towards English

The second section encompassed six questions investigating students' attitude towards the English language.

4. How important do you think English is in today's world?

The majority of students, both male and female, agreed that English is very important in today's world 86%, while a minority felt that English was important 14%.

5. How would you rate your English proficiency?

The responses to this question varied among the participants. The minority of students reported that they were able to speak 36%, while others were more comfortable in writing 32%. Most students reported that they were able to read and understand 54%, while fewer were confident in listening and understanding skills 28%.

6. Please indicate your current level of English

The majority of students reported being at an intermediate level of English 76%, with the ability to comprehend and communicate quite easily in familiar topics whereas 24% asserted being advanced. However, they proclaimed that they are still having limited vocabulary and difficulties in complex subjects. Gender variable was not noticed.

7. The above rate and level of English proficiency is mainly due to your

The majority of students reported that their rate and level of English proficiency was mainly due to their personal efforts 64%. Nonetheless, some students credited their

teachers in formal education 32%. Few female students reported that they had special classes and private tutoring to enhance their English proficiency while males mentioned YouTube channels and subtitled movies.

8. **To what extent are the following useful in English learning?**

Most students 68% reported that personal efforts were very useful, while 34% advocated formal education teachers, and 52% preferred private English classes in English learning.

9. **What do you think is the most relevant to communicate effectively in English?**

Number nine was an introductory question to the vocabulary field. The majority of students agreed that vocabulary was the most relevant aspect to communicate effectively in English 60%. However, many students also admitted that grammar and pronunciation were significant.

Factor	Percentage of respondents	
	Male	**Female**
Vocabulary	56%	64%
Pronunciation	22%	18%
Grammar	16%	24%

Table 3.2: Factors for Effective Communication

SECTION THREE: Students' attitude towards Vocabulary learning

The third and last section was the largest as it comprised 13 questions exploring the lexicon process and students' perceptions regarding VLSs.

10. **How important do you think vocabulary learning is in learning English?**

The vast majority of students reported that vocabulary learning is very important in learning English 72% while 28% rate it as important.

11. **When it comes to learning vocabulary, you generally rely on:**

The majority of students 64% admitted relying on themselves to acquire vocabulary, while 26% opted for teachers and 10% for coursebooks.

Responses	Gender		Total
	males	females	Percentage of respondents
Yourself	68%	60%	64%
Teacher	24%	28%	26%
Coursebooks	08%	12%	10%

Table 3.3: Vocabulary Reliance

12. Do you self-initiate activities to enlarge your vocabulary repertoire?

The large proportion of freshmen students 72% did not self-initiate activities to enlarge their lexicon, and those who did 28% are mainly female participants.

Responses	Gender		Total
	males	females	Percentage of respondents
Yes	20%	36%	28%
No	80%	64%	72%

Table 3.4: Self-initiated Activities

13. Do you record the new vocabulary words?

The question investigated if students tracked their new lexicon, 64% reported recording unfamiliar words while 36% did not trail any vocabulary words.

Responses	Gender		Total
	males	females	Percentage of respondents
Yes	52%	76%	64%
No	48%	24%	36%

Table 3.5: Vocabulary Record

14. Do you review the recorded lexical items?

The question explored whether first-year students reviewed their lexicon, fewer 40% went back to the noted vocabulary words.

Responses	Gender		Total
	males	females	Percentage of respondents
Yes	24%	56%	40%
No	76%	44%	60%

Table 3.6: Vocabulary Review

15. Do you practice using the new lexical items learnt?

Most students 64% did not practice using the new acquired lexicon, while 36% rehearsed and used the recorded words.

Responses	Gender		Total
	males	**females**	**Percentage of respondents**
Yes	16%	56%	36%
No	84%	44%	64%

Table 3.7: Vocabulary Practice

16. Through which of the following skills do you prefer to learn vocabulary?

The responses to this question mottled. The majority of students 38% preferred to learn vocabulary through reading, while 29% favoured listening.

Skill	Percentage of respondents	
	Male	**Female**
Reading	32%	44%
Listening	36%	22%
Speaking	24%	16%
Writing	08%	18%

Table 3.8: Favoured Skill to Learn Vocabulary

17. Are you familiar with Vocabulary Learning Strategies?

The majority of first-year students 60% reported that they were not familiar with vocabulary learning strategies.

18. How important is using Vocabulary Learning Strategies to you?

Most students 66% reported that using Vocabulary Learning Strategies was important to them and 28% selected important, whereas 06% rated it not very important.

19. Do you feel self-conscious when resorting to Vocabulary Learning Strategies?

The majority of students 78% reported that they unconsciously resorted to VLSs. They argued through the think aloud-protocol that they spontaneously and instinctively use a limited set of VLSs. No gender difference was pointed.

20. How often do you take part in the classroom discussion?

The responses to this question varied among the participants. However, most students 39% reported that they did not take part in the classroom discussion, while only 18% often participated.

Responses	Gender		Total
	males	females	Percentage of respondents
Often	00%	36%	18%
Sometimes	22%	42%	32%
Rarely	14%	08%	10%
Never	64%	14%	39%

Table 3.9: Classroom Interaction

21. Your above answer is determined by:

The majority of students 40% reported that their vocabulary repertoire was the core factor determining their interaction in classroom practice.

Factor affecting learner interaction	Percentage of respondents	
	Male	Female
Vocabulary repertoire	38%	42%
Pronunciation fluency	12%	10%
Grammar skills	20%	22%
Teacher's activity	10%	10%
Teacher's motivation	20%	16%

Table 3.10: Classroom Interaction Motives

22. Learners seldom interaction in the classroom is because of

The majority of students reported that learners' lack of vocabulary 39% and teacher's teaching method or attitude 20% were the main reasons for learners' seldom interaction in classroom. Some (06%) mentioned that they were frightened to be laughed at or embarrassed to make mistakes. Male students added that they felt confused and blurred facing an audience.

Responses	Gender		Total
	males	females	Percentage
Lack of vocabulary	32%	46%	39%
Pronunciation problems	10%	14%	12%
Grammar mistakes	18%	12%	15%
Teacher's teaching method or attitude	24%	16%	20%

Uninterested	08%	06%	07%
Others	08%	04%	06%

Table 3.11: Seldom Interaction Causes

3.1.1.2 Second Year

The undertaken second-year students' questionnaire results are discussed in this unit.

SECTION ONE: Background information

The first section included three questions about students' scholastic background.

1. **How long have you been studying English?**

The majority of second-year students (78%) have been studying English for eight years, with a few reported over 9 year of study.

2. **Why did you choose to major in the English language?**

Most students (60%) selected to major in English for personal interests and career advancement, while minorities (10%) were directed to it.

3. **Do you enjoy/appreciate studying English?**

The majority of students (78%) reported enjoying and appreciating studying English, while a small percentage (22%) were neutral.

SECTION TWO: Students' attitude towards English

The second section covered six questions inspecting students' attitude towards the English language.

4. **How important do you think English is in today's world?**

The majority of second-year students (76%) think English is very important in today's world, with a small percentage (24%) rating it as important with no gender interference.

5. **How would you rate your English proficiency?**

Most students (68%) reported being able to read and understand other preferred to write English, while a percentage of (56%) were able to speak and 52% listen and understand.

6. Please indicate your current level of English

The majority of second-year students (68%) rated their English proficiency level as intermediate, with some (32%) rating it as advanced.

7. The above rate and level of English proficiency is mainly due to your:

Personal efforts were testified as the main contributor to sophomore students' rate and level of English proficiency, then came formal education teachers. Some female participants cited private classes, whereas males advocated online video games.

Reason	Percentage of respondents	
	Male	**Female**
Personal efforts	78%	68%
Teachers in formal education	16%	28%
Others	06%	04%

Table 3.12: English Proficiency Reasons

8. To what extent are the following useful in English learning?

A great number of students (76%) reported personal efforts and formal education teachers as very useful in English learning, while private English classes were rated as less useful.

9. What do you think is the most relevant to communicate effectively in English?

The majority of students rated vocabulary (54%) and grammar (29%) as the most relevant to communicate effectively in English, with a minor percentage (17%) rating pronunciation as the most relevant.

Factor	Percentage of respondents	
	Male	**Female**
Vocabulary	40%	68%
Pronunciation	24%	10%
Grammar	36%	22%

Table 3.13: Communication Features

SECTION THREE: Students' attitude towards Vocabulary learning

The third and last section was the largest as it comprised 13 questions reconnoitering vocabulary development and students' perceptions regarding VLSs.

10. How important do you think vocabulary learning is in learning English?

The majority of second-year students (78%) believed that vocabulary learning is very important in learning English, with a small percentage (22%) rating it as important.

11. When it comes to learning vocabulary, you generally rely on:

The vast majority of students 66% admitted relying on themselves to acquire vocabulary, while 20% opted for teachers and 14% on coursebooks.

12. Do you self-initiate activities to enlarge your vocabulary repertoire?

A percentage of 49% second-year students, mainly females self-initiated activities to enlarge their lexicon.

Response	Percentage of respondents	
	Male	Female
Yes	36%	62%
No	64%	38%

Table 3.14: Self-initiated Activities

13. Do you record the new vocabulary words?

The question investigated if students tracked their new lexicon, 69% reported recording unfamiliar words while 31% did not trace any vocabulary words.

Response	Male	Female
Yes	58%	80%
No	42%	20%

Table 3.15: Vocabulary Record

14. Do you review the recorded lexical items?

The question explored whether second-year students reviewed their registered lexicon, the majority (52%) revised the noted vocabulary words.

Response	Male	Female
Yes	34%	72%
No	66%	28%

Table 3.16: Vocabulary Review

15. Do you practice using the new lexical items learnt?

Most second-year students 53% practiced the new acquired lexicon, while 47% did not rehearse nor use the recorded words.

Response	Percentage of respondents	
	Male	**Female**
Yes	42%	64%
No	58%	36%

Table 3.16: Vocabulary Practice

16. Through which of the following skills do you prefer to learn vocabulary?

Reading (40%) and listening (30%) were reported as the most preferred skills for learning vocabulary among second-year students. On the other hand, speaking scored 24% and writing 06% with minor gender interference.

17. Are you familiar with Vocabulary Learning Strategies?

Most of second-year students 62% reported being familiar with VLSs, mainly females 74%.

18. How important is using Vocabulary Learning Strategies to you?

The majority of second-year students (48%) described using VLSs as very important in learning English while 40% scored it important. Nevertheless, 12% of participants rated it as not useful due to their disregard of the VLSs concept.

19. Do you feel self-conscious when resorting to VLSs?

Most second-year students (58%) reported they were willingly resorting to Vocabulary Learning Strategies, while (42%) admitted using VLSs instinctively.

Response	Percentage of respondents	
	Male	**Female**
Yes	44%	72%
No	56%	28%

Table 3.18: VLSs Resort

20. How often do you take part in the classroom discussion?

A rate of 45% sophomore students reported often taking part in the classroom discussion, while a small percentage (10%) reported never taking part in task practice.

Classroom Discussion Participation	Male	Female
Often	28%	58%
Sometimes	36%	28%
Rarely	22%	10%
Never	14%	04%

Table 3.19: Participation Rate

21. **Your above answer is determined by**

Second-year students advocated vocabulary repertoire 49% as the main factor affecting their classroom interaction, while grammar skills came second with 16%.

Factor affecting learner interaction	Male	Female
Vocabulary repertoire	42%	56%
Pronunciation fluency	10%	12%
Grammar skills	20%	12%
Teacher's activity	18%	10%
Teacher's motivation	12%	10%

Table 3.20: Participation Motives

22. **Learners seldom interaction in classroom is because of**

The main reasons reported for second-year students' lack of interaction in classroom were lack of vocabulary (45%) and teacher's teaching method or attitude (22%). Some mentioned shyness and apathy; they might not perceive the relevance of the debated or discussed subject.

Assessment method	Male	Female
Lack of vocabulary	38%	52%
Pronunciation problems	22%	08%
Grammar mistakes	14%	22%
Teacher's teaching method or attitude	24%	16%
Uninterested	00%	
Others	02%	

Table 3.21: Seldom Participation Causes

3.1.1.3 Third Year

The questionnaire's results completed by third-year students of the English department at Algiers 2 University are thoroughly displayed.

SECTION ONE: Background information

The first section included three questions undertaking students' general educational background.

1. The majority of the third-year students (64%) have been studying English for 9 years, while 26% have been studying for more than 9 years and 15% for less.

2. The majority of students (64%) chose to major in the English language for personal interests, while 32% chose it for career advancement and 04% were directed to.

3. The vast majority of students (76%) enjoy/appreciate studying English.

SECTION TWO: Students' attitude towards English

The second section incorporated six questions investigating students' attitude towards the English language.

4. All the students believed that English is important in today's world, with 68% stating that it is very important.

5. When it came to English proficiency, 72% of third-year students rated themselves as able to speak, 84% as able to read and understand, 68% as able to listen and understand, and 54% as able to write.

6. Concerning third-year students' level of English, 34% admitted having an intermediate level, while 66% were advanced.

7. When asked about the main reason behind their level of English proficiency, 58% of the students attributed it to their personal efforts, 36% to their teachers in formal education, and 06% to other factors. Some males mentioned that they were inspired by family members since their childhood.

8. A great proportion of third-year students (88%) judged personal efforts to be very useful or useful in English learning, while 66% designated formal education teachers to be very useful or beneficial. Private English classes were deemed not useful by 22% of the students.

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9. The most relevant factor judged effective to communicate in English was vocabulary, according to 60% of junior students, followed by pronunciation and grammar (20%).

SECTION THREE: Students' attitude towards Vocabulary learning

The third and last section scouted the process of lexicon and students' awareness towards VLSs.

10. The vast majority of third-year students (78%) recognized vocabulary learning as very important or important (22%) in learning English.

11. Regarding learning vocabulary, the majority of students 68% admitted relying on themselves to acquire vocabulary, while 24% opted for teachers and 08% for coursebooks.

12. A considerable number of third-year students (62%) self-initiated activities to enlarge their vocabulary repertoire especially female participants, while 38% did not perform any extra activities.

Response	Male	Female
Yes	52%	72%
No	48%	28%

Table 3.22: Self-initiated Activities

13. The question investigated whether students tracked their new encountered lexicon, 75% reported recording unfamiliar words while 25% did not trail any vocabulary words.

Response	Male	Female
Yes	64%	86%
No	36%	14%

Table 3.23: Vocabulary Record

14. The question explored whether third-year students reviewed their lexicon, some 62% declared reviewing the noted vocabulary words.

Response	Male	Female
Yes	46%	78%
No	54%	22%

Table 3.24: Vocabulary Review

15. In terms of practicing the learnt vocabulary items, most third-year students (56%) practiced using the new acquired lexicon, while 44% rehearsed and used the recorded words.

Response	Male	Female
Yes	34%	78%
No	66%	22%

Table 3.25: Vocabulary Practice

16. As to the preferred skills for learning vocabulary, the majority of third-year students (39%) preferred reading, trailed by listening (30%), speaking (16%), and writing (15%).

Skill	Male	Female
Reading	36%	42%
Listening	32%	28%
Speaking	24%	08%
Writing	08%	22%

Table 3.26: Vocabulary Favoured Skill

17. Concerning being familiar with Vocabulary Learning Strategies, the majority (76%) of third-year students were accustomed with VLSs.

18. Concerning the importance of using Vocabulary Learning Strategies, a large number of students (84%) find it very important and the rest important.

19. The majority of students (71%) were self-conscious when resorting to VLSs.

Response	Male	Female
Yes	64%	78%
No	36%	22%

Table 3.27: VLSs Resort

20. Concerning the classroom discussion and participation, 47% of third-year students often manifested in classroom practice.

Classroom Discussion Participation	Male	Female
Often	36%	58%
Sometimes	32%	24%
Rarely	24%	12%
Never	08%	06%

Table 3.28: Participation Rate

21. The main variable that determined classroom interaction and third-year students' participation was vocabulary repertoire (55%), followed by teacher's activity (16%), grammar skills (10%) and pronunciation fluency (09%).

Variables	Male	Female
Vocabulary repertoire	48%	62%
Teacher's activity	18%	14%
Pronunciation fluency	14%	06%
Grammar skills	12%	08%
Teacher's motivation	08%	10%

Table 3.29: Interaction Motives

22. The principal reason for learners' seldom interaction in classrooms was lack of vocabulary (60%), and teacher's teaching method or attitude (15%), then grammar mistakes (13%). Pronunciation problems and lack of interest were each reckoned as factor of 09%, and 04%. Male students added that the dominance of females hindered their contribution.

Factor affecting learner interaction	Percentage of respondents	
	Male	Female
Lack of vocabulary	48%	72%
Pronunciation problems	12%	06%
Grammar mistakes	16%	10%
Teacher's teaching method	18%	12%
Others	06%	00%

Table 3.30: Seldom Participation Reasons

3.1.2 The Teachers' Questionnaire Results

The results of teachers' questionnaire spotted light into the attitudes and approaches of teachers towards teaching vocabulary and students' behaviour. The data was analyzed and summarized as follows:

SECTION ONE: General information

The first section comprehended five questions exploring teachers' background teaching experience.

1. **Highest academic qualification:** The majority of the respondents (50%) had a PhD, while 20% had a Magister, and 30% a Master's degree. The two latter were preparing their PhD.

2. **Job title position:** The highest percentage of respondents (40%) was Lecturers, followed by Teaching Assistants (30%). Only a small percentage of respondents (10%) hold the title of Professor.

3. **Teaching experience:** The majority of respondents (50%) had a teaching experience of more than 10 years, while 40% had 4-9 years. Only a small percentage of respondents had less than 3 years of experience (10%).

4. **Teaching level/year:** The majority of EFL teachers already taught the three mainstream years and undergraduate EFL students. The table below demonstrated their back then level of teaching.

Teaching level/year	Percentage of respondents
First year	30%
Second year	30%
Third year	40%

Table 3.31: Teaching Year

5. **Modules/courses you teach:** The respondents listed various modules or courses they taught.

Modules/courses taught	Percentage of respondents
Oral & Written comprehension	30%
Linguistics	20%
Am/Brit Lit & Civ	20%
Phonetics	10%
Didactics	20%

Table 3.32: Subjects Taught

SECTION TWO: Teacher's opinion towards vocabulary

The second section comprised five questions investigating teachers' opinion towards vocabulary.

6. To what extent is vocabulary important to EFL learners?

The majority of respondents (90%) asserted that vocabulary is very important to EFL learners, while a minority considered it important (10%).

7. How would you classify your students' vocabulary level?

The majority of teachers (50%) classified their students' vocabulary level as average, some rated it as good (30%) while 20% judged it weak.

8. Do you believe that it is the teacher's duty to introduce new vocabulary?

The majority of lecturers (60%) agreed that it was teacher's responsibility to introduce new vocabulary, while some were neutral (10%) and 30% disagreed.

9. Do you ponder that students' motivation and self-esteem have an impact on their vocabulary acquisition?

Many teachers (80%) approved that students' motivation and self-esteem had a significant impact on their vocabulary acquisition. They indicated that when students are motivated, they become actively engaged in their learning process. Meanwhile, 20% disapproved stating that teachers' support and guided instructions were superior.

10. The availability of English language resources outside the classroom has an impact on students' vocabulary acquisition

The majority of teachers (80%) affirmed that the exposure to outer classroom resources had a crucial influence on students' vocabulary acquisition. A rich English language environment such as books, media, or online facilities embodies additional lexicon and phrases. Few respondents (20%) were neutral claiming the convenience of the exposed amenities.

SECTION THREE: Teaching methodology & Strategy use

The third section contained five checkbox scaled-responses, and five polar questions about teaching methodology and strategy use.

11. Do you present new items in every lesson?

A great number of lecturers (80%) presented new items on a regular basis, while 20% did not introduce new vocabulary in every lesson declaring that they are levitating learners' autonomy by doing so.

12. Do you explain all the fuzzy/unknown words?

The majority of teachers (80%) explained all the unfamiliar words, whereas some (20%) preferred to trigger students' attention and curiosity by including unknown items.

13. Do you teach vocabulary learning strategies?

Around 60% of teachers admitted that they did not teach vocabulary learning strategies to their students, while the remaining 40% did it explicitly. It induced that a significant portion of EFL learners were left alone dealing with amount number of new lexicon.

14. How do you incorporate vocabulary learning into your lessons and activities?

Many educators (40%) reported that they incorporated vocabulary learning into their lessons and activities through contextualized instruction (i.e. teaching in the context of story or real-life situations). The use of visual aids and word games were the least employed.
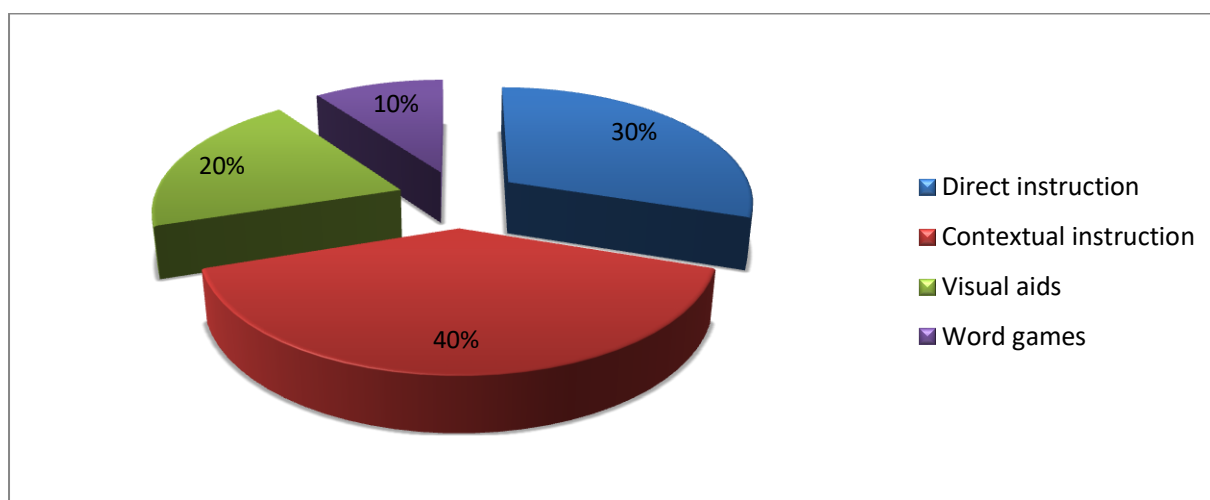
Figure 3.1: Vocabulary Incorporation

15. How often do students participate in English conversation practice?

Multiple surveyed teachers reported that their students *sometimes* took part of classroom discussions. Fewer conveyed that some learners never or rarely participated.
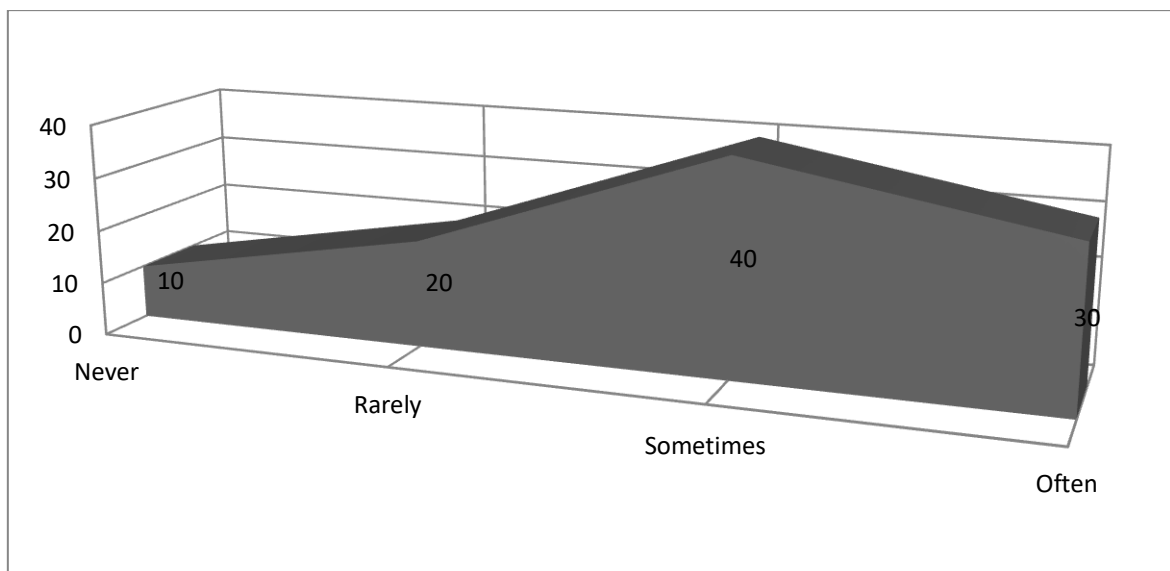
Table 3.2: Participation Rate

16. Learners interaction in classroom depends on

The outcome for this question was roughly diverged, with no single factor being identified as the most important for learners' interaction in the classroom. Students' confidence, students' vocabulary, teacher's teaching method, and the type of activity used were all identified important variables for learners' interaction.

17. How do you typically assess your students' vocabulary acquisition?

Numerous teachers testified that they typically assessed their students' vocabulary acquisition through written exams (60%) or oral exams (30%). Classroom activities were also reported as a common method of assessment by a minor portion of teachers.

18. According to you, which of the following vocabulary learning strategy is the most useful?

Teachers were asked to classify the listed VLSs according to their perception of usefulness. The majority of teachers conveyed that the use of monolingual dictionaries and reading/guessing from the context were the most useful for vocabulary learning,

traced by note taking, and use of bilingual dictionaries. Translation and asking others were identified as being the least useful strategies.

19. In your experience, do you observe any difference in English vocabulary use between male and female students?

Most of teachers (70%) attested that they did not observe any differences in English vocabulary use between male and female students. Nonetheless, 30% reported noticing female learners using more VLSs strategies (such as; note taking and highlighting) in the classroom compared to males who rarely manifested.

20. Have you noticed a difference in vocabulary learning strategies use between first, second or third year students?

The vast majority of teachers attested that there was a distinctive difference in VLSs use between freshmen, sophomore and junior students. However, 20% were not sure whether undergraduate students were more likely to consolidate the familiar strategies or went for new ones.

3.2 Classroom Observation

This section disburses the results of classroom observation using the grid (appendix n°3) as a medium to collect data for the first, second, and third year EFL students. The aim of these observations was to gain a deeper understanding of how male and female students' approach vocabulary learning in the classroom setting. The observation concentrated on teachers' performance and commitment. It identified evidences about communication skills, behaviour engagement, use of instructional materials and technology, vocabulary time allocation, and students' attention. It also studied students' behaviour, engagement, and attitudes.

However, it is important to note that the observation classes were limited as not many teachers were willing to be observed. Ultimately, four courses from each year, totalling in 12 classroom sessions were observed based on the accessibility and teachers' permission. The presence of male students was also required as the majority of groups encompassed females only.

3.2.1 First Year

The first-year was an exploring English learning phase for freshmen students. Four observation sessions were directed by attending the listed modules; reading & writing, listening & speaking, and English grammar. The classroom was well-organized and conducive to learning. There were generally groups of 30 students, predominantly females. The teachers usually started their classes by reviewing the previous lesson or introducing the new one. Each module had its specific concepts and lexicon range.

All first-year teachers demonstrated a high level of commitment and engagement, good command of time allocation and students' behaviour. The teachers used a variety of instructional methods, some included visual aids and interactive activities to enhance the students' learning experience.

Regarding the writing course, students' task was to write an effective topic sentence, supporting ideas and concluding sentences. Auspiciously, the reading session was about the use of reading strategies to comprehend information in different types of texts. The teacher presented the following strategies:

- ❖ Using prior knowledge to think about the topic.
- ❖ Skimming to get the gist (main idea) of a given text.
- ❖ Scanning to locate specifically required information.
- ❖ Using background knowledge as well as linguistic and contextual clues to deduce the meaning of unfamiliar words (inference).

During the session, the lecturer's teaching techniques were accurate, used different context clues and visual aids to reinforce the freshmen students' understanding. The teacher also encouraged students' interaction by instructing pair work practice to enhance their decision-making and problem-solving skills. The students' behaviour and engagement were scarcely positive, with a seldom participation rate and a willingness to ask questions or engage in classroom discussions. Additionally, the students' vocabulary array was restricted. Note taking was the initial vocabulary strategy employed whenever encountering a new word; others opted for translation

and dictionary use. The teacher provided frequent feedback and encouraged students to use VLSs to practice and improve their vocabulary.

In the subject of listening and speaking, the audio task was a sightseeing record using specific information (words, idioms) then discussing the topic. The speaking objective was to produce correct and relevant instances of discourse with ease and confidence. The teacher circulated around the classroom and observed the students as they listened to the recording. Some freshmen learners struggled with using ICT materials; however the lecturer coped successfully with the situation. During the speaking activity, female students were more engaged and participative in creating their dialogues, while male students were more hesitant and demonstrated little vocabulary use. However, there were also male students who actively contributed to the task and displayed a virtuous understanding of lexical items.

As regard to the English grammar course, students were expected to demonstrate ability to make appropriate grammatical choices to express the intended meanings. The assigned exercise was writing a short paragraph to allow students produce language using the required structure. At the end of the activity they were requested to present their task to the class. The female students were more assertive in presenting their work and used erudite words, while male students were more creative, but some struggled with pronunciation and misused few words. The instructor provided constructive feedback on errors generated in the spoken and written productions.

Succinctly, the first year classroom observation disseminated that freshmen students used a limited range of VLSs and displaced gender difference in the engagement and confidence levels in vocabulary learning. The observation evidence also indicated a positive learning environment with opportunities for vocabulary improvement.

3.2.2 Second Year

Second-year students were observed in four disciplinary field namely reading and writing, linguistic concepts, and Anglophone literature.

Concerning the reading and writing course, which seek to improve students' ability to interpret academic texts by using critical reading techniques and use the writing

process steps such as prewrite, outline, draft, revise, and edit. In an expository essays lesson, students were queried to write a paragraph using compare and contrast or cause and effect from a prearranged list of topics. Students claimed teacher's assistance to monitor their writing; they also demonstrated difficulties setting their ideas into words. The lecturer displayed strong communication skills, dedicated on individual students' needs by offering a tailored feedback and guidance to improve their vocabulary retention and retrieve.

The second observed subject was linguistic concepts. It endeavoured students understand the concept of modern linguistics as developed by the different schools of linguistics. The teacher dispensed selected reading passages about Saussure's dichotomies, the support material was handouts. Sophomores were requested to provide and explain statements or quotations, then answer the raised questions orally or in short paragraphs. While the whole class exhibited little interaction, it was observed that female students were proactive in the group discussions compared to male. The latter justified its hardly ever interference to females' ascendancy.

Considering Anglophone literature, where students dealt with the evolution of literature through time and explored it underwent by studying the different literary movements that appeared in both English and American literatures. Sophomores' assignment was to analyze a variety of literary texts in order to illustrate the literary movements. The lecturer adopted the learner centered classes and encouraged students' interaction to prepare for each class by doing their own research and reading and analyzing the literary works to be studied during each semester. The teacher scrupulously discussed the realist movement: context and characteristics / introducing regionalism and local color in America course. Handouts were administered, either in class or posted on Moodle. Students were then oriented, explained the essential points and counselled to take notes. Whimsically, with a lower participation rate and fewer questions probed males subjugated.

Furthermore, during the group discussions, male students were noticed to be more confident in their use of vocabulary, with many taking the lead in explaining the meanings of the words to their group members. In contrast, female students were more

reserved and appeared contented in taking the lead in debates. The professor provided opportunities for active engagement and encouraged students to take initiative and participate in classroom exchanges.

3.2.3 Third Year

In the report of third-year students, the inspected courses were sociolinguistics, didactics, study of literary texts, and research methodology. The third year teachers were vastly equipped with prodigious knowledge and professional pedagogical skills to effectively model and teach junior students. They demonstrated an obvious dedication and had natural conversations skills alike story tellers. The lecturers enhanced students' interaction individually and collaboratively by fostering motivational materials such as inspiring quotes and positive affirmations or personal success stories.

In the sociolinguistics field, students were expected to be acquainted with the major key concepts in sociolinguistics and be equipped with the fundamental knowledge about the social aspect of language and language diversity. The attended course was about World Englishes, students were introduced to the various forms of English that have developed around the world, including regional dialect, pidgins, creoles and other varieties. These varieties are often influenced by the local language and culture of the region in which they are spoken. Juniors were engaged in various activities and exercises that abetted them develop their skills in critical analysis, creative writing, and translation.

Concerning the introduction to didactics subject, students acknowledged notions and concepts related to teaching, learning, and assessment. They had to understand the basic principles of teaching and assessing language skills. The course title was curriculum development and syllabus design, third-year students demonstrated effective use of analytical and critical thinking skill. They had to create a plan for instruction that includes the content, activities, and assessments that would be used to teach a particular subject. Teachers also demonstrated how to design a syllabus,

creating a document that outlined the course objectives, topics, and activities laboring in a teaching course.

Regarding the study of literary texts, students had to deal with the three (British, American and African) literary genres namely; short stories, poetry, and novels, then highlight the modernist aspects in the selected or attributed work. Students were noticed engaged in critical reading and also developed a literary texts skill analysis. The professor used a variety of instructional materials, including VLSs and ICT materials, to introduce the cultural contexts of the different literary stages and enhance students' learning experience.

As to research methodology, students were expected to distinguish between research projects and other formal pieces of writing, the different steps and stages involved in the process of doing research. The title of the attended lesson was "What is a research paper?" aimed at making students able to bring new contributions to the field they were studying through original ideas, critical thinking and interacting with the resources and material they read. They also learned the adequate research methods and techniques to conduct an independent research in English studies.

The lecturer provided clear instructions and used a variety of interactive methods to boost students' involvement. The teacher also displayed a profound understanding of the students' strengths and weaknesses, provided beset feedback and guidance to improve their vocabulary and communicative skills. The students displayed a high level of commitment, with an inordinate participation rate and males only now and then engaging questions. The students' vocabulary and ICT materials use were particularly strong, designating the professor's approach effectiveness.

3.3 The Vocabulary Levels Test's Results

Shortly after EFL undergraduate students joined the University of Algiers 2 and the lectures started, the vocabulary levels test (Appendix n°4) was carried out. Following the stratified random sampling method, 150 undergraduate EFL students were asked to complete a matching definitions task on vocabulary at 2,000 and 3,000 levels designed by Nation (2001); a diagnostic test that determines whether learners achieved words

mastery at different frequency levels. Test's responses were calculated into mean, each correct answer was given 1 point. The subdivision presents the first, second and third year results of the Vocabulary Levels Test (VLT). The VLT aimed to assess the participants' vocabulary knowledge at different levels of proficiency and identify any differences in vocabulary acquisition between male and female learners.

3.3.1 Pre-Test Results

The pre-test was used to measure students' vocabulary knowledge prior instructions, and compare students performance in the two groups (controlled and experimental). The findings displayed that both groups scored similar marks of VLT.

3.3.1.1 First Year

This section demonstrates the vocabulary pre-test results taken by 50 first-year students majoring in English with no prior experience with VLSs usage in their English language learning. The test comprised two levels of vocabulary proficiency (2,000 and 3,000), with 15 matching definitions practice each. The pre-test results indicated that the majority of the participants (56.25%) had a basic understanding of vocabulary. First-year students' responses are illustrated as follows:

The 2,000 words Level			The 3,000 words Level		
Words	males	females	Words	males	females
A	0.72	0.82	a	0.44	0.40
B	0.80	0.86	b	0.42	0.48
C	0.84	0.78	c	0.54	0.52
D	0.82	0.84	d	0.52	0.42
E	0.44	0.52	e	0.44	0.42
F	0.80	0.76	f	0.40	0.52
G	0.72	0.82	g	0.52	0.40
H	0.52	0.52	h	0.40	0.44
I	0.46	0.54	i	0.52	0.52
J	0.66	0.64	j	0.36	0.22
K	0.44	0.46	k	0.44	0.42
L	0.32	0.40	l	0.62	0.56
M	0.76	0.82	m	0.74	0.72
N	0.82	0.80	n	0.22	0.24
O	0.88	0.86	o	0.46	0.46

Table 3.33: First-year Pre-test Results　　　**Figure 3.3: First-year Pre-test Results**
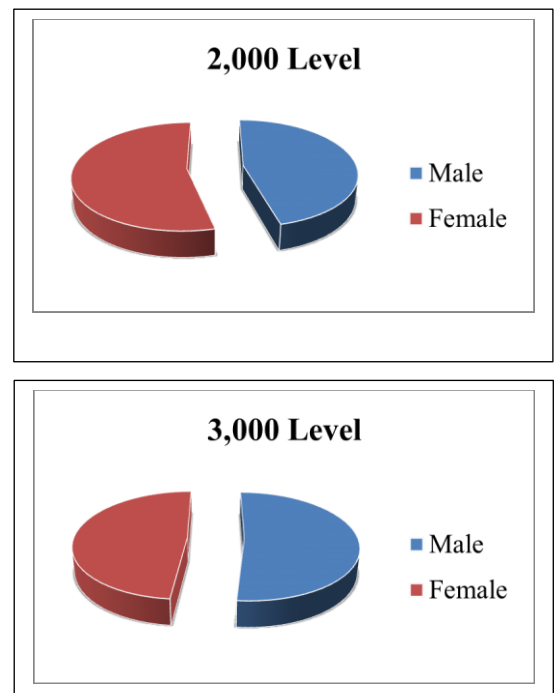
Unsurprisingly, the 2,000 level received the highest percentage of 67.5% of correctly matched answers, varying from 0.32 to 0.88 indicating a moderate level of understanding among freshmen participants. There was little gender interference evidence as male students scored 66%, female learners had 69%. On the contrary, the 3,000 level recorded a total mean of 0.45 ranging from 22% to 74% exact responses, with trifling gender interference (male 46%, and female 44%).

3.3.1.2 Second Year

In the second-year, the pre-test results showed a higher level of understanding compared to the first-year. The participants matched correctly 66.83% of the vocabulary words to definitions.

The 2,000 words Level			The 3,000 words Level		
Words	males	females	Words	males	females
A	0.78	0.80	a	0.56	0.60
B	0.86	0.82	b	0.48	0.52
C	0.84	0.88	c	0.62	0.60
D	0.92	0.84	d	0.54	0.52
E	0.52	0.52	e	0.64	0.62
F	0.82	0.80	f	0.48	0.48
G	0.84	0.78	g	0.54	0.52
H	0.72	0.68	h	0.52	0.62
I	0.68	0.66	i	0.68	0.72
J	0.74	0.78	j	0.44	0.40
K	0.64	0.72	k	0.64	0.64
L	0.62	0.66	l	0.72	0.66
M	0.86	0.88	m	0.82	0.80
N	0.80	0.80	n	0.40	0.44
O	0.86	0.88	o	0.56	0.52
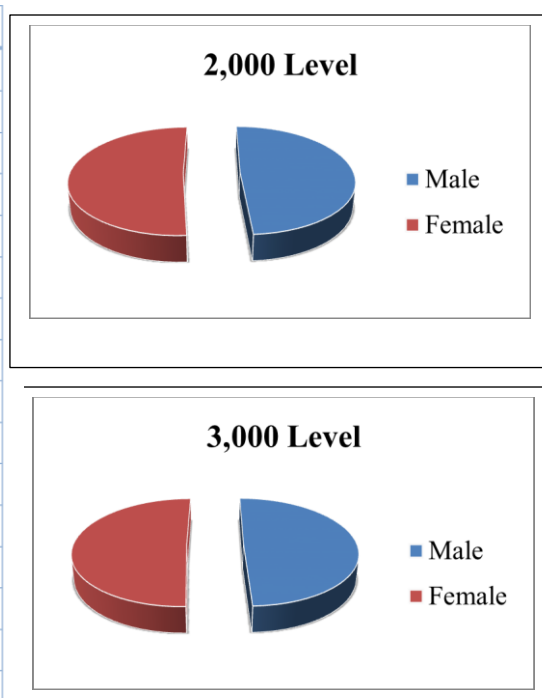
Table 3.34: Second-year Pre-test Results   **Figure 3.4: Second-year Pre-test Results**

The table above displayed the results of a vocabulary levels test completed by 50 second-year students. Concerning the 2,000 level, the properly matched definitions percentage was 76% ranging from 0.52 to 0.92 mean scored by males with no gender difference chronicled (76%). Conversely, the 3,000 level scored a ratio of 57.6% right replies ranging from 40% to 82% with a fine gender rate, while male students had 0.576, female students marked 0.577.

3.3.1.3 Third Year

The pre-test results for the third-year predictably exhibited the highest percentage; the participants correctly matched 78.9% of the vocabulary words to the suitable definitions with a range of mean scores from 0.42 to 0.94.

The 2,000 words Level			The 3,000 words Level		
Words	males	females	Words	males	females
A	0.86	0.84	a	0.80	0.78
B	0.84	0.88	b	0.72	0.74
C	0.82	0.88	c	0.76	0.80
D	0.92	0.92	d	0.82	0.72
E	0.66	0.74	e	0.68	0.62
F	0.92	0.92	f	0.64	0.72
G	0.92	0.82	g	0.74	0.68
H	0.84	0.80	h	0.76	0.78
I	0.86	0.92	i	0.82	0.84
J	0.88	0.92	j	0.56	0.52
K	0.72	0.82	k	0.72	0.78
L	0.80	0.78	l	0.80	0.82
M	0.94	0.92	m	0.92	0.88
N	0.92	0.88	n	0.52	0.42
O	0.92	0.90	o	0.64	0.62

Table 3.35: Third-year Pre-test Results   **Figure 3.5: Third-year Pre-test Results**

The charts above illustrated the results of a vocabulary levels test enrolled by 50 third-year students. The 2,000 level demonstrated a noteworthy range of performance with a percentage of 85.8% correctly answered definitions as males scored 0.854, females had 0.862, fluctuating from proportions of 66% to 94%. Additionally, the 3,000 level scored an impressive rate of 72% with accurate answers and wide range of performance from both males means (0.72) and females (0.71).
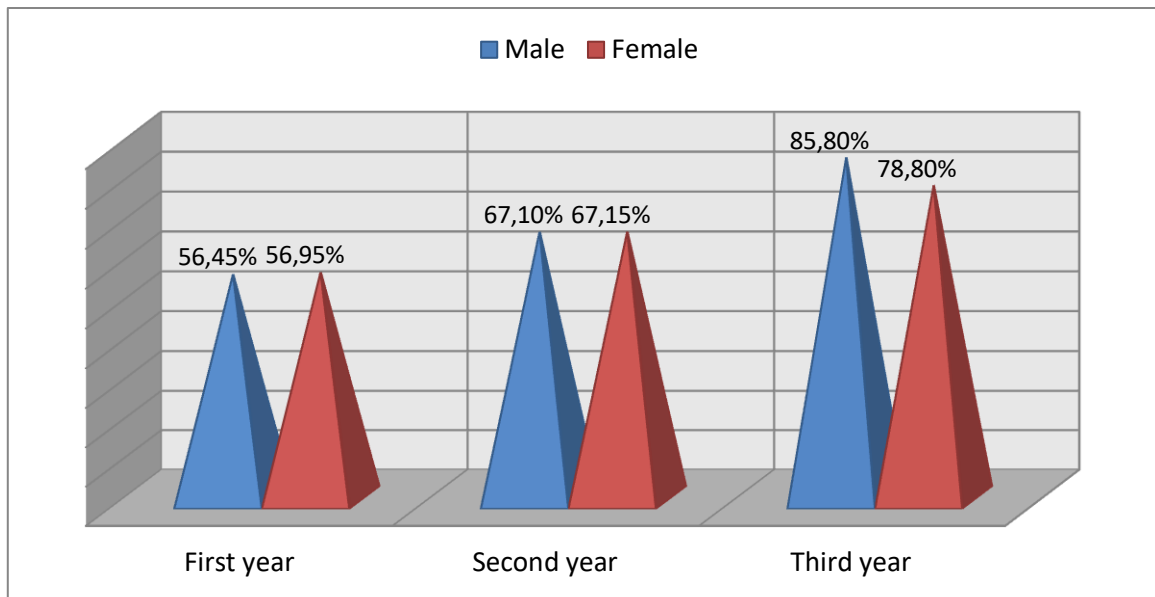
Figure 3.6: Vocabulary Levels Pre-test

Conclusively, the vocabulary levels pre-test findings varied across the three years (figure 3.6). The second and third-year participants had a noticeable vocabulary level, indicating some exposure to VLSs in previous courses or through independent study. Undergraduate students reported that the 2,000 level was easy to fill (76.97%) as the majority of words were familiar, i.e. grasped or heard before. They also added that these words were generally encountered in their outdated materials (classroom, books, TV). On the contrary, the majority of students were clearly confused by the unidentified lexical items in the 3,000 level scoring only 58.70% correct answers. These findings are important to understand the impact of instructional interventions and how it would contribute in improving the participants' understanding of VLSs which is tackled in the post test results.

3.3.2 Post - Test Results

A post-test is a type of assessment administered after instruction has been completed. It was used to measure how much students attained from the vocabulary learning strategies training and evaluate its effectiveness. The post-test included the vocabulary levels test (appendix n°4) and a writing section where the experimental students group were asked to use the listed words from VLT in a sentence or paragraph. Post-test assessed students' knowledge of the lexicon learned, identified the employed VLSs and consolidated their ability to use the new words in context. It demonstrated a

positive impact on the students' vocabulary knowledge, as evidenced by their increased scores on VLT and assignment task.

3.3.2.1 First Year

The post-test results indicated that the majority of the first-year students had a significant understanding of VLSs training (83.45%) as illustrated in the charts below:

The 2,000 words Level				The 3,000 words Level		
Words	males	females		Words	males	females
A	0.94	0.92		a	0.76	0.72
B	0.98	0.96		b	0.72	0.78
C	0.96	0.98		c	0.84	0.82
D	0.96	0.94		d	0.72	0.72
E	0.84	0.88		e	0.84	0.82
F	0.96	0.96		f	0.80	0.72
G	0.92	0.92		g	0.72	0.68
H	0.88	0.82		h	0.72	0.64
I	0.96	0.92		i	0.82	0.84
J	0.98	0.98		j	0.66	0.52
K	0.92	0.94		k	0.74	0.74
L	0.88	0.88		l	0.80	0.76
M	0.96	0.96		m	0.92	0.92
N	0.94	0.92		n	0.54	0.44
O	0.98	0.98		o	0.68	0.68
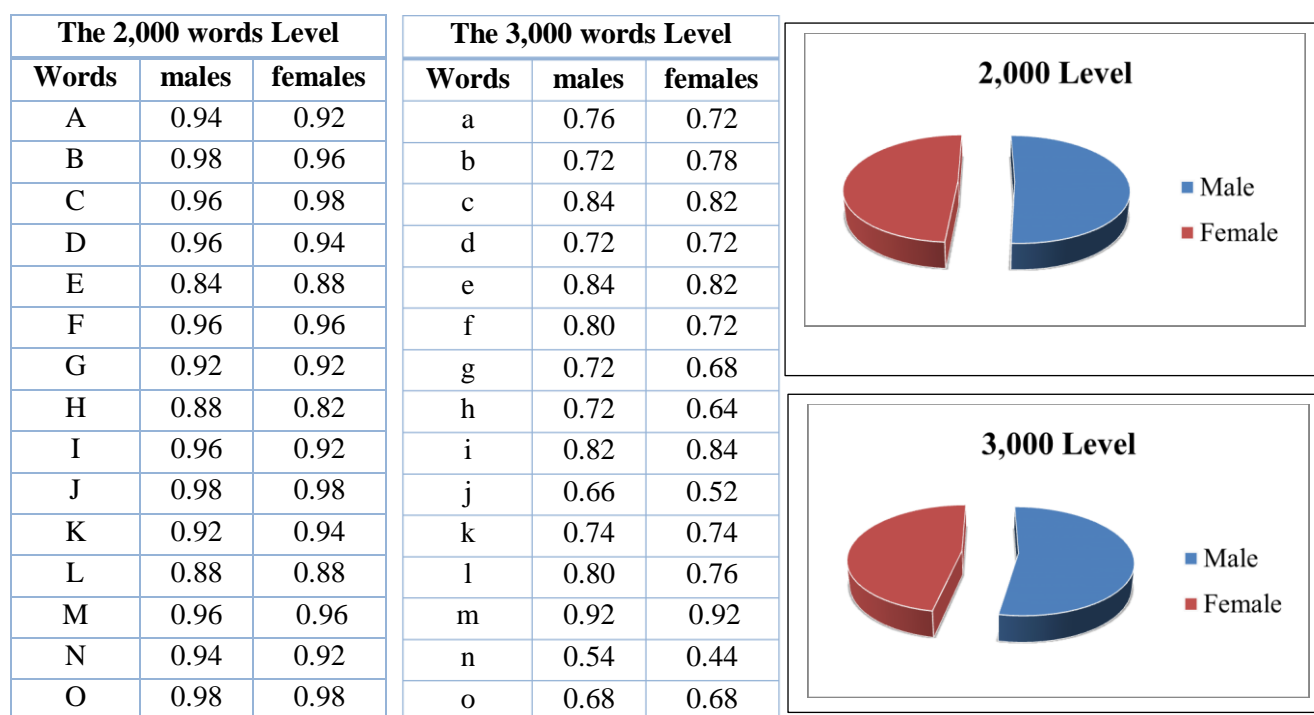
Table 3.36: First-year Post-test Results   **Figure 3.7: First-year Post-test Results**

The 2,000 level received a mean score of 0.933 accurate answers, varying from 82% to 98% indicating a substantial level of understanding among freshmen participants. There was no gender interference evidence as male students scored 0.937, while female learners had 0.930. Conversely, the 3,000 level scored a mean rate of 0.736 ranging from 44% to 92%, with trivial gender intervention (Male 0.752, female 0.72).

Regarding the written chore, 60% of first year students showed a critical ability in vocabulary use. The sentences were poorly arranged in terms of grammar and cohesion; mainly word choices, translation from L1 (Arabic) also persisted. It could be justified by the limited lexicon stock. Nonetheless, 40% managed to write coherent simple sentences as displayed below.

Sentences Sample	
Female	❖ I have a leather **belt**. ❖ She offered me a **pen** for my **birth**day! ❖ I <u>buy</u> a **mirror** last week.
Male	❖ We are <u>**attack**</u>. ❖ My mother is <u>very</u> **charm**. ❖ The room is full of spider webs and **dust**

Table 3.37: First-year Sample Sentences

3.3.2.2 Second Year

The findings below exposed the results of a vocabulary levels test completed by 20 second-year students. The participants matched correctly 87% of the vocabulary words to definitions.

The 2,000 words Level			The 3,000 words Level		
Words	males	females	Words	males	females
A	0.96	0.92	a	0.86	0.80
B	0.98	0.96	b	0.88	0.82
C	0.98	0.98	c	0.82	0.80
D	0.96	0.96	d	0.84	0.80
E	0.92	0.92	e	0.84	0.82
F	0.98	0.98	f	0.88	0.76
G	0.96	0.94	g	0.74	0.72
H	0.88	0.86	h	0.76	0.72
I	0.96	0.94	i	0.88	0.82
J	0.98	0.98	j	0.74	0.60
K	0.92	0.92	k	0.84	0.82
L	0.92	0.96	l	0.82	0.82
M	0.96	0.96	m	0.92	0.92
N	0.92	0.92	n	0.66	0.68
O	0.96	0.98	o	0.72	0.72
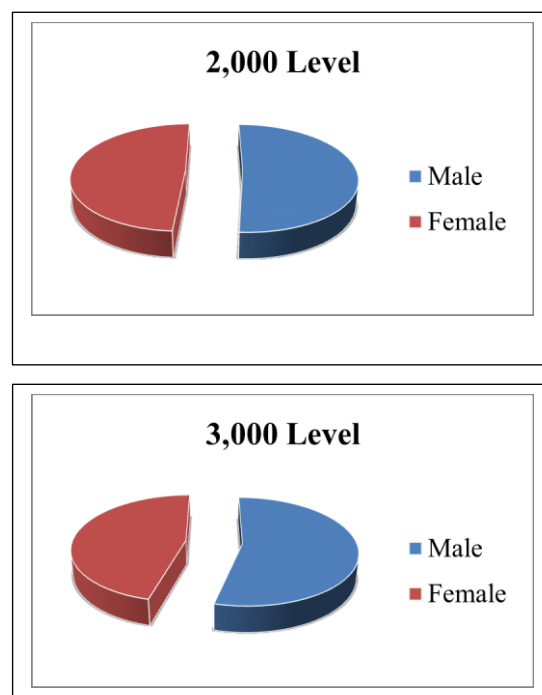
Table 3.38: Second-year Post-test Results   **Figure 3.8: Second-year Post-test Results**

Concerning the 2,000 level, second-year students had a surprising percentage of 94.7% ranged from 86% to 98% with little gender involvement encountered (males 0.949, females 0.945). On the contrary, the 3,000 level scored 79.3% correct answers ranging

from 60% to 92% with a conspicuous gender intercession, while male students had a mean of 0.813, female students marked 0.774.

The sentences written by second-year students were generally well structured and demonstrated a good understanding of vocabulary and syntax. However, there were some minor grammatical errors and ambiguous expressions as exemplified below.

Sentences Sample	
Female	❖ My **parent**s <u>has</u> always valued **Education**.
	❖ The **bench** was placed <u>at</u> the hallway of the **apartment**.
	❖ The farmer harvested a large **crop** of apples.
Male	❖ The **device** was used to monitor the hidden camera inside the **mirror**!
	❖ I made myself from **dust** and ashes of my ancestors!
	❖ That veil gave you some nice **charm**

Table 3.39: Second-year Sample Sentences

3.3.2.3 Third Year

The vocabulary levels post-test was administered to 20 third-year EFL students exhibited the highest percentage of 98.22% correctly matched words to suitable definitions with more than 45% expressions were effusively answered by all students.

The 2,000 words Level			The 3,000 words Level		
Words	males	females	Words	males	females
A	1.00	0.98	a	0.98	0.98
B	1.00	1.00	b	0.98	0.96
C	1.00	1.00	c	1.00	0.98
D	1.00	1.00	d	0.98	0.96
E	0.98	0.98	e	1.00	1.00
F	1.00	1.00	f	0.96	0.98
G	0.98	1.00	g	0.96	0.96
H	0.96	0.98	h	0.98	0.98
I	1.00	1.00	i	1.00	1.00
J	0.98	0.96	j	0.94	0.92
K	0.96	0.98	k	1.00	0.98
L	0.98	0.98	l	1.00	1.00
M	1.00	1.00	m	1.00	1.00
N	0.98	1.00	n	0.92	0.92
O	1.00	1.00	o	0.98	0.98

2,000 Level
- Male
- Female

3,000 Level
- Male
- Female
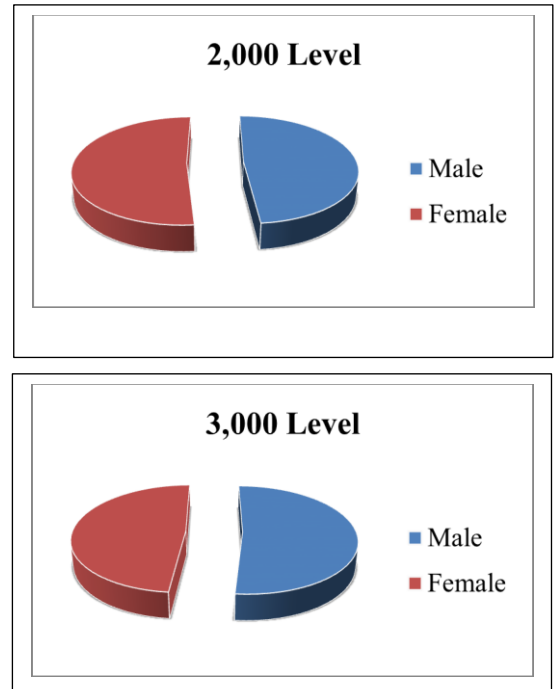
Table 3.40: Third-year Post-test Results   **Figure 3.9: Third-year Post-test Results**
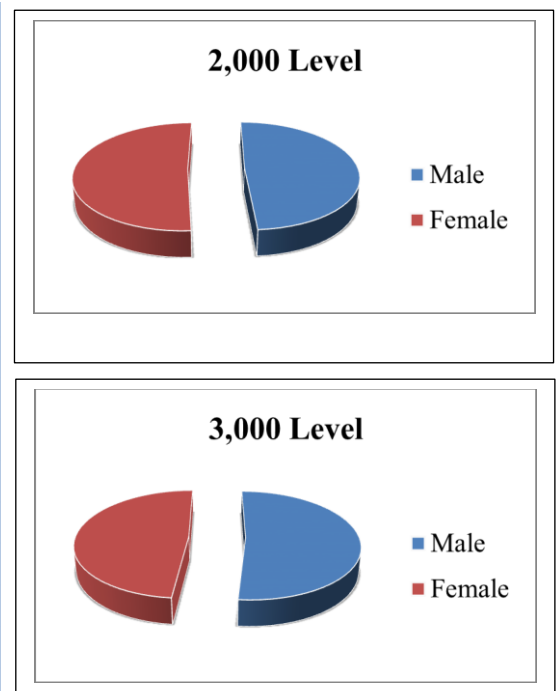
The charts above illustrated the results of a vocabulary levels test enrolled by 20 junior students. The 2,000 level demonstrated an impressive range of performance with a percentage of 98.9% correctly replied definitions as males scored a mean of 0.988, females had 0.990, shifting from 96% to 100%. Likewise, the 3,000 level scored a noteworthy rate of 0.975 with accurate answers and wide range of performance from both males (97.8%) and females (97.3%).

Concerning the written task, third year students demonstrated an outstanding ability in writing varied and well-constructed sentences. They used different types of phrases, more complex compared to freshmen and sophomore participants, as well as accurate and free of errors as clarified in table 3.

Sentences Sample	
Male	❖ The shadow of the **factory** loomed large on the horizon, dwarfing everything in its path.
	❖ The fluttering **row** of flags in the wind is a sign of nation's **victory**.
	❖ This **boot** <u>have</u> been lonely since I lost its pair!
Female	❖ The **victim** was left with a **phrase** of sorrow.
	❖ Your **secret** is safe with me, my lips are sealed!
	❖ On the day of her **birth**, a **dust**ing of snow blanketed the town.

Table 3.41: Third-year Sample Sentences

Ultimately, the vocabulary learning strategies training endeavoured a positive impression on students' vocabulary knowledge demonstrating a considerable progress in vocabulary levels test scores (figure 3.10) and a good grasp of the language writing practice. The experimental students' group average score increased from a mean rate of 0.675 to 0.895 with inconsequential gender interference. Additionally, the results indicated that some participants organized texts while others learned to spend time preparing the writing main ideas and proofreading. As a result, students were able to strengthen the prevalence of eloquent writing, by devoting the appropriate time and preparation.

	First year	Second year	Third year
■ Co,G Male	56,45%	67,10%	85,80%
■ Co,G Female	56,95%	67,15%	78,80%
■ Ex,G Male	84,45%	88,10%	98,30%
■ Ex,G Female	82,50%	85,95%	98,15%
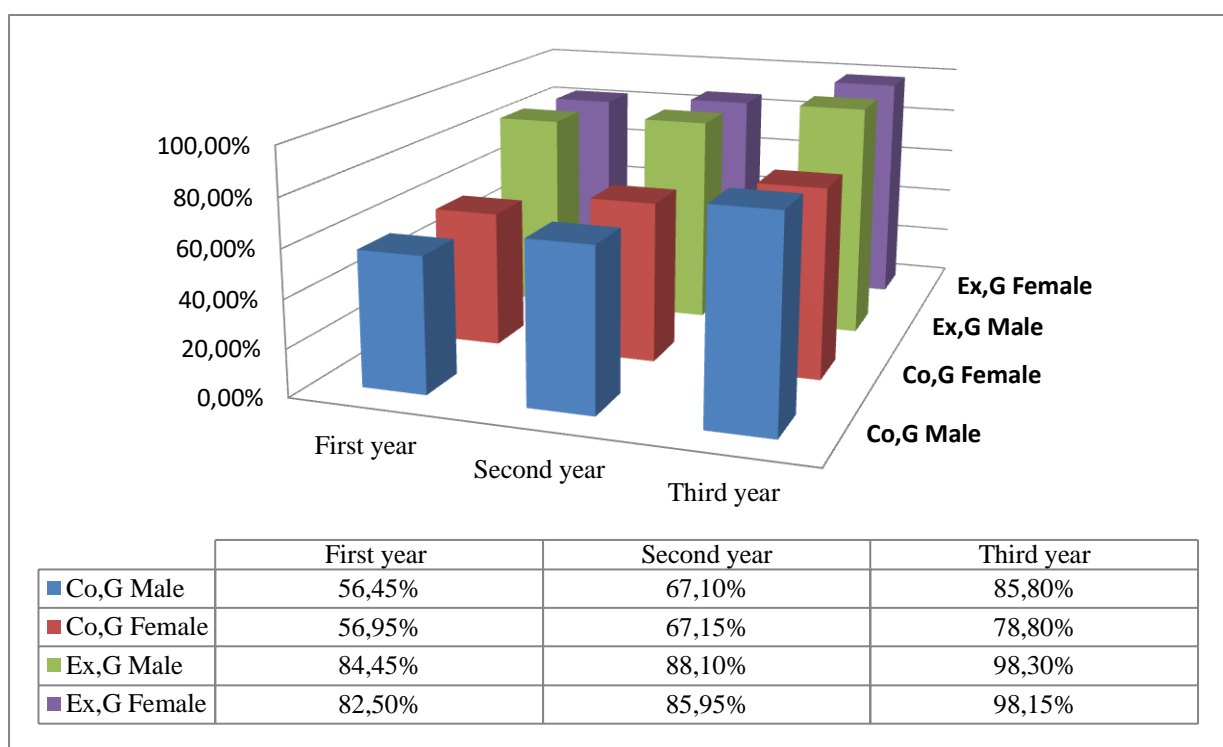
Figure 3.10: Pre and Post-test Results

The post test revealed that the vocabulary training session had a significant influence on students' vocabulary outcome. It should be also noted that both male and female students achieved satisfying scores.

3.4 Focus Group Discussion

A focus group (appendix n°5) is a qualitative research method used to gain insights into students' attitudes, behaviours, and opinions on vocabulary learning strategies while carrying out the vocabulary test. The three groups were typically composed of ten students, five males and five females were scarcely selected to explore potential gender interference and VLSs use. The discussion was guided by three open-ended questions to embolden students share their thoughts and feelings. The focus group discussion provided the following discernments.

3.4.1 First Year

At the end of the vocabulary strategy training session, first-year students participated in a focus group discussion to share their feedback on the effectiveness of the program. The group was asked three main questions, and each student took turns answering. The

findings revealed that the training was advantageous in improving students' understanding of new words, as reflected in the post-training vocabulary test. However, the students expressed complications in applying the new acquired vocabulary in everyday conversations, designating transition from their theoretical knowledge to the practical usage. In order to overcome the challenge of retrieve usage, they suggested using flashcards and reading loads or ludicrously playing online videogames to expand their lexicon and surge their confidence in using new words in conversations.

A comparison between pre and post training communication skills assessments revealed a marginal progress in communication skills among freshmen students. Pithily, first-year students avowed that the vocabulary strategy training contributed in enhancing their confidence and conversation further practice. The findings suggested that since the vocabulary strategy training was effective in expanding students' vocabulary knowledge, a more targeted approach incorporating practical usage of new words in everyday exchanges would enrich their vocabulary expenditure.

3.4.2 Second Year

In a focus group discussion, second-year students acknowledged that the program was effective in expanding their vocabulary knowledge. However, they confessed that they faced difficulties in retaining the new words they learned. A comparison between the pre- and post-training vocabulary assessments revealed a significant increase in the number of new words acquired by students, but only a marginal improvement in their retention rates.

In order to expand vocabulary retention, second-year students recommended incorporating more hands-on activities into classes, such as games and quizzes, to reinforce vocabulary learning. They also suggested reading extensively and incorporating new lexical items in daily conversations to reinforce the remembering process. Succinctly, second-year students alleged that the vocabulary strategy training was a prized experience in expanding vocabulary knowledge and would undeniably increase retention rates.

3.4.3 Third Year

The third-year focus group discussion adduced that vocabulary learning strategies training was constructive, though some participants declared that it would be more effective once tailored to individual learning styles. Junior students further reported facing some hurdles when learning unfamiliar words that were not commonly employed in daily life routine. In order to overcome this impediment, most students suggested breaking down complex words into root components and practicing using them in sentences to develop vocabulary retention. They also advocated watching podcast and memics, as the first provides an engaging and interactive way to learn new words. Podcasts frequently feature conversations between native speakers, and listening to them promotes students familiarity with new words and their meanings, as well as how to use it in context. Additionally, it is perceived as a prodigious strategy to practice pronunciation as you can hear how natives pronounce it in a more natural way.

Memics is a portmanteau of the words "meme" and "comics" which refers to a type of comic strip or cartoon that uses memes as a source of humor. Memics generally ascribe popular internet memes providing visual cues and mnemonic devices. Junior students might exploit it by creating a mental image of a word by associating it with a picture or a phrase and ultimately help them remember words more easily. Memics is also used to create words associations, learning multiple words at once in a more enjoyable manner. Some juniors advised putting oneself in challenging situations (addressing natives) would surely endorse vocabulary learning. They added that it was not easy at first nor welcomed by everyone, they were mocked or laughed at but other native speakers were willing to help by correcting their blunders.

Conclusively, the group reckoned vocabulary strategy training program as a valuable experience that facilitated their vocabulary consumption. The findings recommended a tailored approach to vocabulary training such as breaking down complex words and catering individual learning styles would be more effective for students' vocabulary retention. Creative, fun, and engaging activities are considered favourable in promoting students' vocabulary acquisition.

3.5 The Vocabulary Learning Strategy Survey's Results

In this section, the vocabulary learning strategy survey (appendix n°6) results are thoroughly deliberated. The survey aimed to assess the various strategies employed by EFL students in learning new English words and perceived useful to build their lexicon. The data collected from the survey provided valuable insights into the effectiveness and the utility of different VLSs and its impact on the students' language proficiency.

The findings are equated in mean, each response was attributed a numerical score from one to five. Never/*not useful* = 1, seldom/*not sure it is useful* = 2, sometimes/*quite useful* = 3, often/*very useful* = 4, very often/*extremely useful* = 5. The standard deviation for each vocabulary learning strategy was also calculated. For instance, a score of 3.7/1.4 refers to a mean of 3.7 and a standard deviation of 1.4. Moreover, the results are authentically reported in tables first then figures to better demonstrate the strategies rate. The overall mean score of the 38 strategies for frequency of use is 3.18 (*sometimes*); while the usefulness is 3.83 (*quite /very useful*).

3.5.1 First Year

The first part of this section discusses the key findings of the vocabulary survey, stating the most frequently used vocabulary learning strategies by first-year female and male students. The second part presents the most VLSs perceived as useful.

3.5.1.1 Determination Strategies

According to first-year students' survey outcomes, determination strategies rated first being the most regularly used category with a mean score of 3.94/0.81 as listed in details below.

		Male	Female	Total
A1	Check the new word's form	2.93/0.81	3.89/1.03	3.41
A2	Look for any word parts that I know	3.46/0.76	4.25/1.16	3.85
A3	Use any pictures or gestures to help me guess	2.58/0.73	3.83/0.29	3.20
A4	Guess from the context	4.86/0.32	4.83/0.61	4.84
A5	Use an Arabic/French-English dictionary	4.74/0.27	4.91/0.76	4.82
A6	Use an English-English dictionary	3.19/0.89	3.88/1.12	3.53

Table 3.42: First-year Frequency of Use (Determination Strategies)

The obtained data indicated that first-year students frequently employed the majority of strategies to determine new words meanings when first encountered. The strategy of checking word's form (A1) was *seldom* used by male and *sometimes* by female. The strategy of looking at word parts such as affixes or suffixes to define meaning (A2) was also *sometimes* employed. Concerning the strategy of using pictures or gestures (A3), it was *seldom* endeavoured by male while *often* advocated by female. Guessing word meanings from context (A4) was highly *(very often)* supported by freshmen students as it occurs spontaneously in any unfamiliar lexical situation. The two last determination strategies scored interesting results. As seeking bilingual dictionaries (A5) were *very often* deployed, monolingual dictionaries (A6) were *sometimes* utilized.
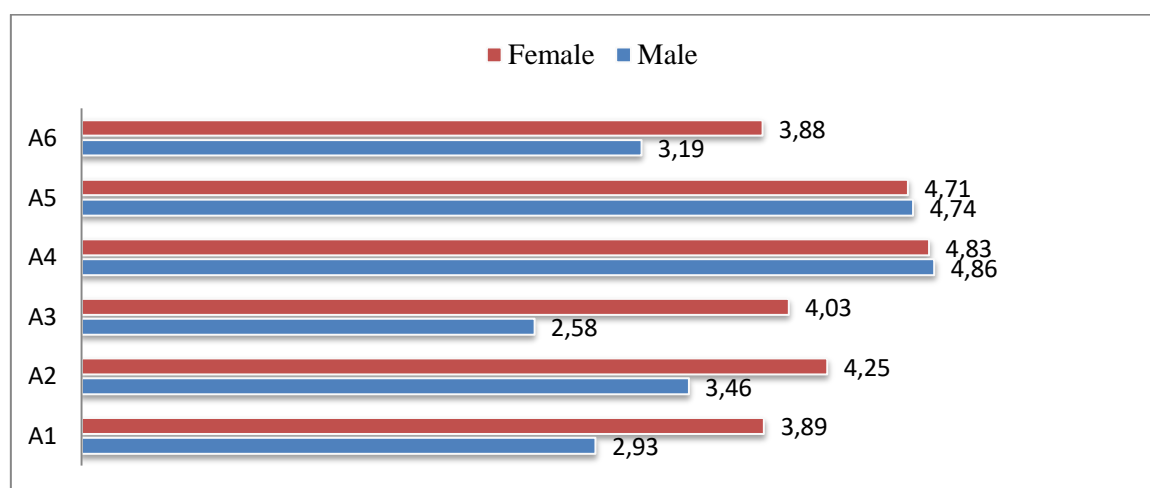
Figure 3.11: First-year Frequency of Use (Determination Strategies)

Regarding the figure above, it is distinctively avowed that first year female students (4.26) use an extensive array of determination strategies compared to male participants (3.62) who slightly supersede in A4 and A5.

Determination Strategies were also perceived by first-year students as *very useful* with a mean of 4.18/0.87.

		Male	*Female*	*Total*
A1	Check the new word's form	4.03/1.01	4.11/1.23	4.07
A2	Look for any word parts that I know	3.89/0.69	4.23/1.02	4.06
A3	Use any pictures or gestures to help me guess	3.76/0.71	3.96/0.76	3.86
A4	Guess from the context	4.57/0.42	4.74/0.61	4.65
A5	Use an Arabic/French-English dictionary	4.04/0.74	4.76/1.21	4.40
A6	Use an English-English dictionary	3.95/0.83	4.18/1.33	4.06

Table 3.43: First-year Perceived Usefulness (Determination Strategies)

A trivial gender difference was detected in terms of determination strategies utility. Whereas male students scored 4.04/0.73, female learners recorded 4.33/1.02.
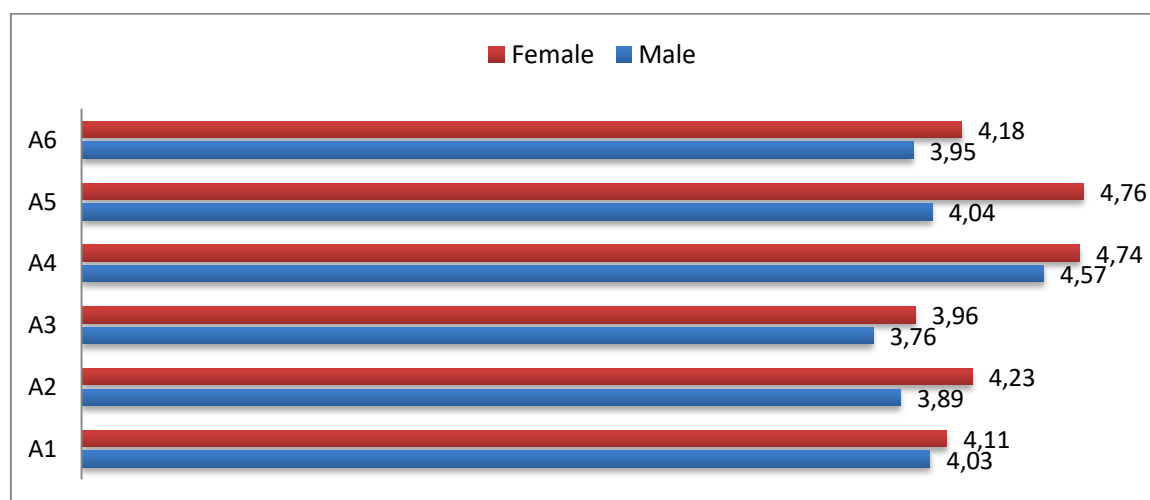
Figure 3.12: First Year Perceived Usefulness (Determination Strategies)

The most useful determination strategies according to female students were A5 and A4; bilingual dictionaries and guessing from context. Male respondents also sustained these two strategies with a less frequency of perceived usefulness.

3.5.1.2 Social Strategies

First-year students manifested to *sometimes* exert social strategies with a frequency of 3.31. However, males scored a higher rate (3.54) compared to females (3.08)

		Male	*Female*	*Total*
B1	Ask the teacher to give you the definition or a sentence.	3.34/0.04	3.88/0.18	3.61
B2	Ask your classmates for the meaning	3.49/1.01	3.57/0.83	3.53
B3	Study the word with your classmates	2.51/1.09	2.14/0.71	2.32
B4	Ask the teacher to check your definition	3.85/0.46	3.18/1.26	3.51
B5	Talk with native speakers	4.52/0.51	2.64/1.59	3.58

Table 3.44: First Year Frequency of Use (Social Strategies)

First-year students strove a mechanical lane while resorting to social strategies. The strategies of asking the teacher for words' definition (B1) or verify students' explanation (B4), and asking classmates for meaning (B2) established analogous score. It could be vindicated by the classroom daily routine that students exert when facing new lexicon. They have the propensity to guess the meaning on their own first, if they do not succeed, they recourse to dictionaries.
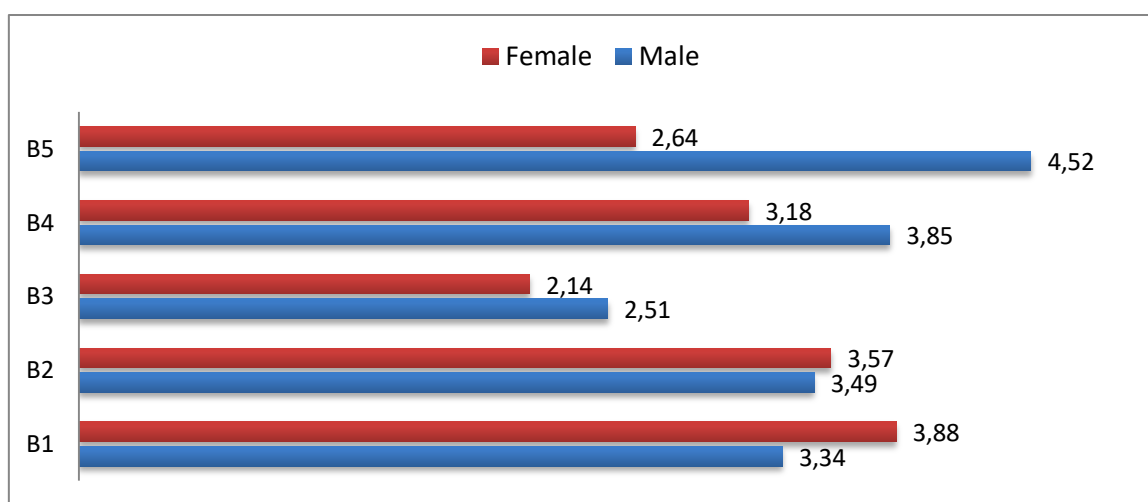
Figure 3.13: First Year Frequency of Use (Social Strategies)

Conversely, students seek classmates' or teacher's assistance when the aforementioned strategies strand in determining the word's meaning. Thereby, first year students initially try earnestly to decode new lexical items themselves, and only when insuperable, they reach for support from an outer circle. The results plunged when studying the word with classmates (B3) which was *seldom* or *never* used.

Freshmen students perceived social strategies usefulness as *quite useful* with a score of 3.73 (female 3.59, male 3.87).

		Male	*Female*	*Total*
B1	Ask the teacher to give you the definition or a sentence.	4.02/0.84	4.21/0.98	4.11
B2	Ask your classmates for the meaning	3.98/1.03	3.32/0.91	3.65
B3	Study the word with your classmates	2.96/0.87	2.74/0.95	2.85
B4	Ask the teacher to check your definition	3.87/0.92	3.96/1.06	3.91
B5	Talk with native speakers	4.52/0.91	3.76/1.11	4.14

Table 3.45: First Year Perceived Usefulness (Social Strategies)

Though talking with native speakers (B5) was *sometimes* employed, it was perceived as *very useful* particularly by males. Nowadays, students ought to handily communicate with native speakers with abundance conveniences using social Medias or chatting platforms such as *Facebook*, *Instagram*, *telegram*… etc.
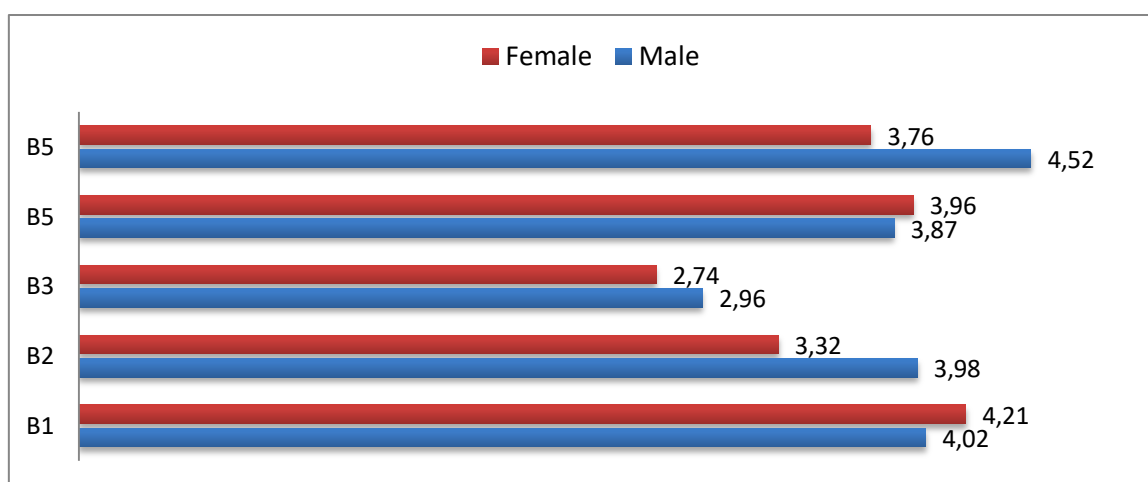
Figure 3.14: First Year Perceived Usefulness (Social Strategies)

Moreover, teacher's assistance (B1) was also perceived very useful by freshmen students, whereas they could not accentuate the other social strategies effectiveness.

3.5.1.3 Memory Strategies

The memory strategies were *seldom* used (2.59). It encompassed the least three deployed strategies and have received the second lowest frequency of use (males 2.58, females 2.60).

		Male	*Female*	*Total*
C1	Draw a picture of the word to help remember it	1.02/0.01	1.01/0.05	1.01
C2	Make a mental image of the word's meaning	2.73/0.13	2.48/0.75	2.60
C3	Connect the word to a personal experience	2.46/0.28	2.61/0.36	2.53
C4	Remember the words that follow or precede the new word	1.01/0.01	1.02/0.01	1.01
C5	Connect the word to other similar/opposite words meanings	3.43/0.89	3.62/0.37	3.52
C6	Remember words in 'scales' (always, often …)	2.42/0.24	2.55/0.92	2.48
C7	Group words together to study them	2.09/0.36	2.15/0.52	2.12
C8	Use new words in sentences	3.53/0.07	3.61/0.97	3.57
C9	Write paragraphs using several new words	2.96/0.58	2.98/1.36	2.97
C10	Study the spelling of a word	3.71/0.43	3.99/1.09	3.85
C11	Study the sound of a word	2.88/0.24	2.83/0.68	2.85
C12	Say the new words aloud when you first meet them	2.11/0.99	2.35/0.03	2.23
C13	Make a mental image of the word's form	2.74/0.14	2.68/0.54	2.71
C14	Remember the word using its parts (im-, un-, -able)	3.32/0.41	2.89/0.85	3.10
C15	Remember the word using its word form (v, n, adj)	3.13/0.02	2.98/0.46	3.05
C16	Make your own definition for the word	3.31/0.71	3.44/1.01	3.37
C17	Use physical action when learning a word	1.01/0.01	1.02/0.04	1.01

Table 3.46: First Year Frequency of Use (Memory Strategies)

Memory strategies were perceived as *quite useful* with a mean score of 3.51 (Males 3.46, females 3.56).

		Male	*Female*	*Total*
C1	Draw a picture of the word to help remember it	1.01/0.31	1.02/0.07	1.01
C2	Make a mental image of the word's meaning	3.53/0.67	4.28/1.15	3.90
C3	Connect the word to a personal experience	4.11/1.94	4.12/1.63	4.11
C4	Remember the words that follow or precede the new word	1.02/0.91	1.01/0.15	1.01
C5	Connect the word to other similar/opposite words meanings	3.84/0.27	4.39/0.47	4.11
C6	Remember words in 'scales' (always, often …)	4.08/1.32	4.22/1.04	4.15
C7	Group words together to study them	4.09/1.24	4.17/1.52	4.13
C8	Use new words in sentences	4.07/1.19	4.25/1.15	4.16
C9	Write paragraphs using several new words	4.22/0.74	4.11/0.52	4.16
C10	Study the spelling of a word	4.11/0.23	3.92/0.09	4.01
C11	Study the sound of a word	4.03/0.92	3.87/0.34	3.92
C12	Say the new words aloud when you first meet them	3.62 /0.49	3.92/1.08	3.77
C13	Make a mental image of the word's form	3.96/1.42	3.92/0.93	3.94
C14	Remember the word using its parts (im-, un-, -able)	3.98/0.81	4.09/0.54	4.03
C15	Remember the word using its word form (v, n, adj)	4.09/0.55	4.18/0.17	4.13
C16	Make your own definition for the word	4.12/1.05	4.11/1.35	4.11
C17	Use physical action when learning a word	1.02/0.21	1.01/0.18	1.01

Table 3.47: First Year Perceived Usefulness (Memory Strategies)

Regarding the records above, it could be noticed that freshmen students had diverse responses and attitudes when approaching memory strategies. The strategies of drawing a picture of the word to enhance its reminiscence (C1), recall the words that follow or precede the new word (C4) and using physical action when learning a word (C17) scored the lowest use and usefulness ratings. These strategies were *never* utilized among students and were also perceived *not useful*.

In contrast, the strategies of studying the spelling of a word (C10), using new lexicon in sentences (C8), making your own definition (C16) and connect lexical items to other words meanings (C5) were relatively employed and perceived *very useful*. The results were expounded by the recurrent learning process accentuated by strategy C10 and C16 in daily English lectures as an initiative contribution for a successful storage. The strategies (C11) and (C12) were *seldom* employed though alleged *quite useful*. These strategies are closely interrelated with phonetics course since it instructs words' sounds. Participants also declared that C10 and C11 were highly valued by lecturers as it fosters students' pronunciation and spelling.
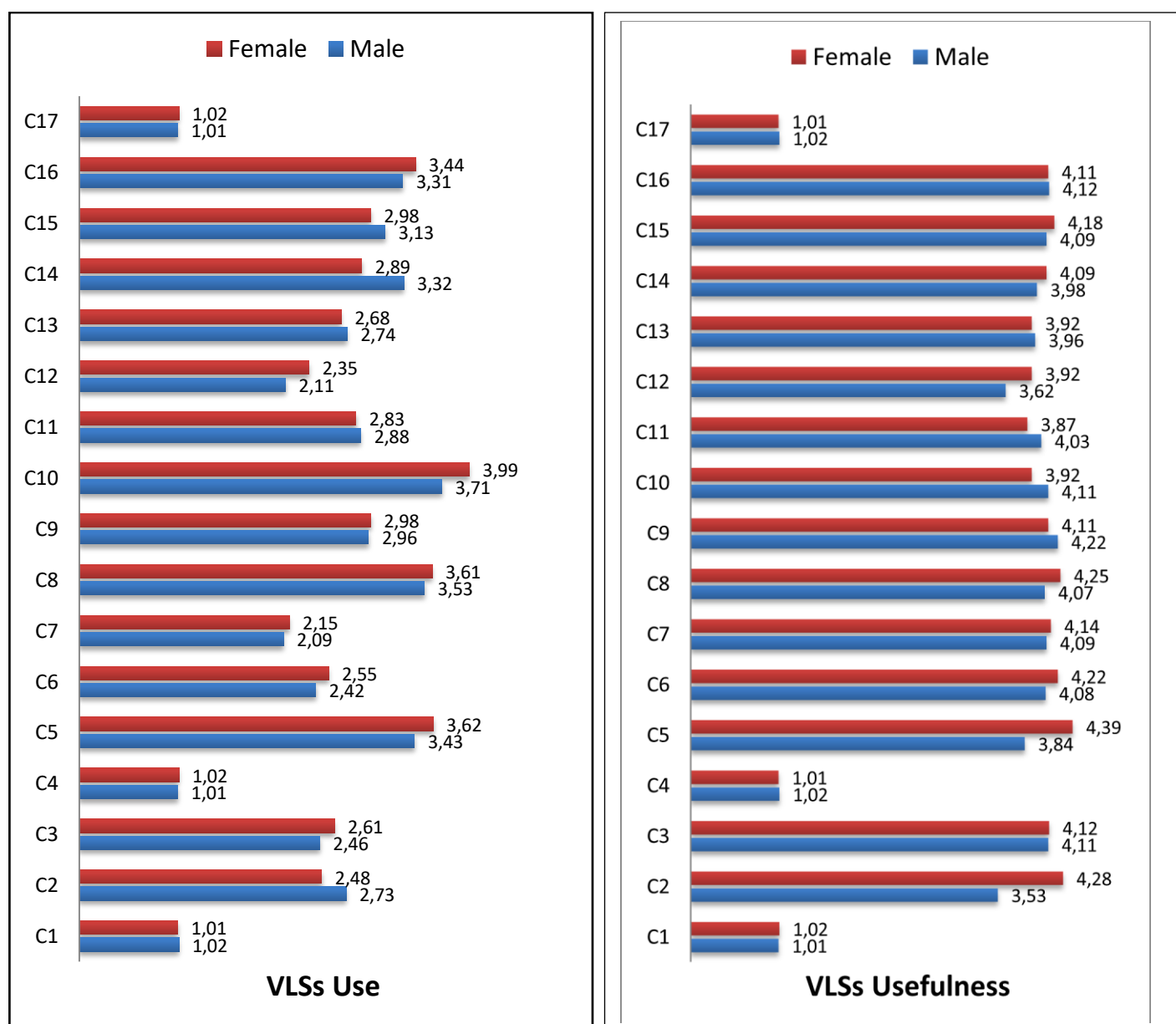
Figure 3.15: First Year Frequency of Use & Usefulness (Memory Strategies)

As regard to the strategies of making a mental image of the word's meaning (C2), connecting it to a personal experience (C3), remembering words in scales (C6), and group lexicon while studying (C7) were *seldom* used though acknowledged as *very useful*. These strategies were generally elected by students advocating learning by heart. Meanwhile, making a mental image of the word's form (C13) was *sometimes* used. In terms of usefulness, they are perceived as *quite useful*. Moreover, strategies C3 and C9 were strained by EFL teachers in practice classes by frequently associating course content with students' interests, hobbies, or daily life routines. Although

teachers often recommend students to retrieve and utilize the new-faced words (C8, C9), they seem to be neglected.

Concerning the strategies (C13) making a mental image and remembering the word using its parts (C14) or form (C15) were *seldom/sometimes* used and qualified *quite useful* as it endorses students' repository. Substantially, it could be deduced from the figure above that freshmen students seldom deploy memory strategies though they recognize them as quite or very useful.

3.5.1.4 Cognitive Strategies

First-year students *sometimes* recoursed to cognitive strategies with a mean score of 3.29, with no gender evidence annotated (male 3.26, female 3.32).

		Male	*Female*	*Total*
D1	Repeat the words aloud many times	2.12/0.03	2.28/0.46	2.20
D2	Write the words many times	2.79/0.36	2.68/0.57	3.23
D3	Make lists of new words	3.61/0.71	3.52/0.21	3.56
D4	Use flash cards to record new words	2.97/0.32	2.93/0.33	2.45
D5	Take notes or highlight new words in class	3.88/0.11	4.47/0.03	4.17
D6	Put English labels on physical objects	3.86/0.64	3.65/0.76	3.75
D7	Keep a vocabulary notebook	3.64/0.45	3.72/0.04	3.68

Table 3.48: First Year Frequency of Use (Cognitive Strategies)

Cognitive strategies were regarded as *quite useful* (3.98) with a significant gender difference (male useful rate 3.81, female 4.15).

		Male	*Female*	*Total*
D1	Repeat the words aloud many times	3.10/1.03	3.62/0.89	3.36
D2	Write the words many times	3.22/1.06	3.97/0.98	3.59
D3	Make lists of new words	3.72/0.62	3.96/1.31	3.84
D4	Use flash cards to record new words	3.82/0.47	4.02/0.54	3.92
D5	Take notes or highlight new words in class	4.80 /0.14	4.92/0.36	4.86
D6	Put English labels on physical objects	3.23/0.21	3.73/0.43	3.48
D7	Keep a vocabulary notebook	4.78/1.29	4.84/1.06	4.81

Table 3.49: First Year Perceived Usefulness (Cognitive Strategies)

Whereas the strategy of repeating words aloud numerously (D1) was *seldom* employed, first-year students did *sometimes* write the words (D2), where both were regarded as *quite useful.* Concerning the strategies of making lists of new words (D3)

and using flash cards to record them (D4) were *sometimes/seldom* used, participants classified them as *quite useful* as well. These strategies embolden students in assembling words while studying for a manageable learning process and create connections between words and ideas.
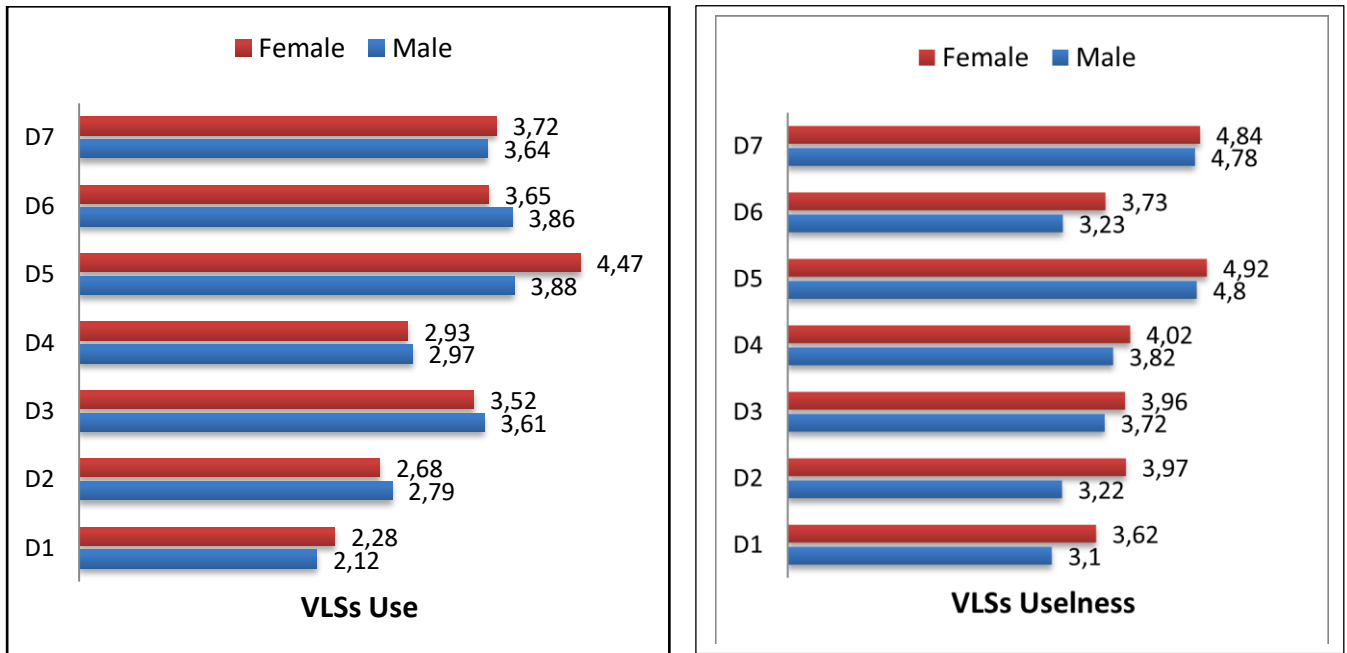
Figure 3.16: First Year Frequency of Use & Usefulness (Cognitive Strategies)

The strategies of taking notes or highlighting new words in class (D5) received the highest use and usefulness rating, trailed by keeping a vocabulary notebook (D7). These strategies were *sometimes/often* used and regarded as *very useful.* Teachers and students agree on the fact that these strategies are worthwhile in learning new vocabulary and concepts. As illustrated in Figure 3.16, it could be perceived that female participants out rated and used more frequently those strategies. Conversely, the results dropped marginally when it came to the use of putting English labels on physical objects (D6). It is predicted that students misinterpreted the connotation of this strategy.

3.5.1.5 Metacognitive Strategies

The metacognitive strategies were designated as the least used category through a mean score of 2.02, with minor gender indications (male 1.90, female 2.14).

		Male	*Female*	*Total*
E1	Use English-language media	3.63/0.25	4.32/0.17	3.97
E2	Test yourself with word tests	1.05/0.03	1.06/0.04	1.05
E3	Study new words many times	1.03/0.02	1.04/0.03	1.03

Table 3.50: First Year Frequency of Use (Metacognitive Strategies)

Furthermore, this category was considered the least useful with a score of 2.11. The male useful rate is 1.89 whereas the female is 2.33.

		Male	*Female*	*Total*
E1	Use English-language media	3.61/0.25	4.86/0.48	4.23
E2	Test yourself with word tests	1.03/0.02	1.04/0.12	1.03
E3	Study new words many times	1.03/0.01	1.09/0.04	1.06

Table 3.51: First Year Perceived Usefulness (Metacognitive Strategies)

The metacognitive strategies results were quite substandard, excluding (E1). The strategy of using English language media received the highest frequency of use in this group for being *often* used and was further perceived as *very useful* mainly by females. In this day and age, students are more exposed to English facilities such as broadcasted channels or shows, and YouTube podcasts that could be recognized as a prodigious approach to building a resilient understanding of the targeted language. Besides being an entertaining and engaging way to learn English, it introduces learners to real-world examples with contemporary topics and how words are used in context. For instance, students avowed during the think-aloud protocol that they were more likely to watch subtitled English movies or talk shows. Teachers also endorsed and accentuated English resources' status once correctly exploited and implemented.
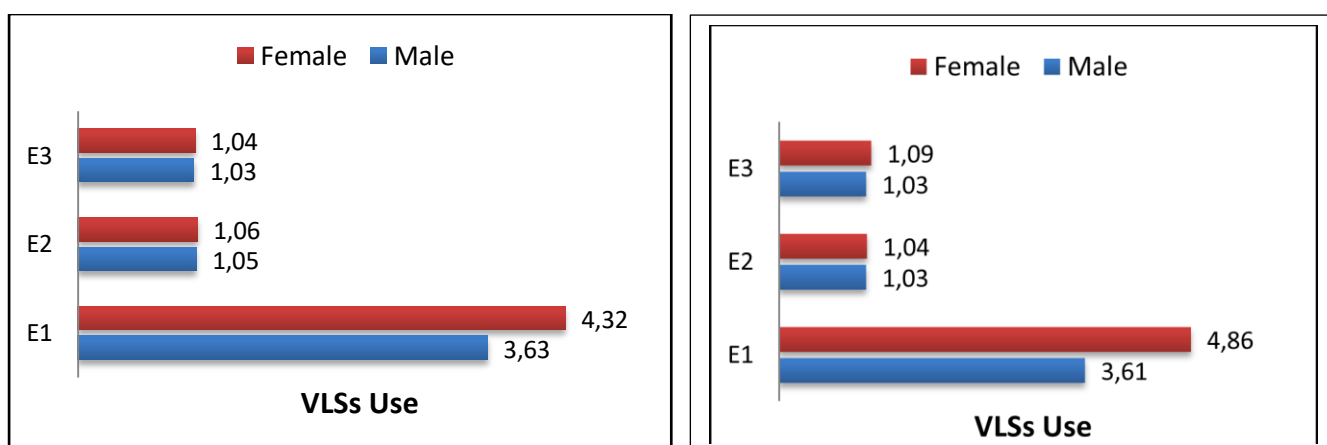
Figure 3.17: First Year Frequency of Use & Usefulness (Metacognitive Strategies)

In contrast, the two metacognitive strategies; testing yourself with word tests (E2) and studying new words many times (E3) were much less used *(never),* and perceived as *not useful* by all participants. These results unveiled some insight concerning freshmen students' learning approach.

3.5.2 Second Year

The vocabulary survey results gathered from 50 second year students studying at Algiers 2 University, department of English are discoursed in details (from use to usefulness) according to the five VLS main categories.

3.5.2.1 Determination Strategies

Based on the collected data from second-year, it was displayed that sophomore students heavily rely on determination strategies to determine the new words' meaning with a mean score of 4.13. Female students scored a higher rate of 4.39, compared to males who had 3.87.

		Male	*Female*	*Total*
A1	Check the new word's form	3.34/1.02	3.97/0.40	3.65
A2	Look for any word parts that I know	3.53/0.87	4.29/1.02	3.91
A3	Use any pictures or gestures to help me guess	3.05/0.83	3.95/1.16	3.50
A4	Guess from the context	4.83/0.86	4.81/1.34	4.82
A5	Use an Arabic/French-English dictionary	4.69/0.57	4.97/0.72	4.83
A6	Use an English-English dictionary	3.83/0.98	4.36/1.03	4.09

Table 3.52: Second Year Frequency of Use (Determination Strategies)

Determination strategies analysis revealed that guessing the word's meaning from context (A4) and seeking bilingual dictionaries (A5) were *often* used by both male and female participants, followed by monolingual dictionaries (A6) which is *sometimes* recoursed by males and *often* by females. Checking the word's form (A1), looking at word parts (A2) and the use of pictures or gestures (A3) were in total use of similarly, they were slightly less frequently used (*sometimes*) by all sophomores except for A2 which was *often* employed by females.
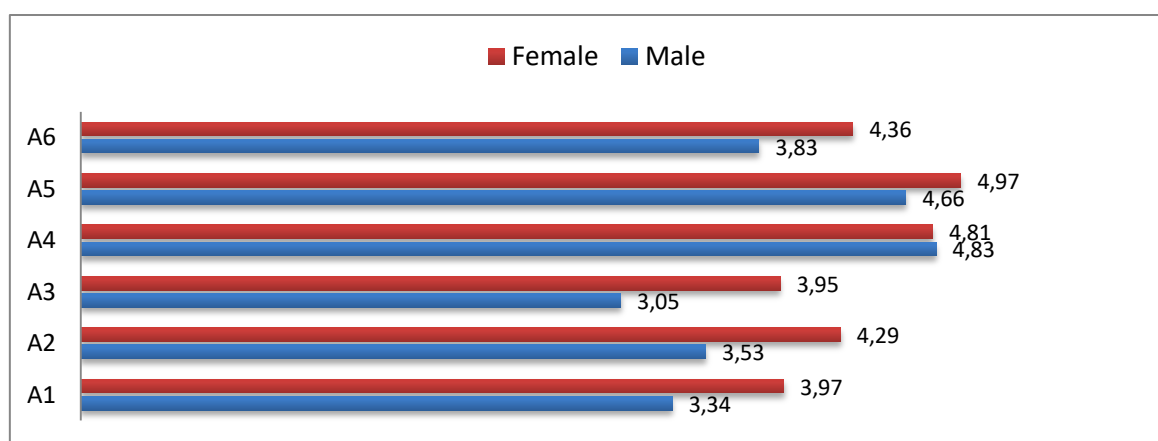
Figure 3.18: Second Year Frequency of Use (Determination Strategies)

Determination strategies were also perceived by second-year students as the most useful category with a mean of 4.29. Male participants had a rate of 4.20, while females scored 4.38.

		Male	Female	Total
A1	Check the new word's form	3.91/1.11	4.22/1.14	4.06
A2	Look for any word parts that I know	4.04/0.65	4.21/1.01	4.12
A3	Use any pictures or gestures to help me guess	3.62/0.73	3.97/1.32	3.79
A4	Guess from the context	4.78/0.92	4.76/0.69	4.77
A5	Use an Arabic/French-English dictionary	4.67/0.86	4.69/0.98	4.68
A6	Use an English-English dictionary	4.19/0.91	4.44/1.07	4.31

Table 3.53: Second Year Perceived Usefulness (Determination Strategies)

The strategies A4 and A5 were found to be *very useful* among all respondents. Conversely, the use of any pictures or gestures to guess the meaning (A3) was the least appraised strategy considered *quite useful*. A trivial gender variation was depicted.
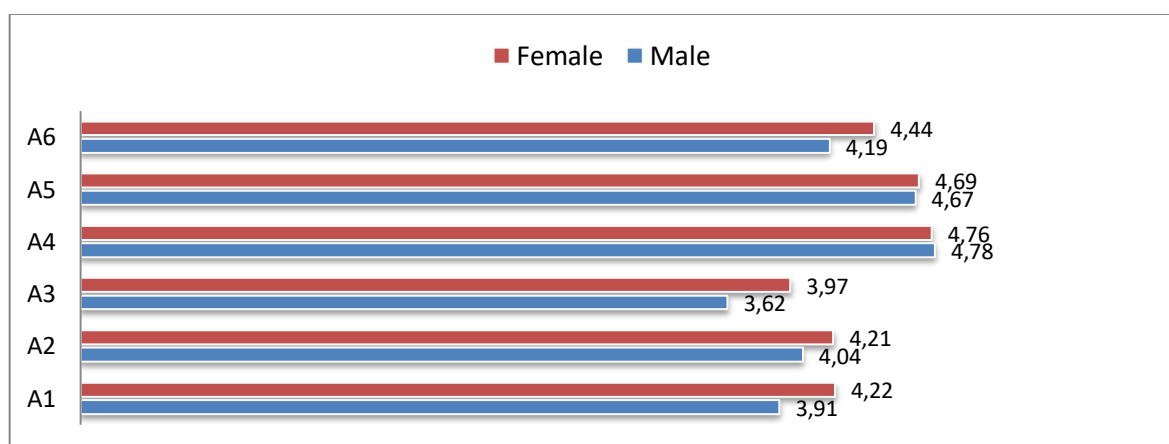
Figure 3.19: Second Year Perceived Usefulness (Determination Strategies)

3.5.2.2 Social Strategies

Second-year students have the tendency to *sometimes* utilize social strategies with a frequency of 3.27. Male respondents had a mean of 3.36, whereas females recorded a rate of 3.18.

		Male	*Female*	*Total*
B1	Ask the teacher to give you the definition or a sentence.	3.03/1.02	4.13/0.18	3.58
B2	Ask your classmates for the meaning	3.63/1.01	2.99/0.83	3.31
B3	Study the word with your classmates	2.34/0.09	2.85/0.71	2.59
B4	Ask the teacher to check your definition	3.12/0.46	3.18/0.26	3.15
B5	Talk with native speakers	4.68/0.21	2.76/0.59	3.72

Table 3.54: Second Year Frequency of Use (Social Strategies)
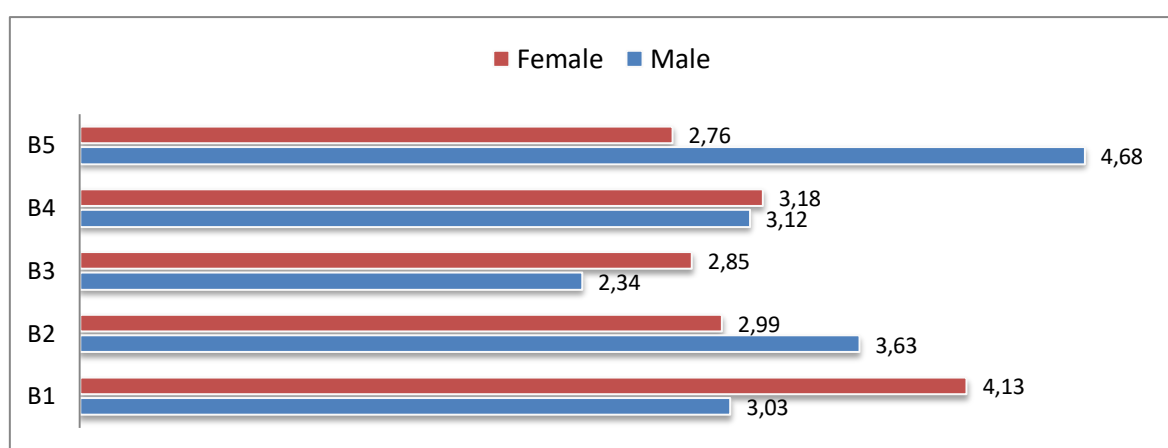
Figure 3.20: Second Year Frequency of Use (Social Strategies)

Second-year students had less resort to social strategies compared to the other categories, except for B1 and B5. Whereas asking for teachers' assistance were *often* used by females, talking with native speakers was *very often* and utmost advocated strategy by males as better demonstrated in figure 3.20. The strategy of studying the word with classmates (B3) was unanimously *seldom* used. Interestingly, the results also indicated that second year students *seldom* employed B2 and B4. Participants rarely requested classmates' support or teachers' supervision.

Nevertheless, second-year students perceived social strategies as *very useful* with a total score of 4.19. There was a minor gender disparity, as male students had a mean of 4.04, and females had 4.34.

		Male	Female	Total
B1	Ask the teacher to give you the definition or a sentence.	3.97/0.84	4.41/0.98	4.19
B2	Ask your classmates for the meaning	3.92/1.03	4.24/1.22	4.08
B3	Study the word with your classmates	3.56/1.17	4.22/0.95	3.89
B4	Ask the teacher to check your definition	4.13/1.02	4.37/1.06	4.25
B5	Talk with native speakers	4.64/0.41	4.46/1.01	4.55

Table 3.55: Second Year Perceived Usefulness (Social Strategies)
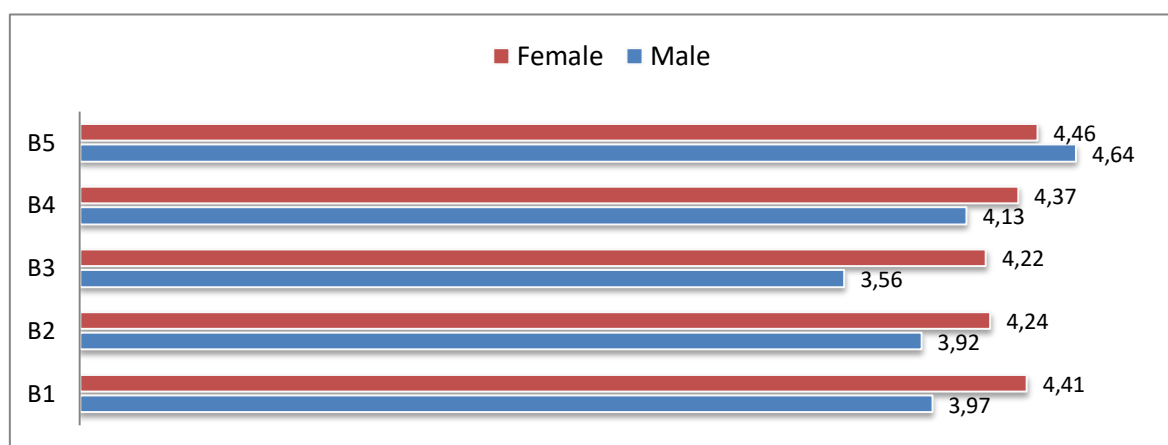
Figure 3.21: Second Year Perceived Usefulness (Social Strategies)

Both female and male participants rated B5 and B4 being *very useful.* Female learners classified the entire set of social strategies *as very useful,* while male respondents rated B1/B2/B3 as *quite useful*. Though the social category is not commonly used, sophomore students assert its effectiveness.

3.5.2.3 Memory Strategies

The results indicated that second-year students *seldom* used memory strategies, with a frequency of 2.81. It also demonstrated that males' use (2.69) was approximate to females' rate (2.93).

		Male	Female	Total
C1	Draw a picture of the word to help remember it	1.02/0.01	1.01/0.05	1.01
C2	Make a mental image of the word's meaning	3.03/0.13	3.67/0.75	3.35
C3	Connect the word to a personal experience	3.29/1.28	3.31/0.36	3.30
C4	Remember the words that follow or precede the new word	1.01/0.01	1.02/0.03	1.01
C5	Connect the word to other similar/opposite words meanings	3.23/0.89	3.29/0.37	3.26
C6	Remember words in 'scales' (always, often …)	3.28/0.24	3.66/0.92	3.47
C7	Group words together to study them	2.08/0.36	3.69/0.52	2.88
C8	Use new words in sentences	3.66/0.07	3.78/0.07	3.72
C9	Write paragraphs using several new words	3.34/0.58	3.96/1.06	3.65
C10	Study the spelling of a word	3.55/0.43	3.47/0.29	3.51

		Male	Female	Total
C11	Study the sound of a word	2.81/0.04	3.29/0.68	3.05
C12	Say the new words aloud when you first meet them	2.03/0.99	2.17/0.13	2.10
C13	Make a mental image of the word's form	2.16/0.34	2.42/0.54	2.29
C14	Remember the word using its parts (im-, un-, -able)	3.04/0.31	3.78/0.85	3.41
C15	Remember the word using its word form (v, n, adj)	3.31/0.02	3.05/0.46	3.18
C16	Make your own definition for the word	3.93/0.71	3.22/0.21	3.57
C17	Use physical action when learning a word	1.01/0.01	1.02/0.04	1.01

Table 3.56: Second Year Frequency of Use (Memory Strategies)

The most commonly employed memory strategy was the use new words in sentences (C8), it is *sometimes* used by males and females. On the contrary, this category scored the least frequently used strategies C1/C4/C17. Drawing a picture of the word to consolidate it, remembering the words that follow or precede the new word, and using physical action when learning a word were *never* utilized by all participants.

Concerning the strategies of saying the new words aloud when first encountered (C12) and making a mental image of the word's form (C13) were *seldom* used by all sophomore students. The rest majority of memory strategies were *sometimes* deployed. Gender differences were observed in grouping words together to study them (C7), and the study of word sound (C11) since female students reported a higher mean scores of *sometimes* recourse than males *seldom* use.

Regarding the usefulness of memory strategies, it was perceived as *quite useful* with a mean score of 3.87/0.57 with no significant gender evidence (male 3.88, female 3.86).

		Male	*Female*	*Total*
C1	Draw a picture of the word to help remember it	1.77/1.01	1.82/0.07	1.79
C2	Make a mental image of the word's meaning	4.23/0.67	4.18/1.05	4.20
C3	Connect the word to a personal experience	4.26/1.18	4.23/1.12	4.24
C4	Remember the words that follow or precede the new word	1.88/1.01	1.84/1.05	1.86
C5	Connect the word to other similar/opposite words meanings	4.34/1.27	4.37/1.47	4.35
C6	Remember words in 'scales' (always, often …)	3.92/1.74	4.33/1.04	4.12
C7	Group words together to study them	4.27/0.82	4.37/1.64	4.32
C8	Use new words in sentences	4.43/1.19	4.79/1.07	4.61
C9	Write paragraphs using several new words	3.98/0.54	4.83/1.52	4.40
C10	Study the spelling of a word	4.59/1.03	4.35/1.09	4.47
C11	Study the sound of a word	4.08/0.92	4.33/1.54	4.20
C12	Say the new words aloud when you first meet them	3.81/1.01	3.78/1.61	3.79
C13	Make a mental image of the word's form	4.32/1.73	4.25/1.12	4.28
C14	Remember the word using its parts (im-, un-, -able)	4.24/1.09	4.22/0.59	4.23
C15	Remember the word using its word form (v, n, adj)	4.61/1.05	4.55/1.17	4.58
C16	Make your own definition for the word	4.67/1.11	4.32/1.33	4.49

| C17 | Use physical action when learning a word | 2.56/1.14 | 1.06/0.45 | 1.81 |

Table 3.57: Second Year Perceived Usefulness (Memory Strategies)

Correspondingly, the least stated useful memory strategies by every student were C1, C4, and C17. The findings revealed that sophomore female students rated all memory strategies as *very useful* except for C12; saying the new word aloud when you first come upon it which was perceived as *quite useful*. Male students, on the other hand, also rated all memory strategies as *very useful* except for remembering words in 'scales' (C6), writing paragraphs using several new words (C9), and (C12) which were considered *quite useful*.
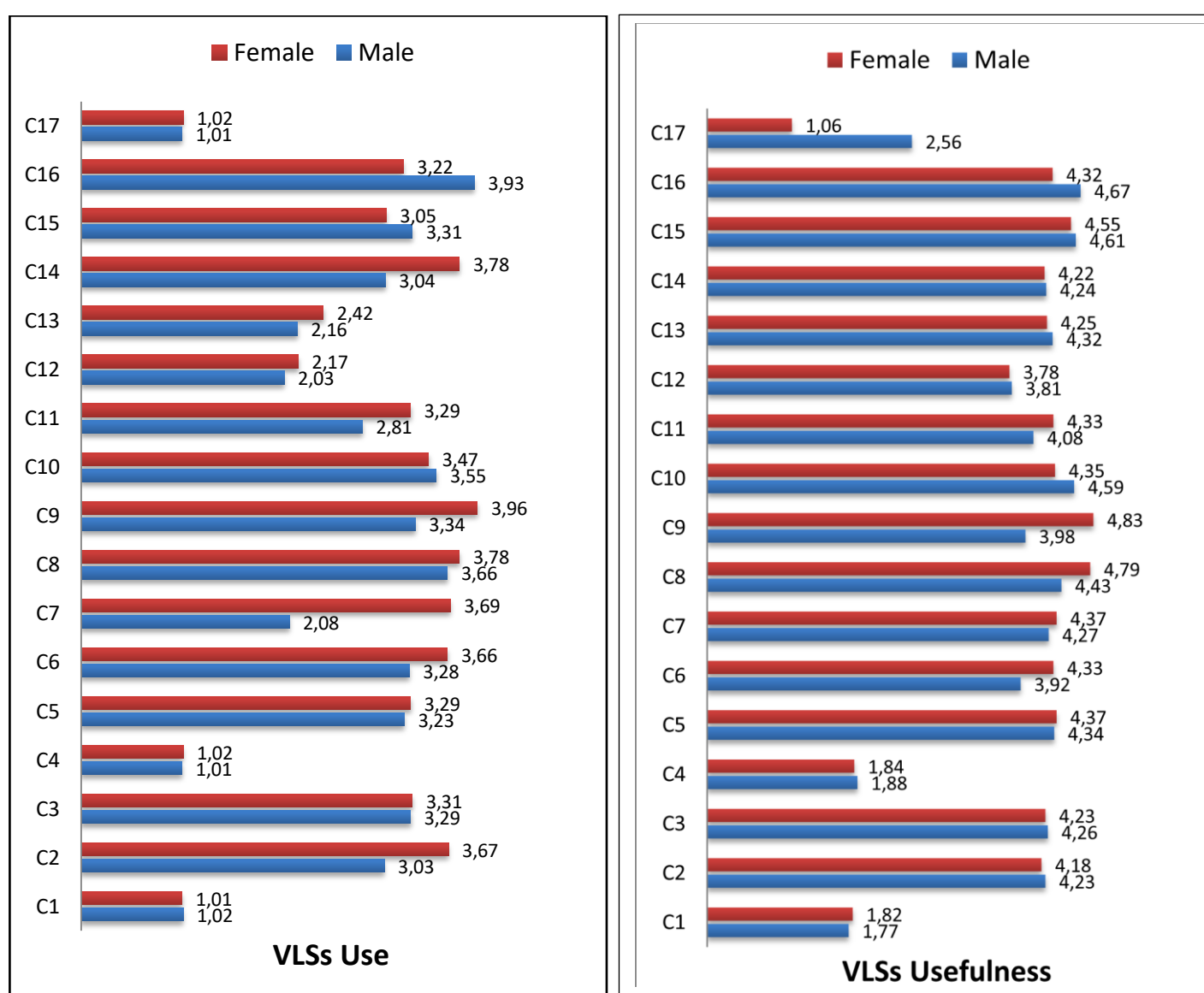
Figure 3.22: Second Year Frequency of Use & Usefulness (Memory Strategies)

As it is exhibited in Figure 3.22, one might say that the usefulness rate of memory category among sophomore students was quite approximatively barring for C16 males' distinction. However, conspicuous gender dissimilarity was recorded in terms of use.

3.5.2.4 Cognitive Strategies

Cognitive strategies were slightly used more than s*ometimes* with a mean score of 3.68, with a noteworthy gender difference (male 3.35, female 4.01).

		Male	*Female*	*Total*
D1	Repeat the words aloud many times	2.32/0.12	3.84/1.01	3.08
D2	Write the words many times	3.03/0.36	3.77/1.05	3.40
D3	Make lists of new words	3.41/0.71	3.95/1.21	3.68
D4	Use flash cards to record new words	3.15/0.92	3.93/1.08	3.54
D5	Take notes or highlight new words in class	4.52/1.31	4.82/1.19	4.67
D6	Put English labels on physical objects	3.87/0.92	3.48/0.76	3.67
D7	Keep a vocabulary notebook	3.16/0.87	4.34/0.82	3.75

Table 3.58: Second Year Frequency of Use (Cognitive Strategies)

The top-ranked strategy by all the given participants was taking notes or highlighting new words in class (D5), which was judged to be *often* used by both male and female students. Additionally, the results disclosed that female students *often* used the strategy of keeping a vocabulary notebook (D7) and reported a lower (*sometimes*) frequency of use for the remained strategies. Furthermore, the results for male students indicated that they *sometimes* utilized the majority of cognitive strategies, with the exception of repeating the words aloud (D1), which was found to be *seldom* employed.

Additionally, cognitive strategies were regarded as *very useful* (4.16), with minor gender indications (male 4.09, female 4.23).

		Male	*Female*	*Total*
D1	Repeat the words aloud many times	3.73/1.03	3.81/0.89	3.77
D2	Write the words many times	3.61/1.06	4.08/0.93	3.84
D3	Make lists of new words	3.77/0.62	4.15/1.32	3.96
D4	Use flash cards to record new words	4.01/0.47	3.98/0.25	3.99
D5	Take notes or highlight new words in class	4.90/0.74	4.91/0.36	4.90
D6	Put English labels on physical objects	3.94/1.21	3.77/1.41	3.85
D7	Keep a vocabulary notebook	4.67/0.29	4.94/0.39	4.80

Table 3.59: Second Year Perceived Usefulness (Cognitive Strategies)

The strategies of D5 and D7 were listed *extremely useful* by both male and female participants. Male students advocated D4 as well for being *very useful*, and they rated the other strategies as *quite useful*. On the other hand, female students valued D2 and D3 strategies as *very useful* while scored the remaining as *quite useful*.
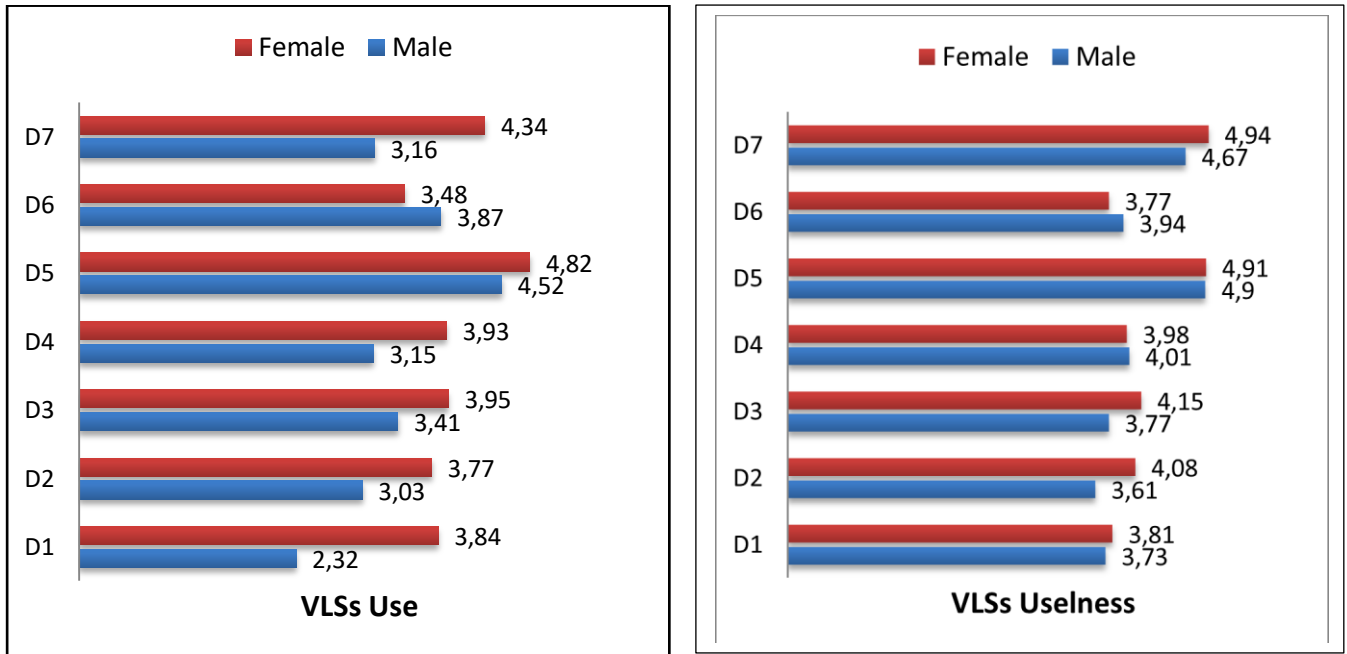
Figure 3.23: Second Year Frequency of Use & Usefulness (Cognitive Strategies)

Regarding the exposed figure, it is construed that second-year students have corresponding discernment towards the cognitive category expediency whereas diverge in the matter of utilization with females' prominence.

3.5.2.5 Metacognitive strategies

With a mean score of 2.05, metacognitive strategies were the least frequently used category. Similar gender scores were discerned, male students had a mean of 2.03 and females' rate was 2.07.

		Male	Female	Total
E1	Use English-language media	4.04/0.11	4.08/0.13	4.06
E2	Test yourself with word tests	1.05/0.02	1.09/0.04	1.07
E3	Study new words many times	1.02/0.01	1.04/0.02	1.03

Table 3.60: Second year frequency of use (Metacognitive strategies)

The first classified strategy, using English-language media (E1), was *often* used by male and female participants. The second and third strategies, testing yourself with word tests (E2) and studying new words many times (E3) ranked last being *never* used by sophomore students.

Nonetheless, the metacognitive strategies were considered to be among the least useful with a score of 3.01 (male 2.94, female 3.08) though encompassing a highly used strategy.

		Male	*Female*	*Total*
E1	Use English-language media	4.92/0.15	4.96/0.93	4.94
E2	Test yourself with word tests	2.02/1.03	2.50/0.53	2.26
E3	Study new words many times	1.88/0.86	1.78/0.52	1.83

Table 3.61: Second Year Perceived Usefulness (Metacognitive Strategies)

The strategy of using English media E1 was rated as *extremely useful* by all participants. In contrast, testing yourself (E2) and studying new words many times (E3) were respectively alleged as *not useful* and *not sure it is useful* by both genders.
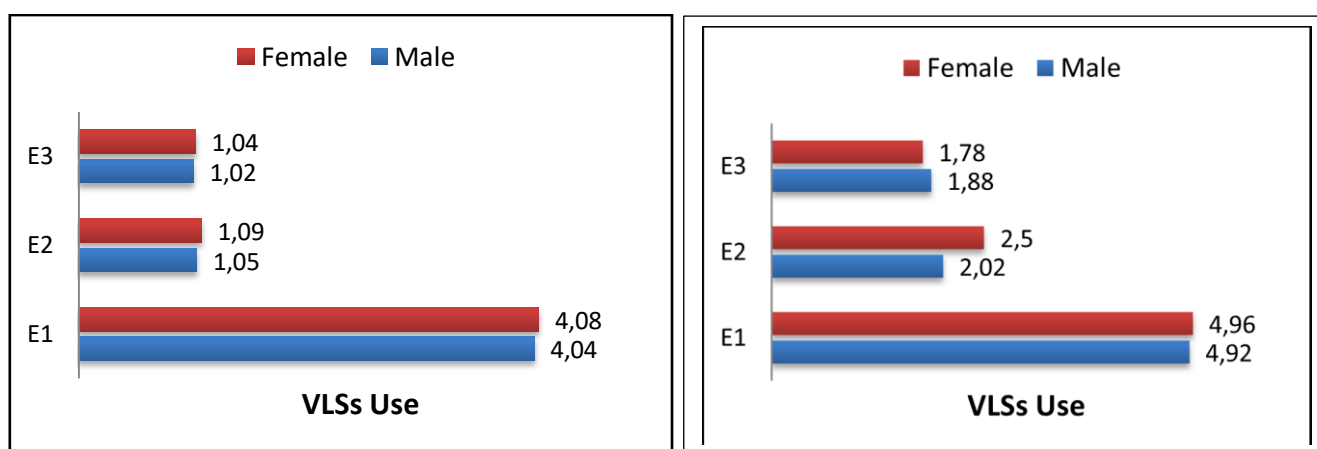
Figure 3.24: Second year Frequency of Use & Usefulness (Metacognitive Strategies)

In a nutshell, there was a grading consensus of metacognitive strategies' mean use and usefulness amid sophomore students as well as a general agreement with the view to recognition of using English language media (E1).

3.5.3 Third Year

The compulsory findings of the vocabulary survey are presented in this final division, starting from the most frequently used VLSs by third-year students to the least perceived useful.

3.5.3.1 Determination Strategies

According to third-year students' vocabulary survey, determination strategies were selected as the most frequently used category with a mean score of 4.36 and minor gender clues (male 4.23, female 4.49) as accurately shown below.

		Male	*Female*	*Total*
A1	Check the new word's form	3.97/0.71	3.98/0.53	3.97
A2	Look for any word parts that I know	4.08/1.02	4.19/1.02	4.13
A3	Use any pictures or gestures to help me guess	3.37/0.76	4.27/1.14	3.82
A4	Guess from the context	4.70/0.43	4.84/0.48	4.77
A5	Use an Arabic/French-English dictionary	4.56/0.24	4.82/0.82	4.69
A6	Use an English-English dictionary	4.72/1.01	4.85/1.03	4.78

Table 3.62: Third year frequency of Use (Determination strategies)

The outcomes disclosed that junior students frequently utilized the majority of determination strategies when encountering new words. The strategy of checking the word's form (A1) was *sometimes* used, whereas looking at familiar word parts (A2) was *often* employed. Concerning the strategy of using pictures or gestures (A3), it was *sometimes* deployed by males while *often* used by females. Guessing word meanings from context (A4), seeking bilingual (A5) and monolingual dictionaries were *very often* buoyed by all third-year students.
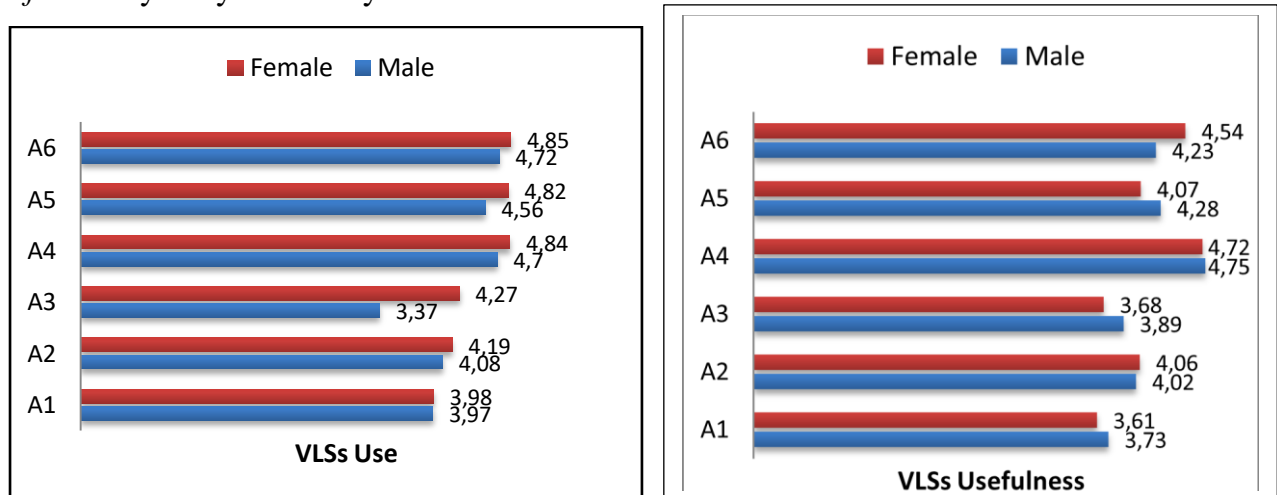
Figure 3.25: Third year Frequency of Use (Determination Strategies)

As regards to the above figure, it is clearly affirmed that third-year students resort to a diverse array of determination strategies with minor gender interference.

Determination strategies were also perceived by third-year students being the most useful with a mean of 4.13 (male 4.15, female 4.11).

		Male	*Female*	*Total*
A1	Check the new word's form	3.73/1.19	3.61/1.17	3.67
A2	Look for any word parts that I know	4.02/0.53	4.06/1.04	4.04
A3	Use any pictures or gestures to help me guess	3.89/0.61	3.68/1.01	3.78
A4	Guess from the context	4.75/0.27	4.72/0.42	4.73
A5	Use an Arabic/French-English dictionary	4.28/1.02	4.07/1.23	4.17
A6	Use an English-English dictionary	4.23/0.94	4.54/1.03	4.38

Table 3.63: Third Year Perceived Usefulness (Determination Strategies)

The strategies A4 and A6 were top ranked and classified *very useful* by all participants as well as A2 and A5. Juniors attested that using a monolingual dictionary was more advantageous considering personal needs and circumstances. Besides, knowing common word components would often decipher new lexicon meanings. Nevertheless, male and female respondents rated A1 and A3 as *quite useful* as the first strategy consolidate the spelling and the grammatical function of the new lexical item while the second strategy provides visual cues associated with particular meaning or concepts.

3.5.3.2 Social Strategies

Third-year students seem to *seldom* recourse to social strategies with a frequency of 2.84/0.83 and a noticeable difference in male 2.67, and female 3.01 rate.

		Male	*Female*	*Total*
B1	Ask the teacher to give you the definition or a sentence.	2.19/0.04	3.23/0.18	2.71
B2	Ask your classmates for the meaning	2.13/0.12	3.63/0.33	2.88
B3	Study the word with your classmates	2.08/0.04	2.29/0.15	2.18
B4	Ask the teacher to check your definition	2.36/0.22	2.18/0.06	2.27
B5	Talk with native speakers	4.60/1.12	3.72/1.09	4.16

Table 3.64: Third Year Frequency of Use (Social Strategies)

The table provided a breakdown of the most and least used social strategies when facing new words. The data revealed that conversing with natives (B5) was the upmost popular strategy, *extensively* exploited by males and *sometimes* by females. The

strategies B1, B2, B3, and B4 were used likewise in terms of score; they were *seldom* employed by male participants.
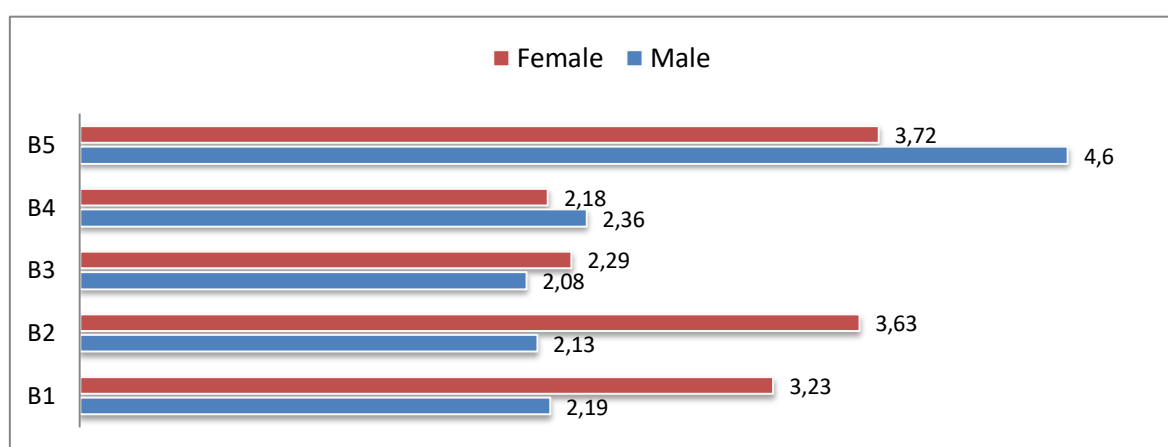
Figure 3.26: Third Year Frequency of Use (Social Strategies)

The aforementioned statistics also indicated some interesting gender differences where females *sometimes* requested teacher's support (B1) or classmates' services (B2), males *seldom* handled those strategies. Moreover, studying the word with your classmates (B3) was males' least favoured strategy. As regard to seeking teacher's definition check (B4), it was *seldom* used by respondents ranking second top by males and surprisingly last for females.

Third-year perceived social strategies usefulness as *very useful* with a score of 4.44 and minor gender interference as males recorded a mean of 4.36, and females had 4.52.

		Male	*Female*	*Total*
B1	Ask the teacher to give you the definition or a sentence.	4.33/0.84	4.52/0.98	4.42
B2	Ask your classmates for the meaning	3.91/0.63	4.23/0.91	4.07
B3	Study the word with your classmates	4.24/0.87	4.43/0.95	4.33
B4	Ask the teacher to check your definition	4.38/0.92	4.65/1.06	4.51
B5	Talk with native speakers	4.96/0.81	4.77/1.11	4.86

Table 3.65: Third Year Perceived Usefulness (Social Strategies)

Interestingly, female students classified the entire category as *very useful*, while males selected B5 as *extremely useful* barring for B2 which was perceived as *quite useful* since some were not contented seeking females' assistance.

3.5.3.3 Memory strategies

The memory strategies were *seldom* used by third-year students, classified the least used category and have received the second lowest frequency of use (2.79) with inconsequential gender intervention (male 2.67 female 2.91).

		Male	Female	Total
C1	Draw a picture of the word to help remember it	1.02/0.01	1.01/0.01	1.01
C2	Make a mental image of the word's meaning	2.53/0.13	2.75/0.64	2.64
C3	Connect the word to a personal experience	3.96/0.88	3.84/1.36	3.90
C4	Remember the words that follow or precede the new word	1.01/0.01	1.02/0.01	1.01
C5	Connect the word to other similar/opposite words meanings	2.94/0.99	3.62/1.37	3.28
C6	Remember words in 'scales' (always, often …)	2.18/0.24	3.55/0.92	2.86
C7	Group words together to study them	2.35/0.36	2.87/0.52	2.61
C8	Use new words in sentences	3.95/0.07	4.03/0.67	3.99
C9	Write paragraphs using several new words	3.81/0.58	3.29/0.46	3.55
C10	Study the spelling of a word	2.87/0.43	3.04/0.29	2.95
C11	Study the sound of a word	2.73/0.04	3.01/0.68	2.87
C12	Say the new words aloud when you first meet them	2.22/0.19	2.52/1.03	2.37
C13	Make a mental image of the word's form	2.05/0.14	3.08/0.54	2.56
C14	Remember the word using its parts (im-, un-, -able)	3.38/0.52	3.23/0.85	3.30
C15	Remember the word using its word form (v, n, adj)	3.67/0.07	3.84/0.46	3.75
C16	Make your own definition for the word	3.83/1.28	3.75/1.21	3.79
C17	Use physical action when learning a word	1.01/0.01	1.02/0.01	1.01

Table 3.66: Third Year Frequency of Use (Memory Strategies)

Third-year students declared that they *sometimes* opt for connect the word to a personal experience (C3) and use new words in sentences (C8). Contrary, drawing a picture of the word to help recall it (C1), remembering the words that follow or precede the new word (C4) and using physical action when learning a word C17 were the least rated *(never)*. In regards to gender differences, findings exposed that C5, C6, C10, C11 and C13 strategies were *sometimes* used by females and *seldom* by males. Notably, male juniors rated C5, C9, C14, and C16 as a more effective strategy than females with a ranking of *sometimes.*

Memory strategies were recognized *quite useful* with an average mean score of 3.69 (male 3.57, female 3.81).

		Male	Female	Total
C1	Draw a picture of the word to help remember it	1.02/0.23	1.01/0.67	1.01
C2	Make a mental image of the word's meaning	4.11/0.67	4.22/1.05	4.16
C3	Connect the word to a personal experience	3.95/0.18	4.53/0.64	4.24

C4	Remember the words that follow or precede the new word	1.01/0.83	1.54/1.08	1.27
C5	Connect the word to other similar/opposite words meanings	4.11/0.27	4.37/0.47	4.24
C6	Remember words in 'scales' (always, often …)	3.94/0.74	4.44/1.04	4.19
C7	Group words together to study them	4.23/0.82	4.28/0.64	4.25
C8	Use new words in sentences	4.64/0.59	4.79/0.75	4.71
C9	Write paragraphs using several new words	4.38/0.74	4.63/0.72	4.50
C10	Study the spelling of a word	4.27/0.33	4.33/0.09	4.30
C11	Study the sound of a word	3.98/0.92	4.21/0.54	4.09
C12	Say the new words aloud when you first meet them	3.53/1.01	3.82/1.11	3.67
C13	Make a mental image of the word's form	3.86/0.32	4.35/0.12	4.10
C14	Remember the word using its parts (im-, un-, -able)	4.09/0.28	4.37/0.59	4.23
C15	Remember the word using its word form (v, n, adj)	4.38/0.05	4.48/0.17	4.43
C16	Make your own definition for the word	4.33/1.12	4.32/0.35	4.32
C17	Use physical action when learning a word	1.02/0.21	1.01/0.61	1.01

Table 3.67: Third Year Perceived Usefulness (Memory Strategies)

The entire array was esteemed as *very useful* by female participants except for C1, C4, C17 being *not useful* and C12 *not sure it is useful*. Meanwhile, male respondents' responses varied between *quite* and *very useful* excluding the highlighted in green strategies. In contrast, teachers certified the strategies of words' sounds (C11) is an important factor that fosters students' vocabulary and (C16) helps students store best the new confronted words.
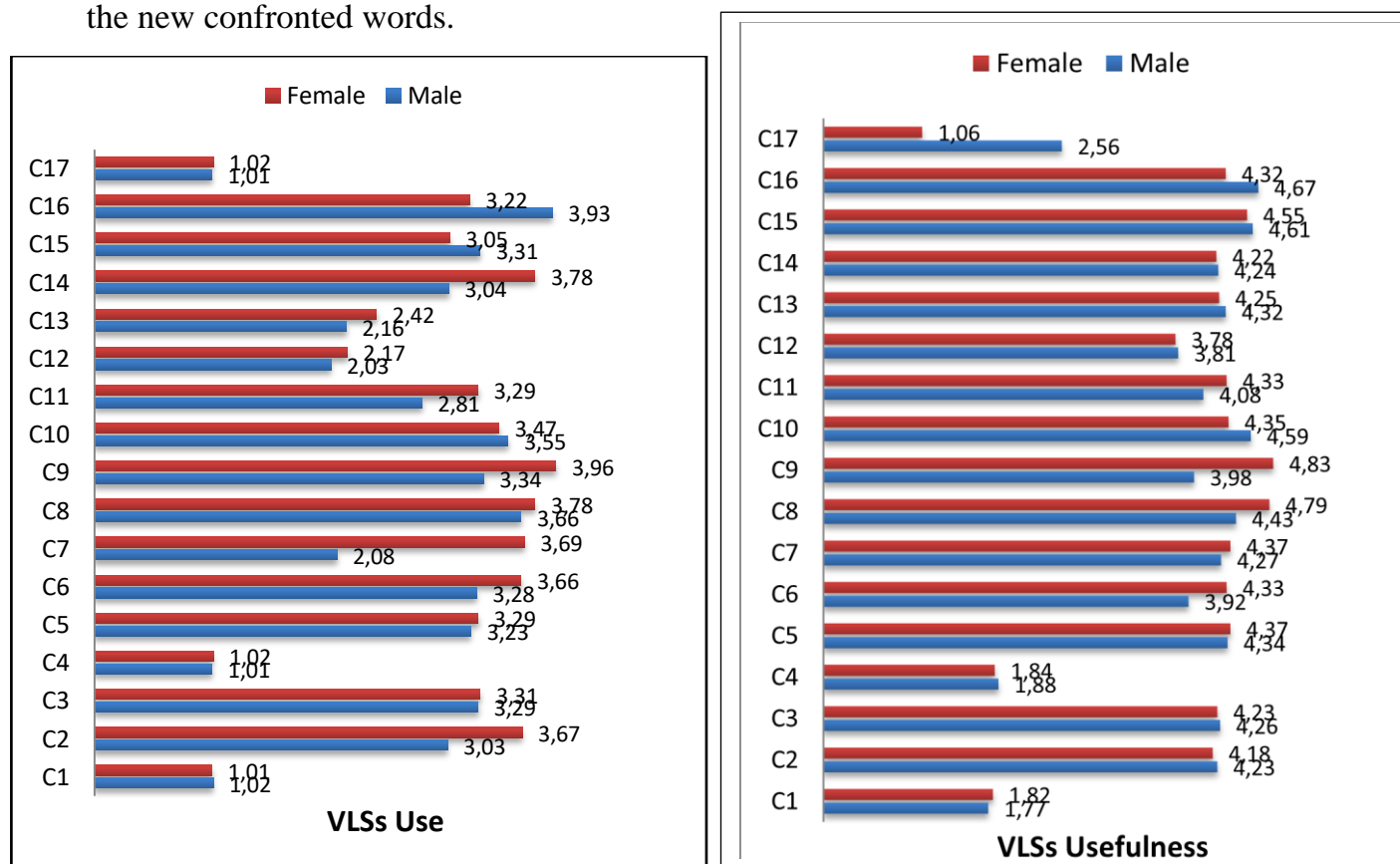
Figure 3.27: Third Year Frequency of Use & Usefulness (Memory Strategies)

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3.5.3.4 Cognitive Strategies

According to junior students' survey results, cognitive strategies were s*ometimes* used with an average mean score of 3.53, and a trim variation between males' ratio 3.37, and females' mean 3.69.

		Male	*Female*	*Total*
D1	Repeat the words aloud many times	3.88/1.12	4.04/1.46	3.96
D2	Write the words many times	3.82/0.36	3.74/1.40	3.78
D3	Make lists of new words	2.99/0.71	4.15/1.21	3.57
D4	Use flash cards to record new words	3.73/0.92	3.53/1.30	3.63
D5	Take notes or highlight new words in class	4.55/1.31	4.97/0.63	4.76
D6	Put English labels on physical objects	2.61/0.44	2.17/0.06	2.39
D7	Keep a vocabulary notebook	3.01/0.82	3.27/0.34	3.14

Table 3.68: Third Year Frequency of Use (Cognitive Strategies)

Looking at the specific strategies such as notes taking or highlight new words in class (D5), it was *often* used by male respondents and *very often* by females. The strategy of repeating the words aloud many times (D1) came second being *sometimes* employed by males the and *often* by females. Similarly, when asked to make lists of new words (D3), females claimed that they *often* performed this strategy. Contrariwise, males reported a lower frequency use, stating that they *sometimes* reverted to it. Nonetheless, putting English labels on physical objects (D6) had the lowest mean score as juniors *seldom* appointed it.
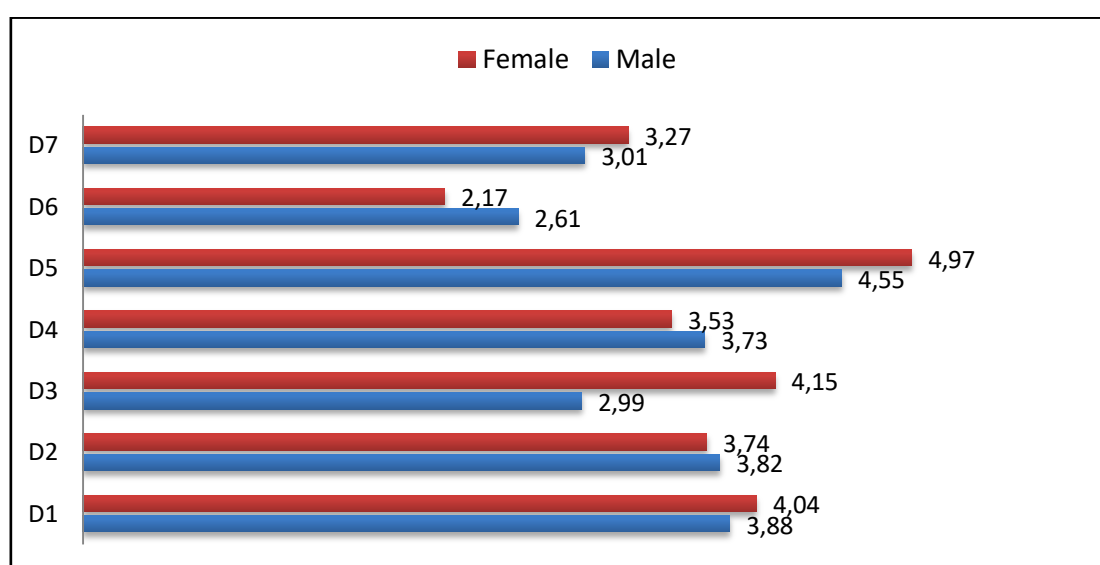
Figure 3.28: Third Year Frequency of Use (Cognitive Strategies)

Conclusively, male and female third year students scored similar means for the strategies of writing new words many times (D2), using flash cards to record new words (D4), and keeping a vocabulary notebook (D7) as they conveyed doing it *sometimes*.

In terms of usefulness, cognitive strategies were perceived as *very useful* (4.25). Male participants had a rate of 4.19, while females' ratio was 4.31.

		Male	*Female*	*Total*
D1	Repeat the words aloud many times	3.93/1.03	4.01/0.89	3.97
D2	Write the words many times	3.88/1.06	4.07/0.98	3.97
D3	Make lists of new words	4.02/0.62	4.06/1.32	4.04
D4	Use flash cards to record new words	4.09/0.47	4.15/0.99	4.12
D5	Take notes or highlight new words in class	4.85/0.34	4.97/0.36	4.91
D6	Put English labels on physical objects	3.94/0.21	4.08/1.41	4.01
D7	Keep a vocabulary notebook	4.62/0.69	4.84/0.39	4.73

Table 3.69: Third year Perceived Usefulness (Cognitive strategies)

The predominance of taking notes or highlight new words in class (D5) and keeping a vocabulary notebook (D7) were rated as *extremely* and *very useful* by all participants. The two least regarded useful strategies in this category with an identical mean were repeating the words aloud (D1) and transcribing it many times (D2). As illustrated underneath, male and female students have comparable visions concerning cognitive strategies.
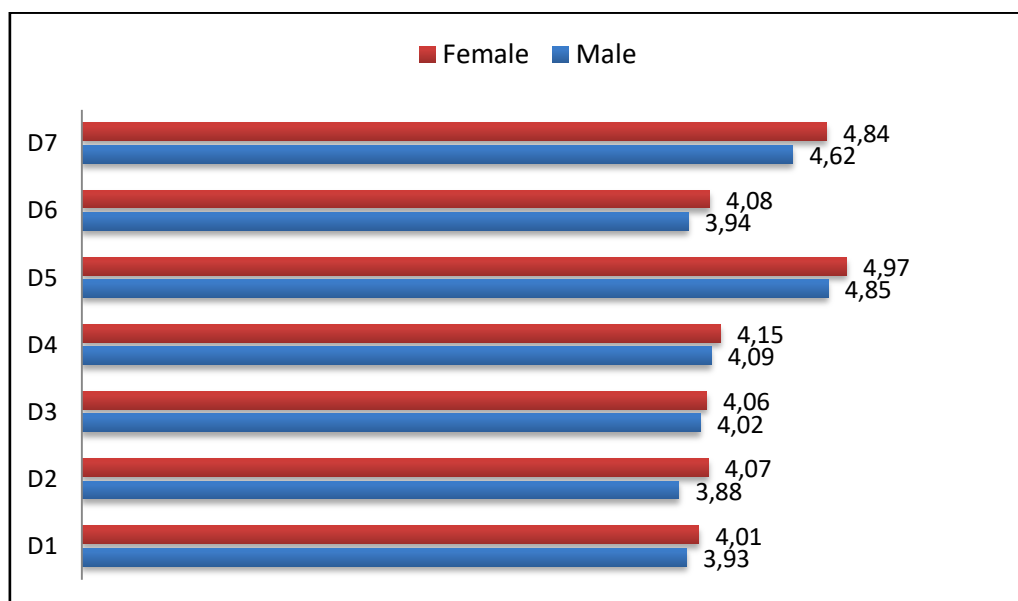
Figure 3.29: Third Year Perceived Usefulness (Cognitive Strategies)

3.5.3.5 Metacognitive Strategies

Metacognitive strategies were *sometimes* used with a mean score of 3.13, and remarkable gender testimonials (male 2.96, female 3.3).

		Male	Female	Total
E1	Use English-language media	4.85/0.29	4.82/0.33	4.83
E2	Test yourself with word tests	1.79/0.27	2.07/0.12	1.93
E3	Study new words many times	2.26/0.44	3.01/0.06	2.63

Table 3.70: Third Year Frequency of Use (Metacognitive Strategies)

According to the gathered data, the use of English-language media (E1) took the lead by being *very often* used by both male and female participants. The second strategy, testing oneself with word tests (E2) was *seldom* used by female and *never* by males. The third and last strategy, studying new words many times (E3) was recounted as *sometimes* used by females and *seldom* males.

When considering the usefulness of metacognitive strategies, they were viewed as *quite useful* with a score of 3.97/0.67. Males rated it 4.03 and females 3.91.

		Male	Female	Total
E1	Use English-language media	4.93/0.75	4.87/0.63	4.90
E2	Test yourself with word tests	3.81/1.03	3.63/0.58	3.72
E3	Study new words many times	3.37/0.86	3.24/0.12	3.30

Table 3.71: Third year perceived usefulness (Metacognitive strategies)

The use of English-language media (E1) was professed as *extremely useful* among male and female respondents while the other two strategies; testing themselves with word tests (E2) and studying new words many times (E3) were considered as *quite useful*. No gender interference was detected as concerns to the use/usefulness of this category.
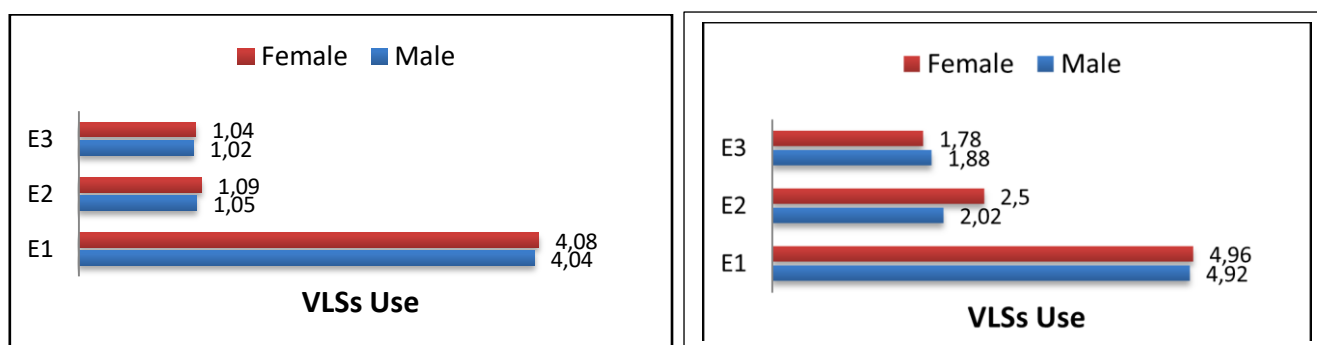
Figure 3.30: Third year frequency of Use & Usefulness (Metacognitive strategies)

3.6 Think-Aloud Results

Think aloud protocol was used to collect more insightful data by having undergraduate students verbalize their thoughts as they interacted with the questionnaire, vocabulary levels test, and vocabulary survey. This process uncovered participants' needs, preferences, and motivation. It also identified usability issues and syllabus design flaws.

3.6.1 First Year

During the think aloud protocol, it was construed that many first-year students struggled with multiple aspects of language learning, including pronunciation, accent, connecting new vocabulary words with their prior knowledge and anxiety when speaking in groups. Numerous students admitted that one of the most difficult aspects of language acquisition was vocabulary, as they experienced difficult times in putting their internal thoughts into transcribed or spoken English words. They also declared that copying native speakers' accent was quite challenging. Ironically, few male participants claimed that being silent in classroom practice was not due to their lack of lexical items, but to their pronunciation which sounded 'girly' and was not appropriate coming for a male speaker. They further avowed that being unable to find a suitable conversational partner fluent in English mired their participation rate.

Nevertheless, first-year students were making sentient efforts to integrate themselves into classroom discussions or debates, remained enthusiastic and proclaimed that persistence and dedication would undoubtedly develop their English lexicon and lead to a more natural, fluent accent. Some students added that they developed effective strategies to enhance their language skills. For instance, cognitive strategies like watching subtitled videos and tutorials served students in understanding new lexicon, whereas determination strategies (translation) monitored and appraised their learning process. Social strategies, on the other hand, such as using English as a code-switching language with siblings or classmates promoted their attitudes, and motivation toward language learning.

Additionally, first-year learners revealed their social anxiety struggle, which made them feel uncomfortable and hindered their speaking in groups. These obstacles highlight the need for additional resources and assistance to sustain students' solicitude in overcoming their anxiety and widen their perspectives towards communicative mates. Overall, many students verbalized their use of making associations with pictures, gestures, and real-life situations, to consolidate their remembrance. Accordingly, female students tended to use more elaborated strategies, such as creating sentences or stories with the new vocabulary words, while male students used more contextual clues and primarily talking to native speakers.

3.6.2 Second Year

Second-year students expressed that the most challenging aspects of learning English were vocabulary and grammar. These two areas were described as tricky and difficult to remember, particularly with the complexity of English words. Furthermore, many second-year participants confessed that they scuffled with the use of formal language and jargon dialect. They demonstrated difficulties in scooping appropriate academic English language during classroom conversations or in writing paragraphs for official exams. They instead employed slang and colloquial expressions depicted from native speakers. This dilemma is compounded by the raveling fact that many learners acquired English lexicon from non-academic resources and media; mainly YouTube podcasts and English movies which caused confusion in differentiating between formal and informal language.

In addition, a large number of second-year students acclaimed interacting through social media and multiplayer video games to enhance their English vocabulary. These strategies could be regarded as metacognitive and social since it involves planning, monitoring, and evaluating one's own language learning process and comprises exchanging with others to practice and improve language skills. They also stated that they massively watch English content with subtitles which could be classified as a determination strategy as it is based on the use of translation to learn and understand new lexical items.

Further, second-year students avowed that they always had fun and a positive experience during English classes. They described the educational program being rich and covered a diversified array of subjects that made it easier for them to comprehend and apply the targeted language in different contexts. They likewise emphasized the effectiveness of the teaching approaches deployed by EFL teachers which were both engaging and appealing to undergraduate students. Conclusively, second-year students were able to use their prior knowledge to connect new vocabulary words with related concepts. Male students inclined in using visualized strategies, while female students treasured organization strategies, such as categorizing the new vocabulary words based on similar meanings or word roots. However, some students had minor troubles in recalling the correct spelling of the new vocabulary words, and often relied on teachers or peers to support their learning development.

3.6.3 Third Year

Third-year students declared that English was the utmost language to learn and did not reckon the process of learning it difficult or challenging. However, most of learners affirmed that the genuine problem lies in the seldom exposition to complex and advanced vocabulary words. They fundamentally insisted on the fact that they were not taught a deepen extent of the English language that would have been more beneficial for them to better articulate their thoughts or ideas and express themselves vividly and accurately.

The participants averred that they were keen on using vocabulary learning strategies that embroiled the combination of audio and visual inputs to strengthen their listening and comprehension skills, as well as pick up new vocabulary and grammar structures. They considered watching English movies and series, for instance, would provide them with the adequate natural way of language exposure and the cultural context to different accents and dialects. This strategy aligns with input-based language learning approaches that prioritize immersion in the target language as a way to acquire language skills. Concerning the participation rate, few students paradoxically alleged that taking part in classroom discussions would intimidate learners who did not have a strong grasp of the English language and would make them feel inferior.

In a nutshell, third-year students employed a variety of vocabulary learning strategies, predominantly including cognitive, metacognitive, and social strategies. Female students used elaborated strategies such as creating sentences or stories with the new learnt vocabulary, while some male students were more interactive and made their own definitions of the new lexicon. However, many students expressed frustration with the limited exposure to authentic English texts and materials which hindered their ability to fully engage and master new vocabulary.

Conclusion

Chapter three discussed the collected research data through the multiple utilized instruments. It initiated by presenting in details the questionnaires' result completed from the three years of study, where each year was separately tackled as well as the university teachers' questionnaire. It also unveiled the classroom observation evidences, exposed the vocabulary levels test (pre-post) outcomes and focus group experiment. It concluded by generating a thorough analysis of the vocabulary survey findings which were classified according to the different VLSs and categories, then a think aloud protocol synopsis was accentuated.

The examination of the two variables (gender and year of study) was stressed along the discernment of the most and least used and perceived as useful VLSs, including determination, social, memory, cognitive, and meta-cognitive strategies. The focus group and think aloud process delivered an in-depth understanding of the participants' perceptions and experiences related to vocabulary learning. Overall, the chapter provided a profound account of the investigated findings to discern insightful interpretations and constructive recommendations.

Introduction

Chapter four discusses the gathered results engendered from the research tools and presents adequate pedagogical instructions. The two primary variables, namely gender and year of study that affected vocabulary learning among undergraduate foreign language learners are thoroughly deliberated. The key findings from the questionnaires, classroom observations, vocabulary levels test, focus group and vocabulary survey analysis are interpreted first, aiming to shed light on the use and usefulness of different vocabulary learning strategies. Then, the approaches that contributed to successful vocabulary acquisition are identified.

The utilized corpus provided the following data; the questionnaires administered to both the students and teachers collected general overview about the subject, the investigated situation and the approaches adopted. Additionally, the classroom observations and focus group delivered a deeper understanding of the learning environment, the emerged trends and a better discernment about students' interaction with vocabulary in context.

Next, the vocabulary levels test and compared groups assessed students' overall vocabulary proficiency, and highlighted the impact of training. It was endorsed by the think aloud protocol which unveiled participants' reaction when encountering familiar and unfamiliar words. Finally, the vocabulary learning strategy survey supplied the strategies and approaches used and perceived useful by undergraduate students while learning or consolidating new lexicon. The gender results' were then compared to Catalán's research (2003).

The chapter concludes by suggesting first pedagogical instructions for EFL teachers that would improve their vocabulary tutoring and create a more enjoyable learning environment. Some advocated trending apps and reading resources were also recommended to promote learners' commitment and consistency throughout their vocabulary learning process.

4.1 Data Interpretation

This section presents meaningful interpretations based on the collected data through rigorous analysis and thoughtful examination of various instruments. The core focus of these interpretations is to address the research questions that were posed at the beginning of the study. It also highlights the relationships, patterns, and trends identified within the data, offering a deeper understanding of the research topic.

4.1.1 Questionnaires

A detailed analysis of the received responses from the administered questionnaires to students and teachers is thoroughly presented. The emerging trends from the data, including the strategies and techniques employed by both respondents in vocabulary learning are also examined. Valuable insights concerning the two investigated variables likely to affect vocabulary learning are underscored. By understanding the perspectives and experiences of students and teachers, areas for improvement in vocabulary instruction are identified, and more successful vocabulary acquisition in the foreign language classroom is facilitated.

4.1.1.1 Students' Questionnaire

The First-year questionnaire results indicated that participants had been studying English for seven years and opted to major in the English language for career advancement. Most students reported enjoying and appreciating studying English. The majority agreed that English is very important in today's world. First-year students' level was intermediate and their proficiency was mainly due to their personal efforts. In terms of investigating the use and usefulness of VLSs, it was stressed that students relied mostly on themselves to learn vocabulary, and they considered it a crucial aspect of learning English. It was also indicated that students may be using a variety of methods to acquire new vocabulary, such as reading, watching TV shows or movies, and using vocabulary-building apps.

Concerning the approaches first-year students' employed when learning vocabulary, question number 12 displayed that only 30% self-initiated activities. Ironically, question 13 uncovered that 65% did record new vocabulary but merely 40% reviewed

the noted lexicon and 36% practiced using it in a sentence or paragraphs (questions n°14 and 15). Nevertheless, female students' rate (57.26%) oversized males' score which was 25.75%. As regards these initial results, it revealed that female respondents use a semi-structured approach, while males set up for the unstructured. The majority of first-year students relied on the teacher's practice to expand their vocabulary repertoire. There was no consensus structure in their learning process, whereas a minority trailed outer resources to support their vocabulary acquisition.

One worth mentioning question was the most relevant aspect to effectively communicating in English, a superior number of first-year students settled for vocabulary, followed by grammar and pronunciation declaring that having a wide range of words and phrases at their disposal would enable them to express themselves more clearly and accurately. However, when it came to using resources for English learning and reliance on teachers, a higher percentage of females reported finding private classes very useful and relied more often on teachers and course books compared to males. These differences, though not significant, construed that female learners might be more open about appealing to structured external resources. In terms of VLSs status, all participants avowed its importance yet 40% acknowledged its eminence and 77% admitted unconsciously resorting to it. The final point concerned the participation pace. Unfortunately, around one-third of first-year participants never took part in classroom discussions, mainly males, due to the lack of vocabulary.

The questionnaire filled by second-year students disclosed that the majority have been studying English for eight years, had an intermediate level in English, and were satisfied with the designated specialty. Additionally, second-year respondents asserted the vocabulary learning importance and added that they were the first responsible then teachers when accrediting new lexicon. According to the approaches deployed to learn English vocabulary varied among individuals. The obtained results signposted that more than half of female students followed the structured approach, as they tracked Sanaoui's main classification points stated in questions 12 to 15. They self-initiated activities to enlarge their vocabulary repertoire and were more likely to track, review, and practice using new vocabulary words. Others settled down for a semi-structured

approach, where they engaged in activities such as reading and watching subtitled videos.

However, a significant number of second-year students proclaimed counting on themselves to acquire vocabulary through exposure to various sources, like private classes, YouTube tutoring, and online video games. Overall, personal efforts were reported as the main contributor to the students' rate and level of English proficiency. Furthermore, a large percentage of students testified being familiar with VLSs, mostly females, and recognized their importance although some were still instinctively using it. It is also worth noting that female students advocated the vocabulary repertoire as the main factor shaping their often classroom interactions. They were also more concerned about their academic learning cursus.

Regarding third-year students' questionnaire results, it revealed that the majority enjoyed studying English since it was their personal choice and attained an advanced level over all their nine years of study. All third-year students purported that English was important in today's world, and they did master the four skills except for males who were not overly keen on writing. In terms of students' proficiency level, some females detailed that they were inspired by family members while other males affirmed that gaming and podcasts were pivot points in their English learning process.

Based on the results of questions 12 to 15, it is construed that female students might be more inclined towards a structured, organized approach when learning vocabulary as they reported self-initiating activities to enlarge their vocabulary inventory, recording, reviewing new words, and practicing using them regularly. Conversely, male students espoused a semi-structured or unstructured approach. They instigated assignments by themselves and traced their new lexicon but did not review or rehearse what they noted. Additionally, third-year students' favoured skills to learn vocabulary were respectively reading and listening.

Apropos of students' sentience to VLSs, everyone credited its importance and the majority of third-year learners were familiar with those strategies which were deliberately deployed. As to the participation rate, it was molded by the vocabulary

array. A moiety of respondents, typically females, regularly took part in classroom conversations and practice.

4.1.1.2 Teachers' Questionnaire

The majority of teachers were lecturers or teaching assistants holding or preparing their PhD degree and have been teaching for three to more than 16 years of experience. Furthermore, all EFL university lecturers have taught the three years of study and instructed numerous subjects, namely oral or written comprehension courses, didactics, linguistics, phonetics, and American/British literature or civilization. The present records indicated that the selected instructors were not novices; on the contrary, they were experienced EFL teachers who are qualified to teach EFL courses at a University level.

Centered on teachers' opinions towards vocabulary, the department of English teachers unanimously asserted the importance of vocabulary in learning the targeted language. However, more than half classified student's vocabulary level as average barring some good learners. The vast majority agreed that it was teachers' responsibility to introduce new vocabulary which was frequently assessed through written then oral examinations. They also acknowledged the importance of students' motivation and self-esteem in vocabulary acquisition. Moreover, the availability of English language resources was primal in students' vocabulary achievement.

Regarding the questionnaire's third section, a significant number of teachers declared presenting new lexical items in every lesson and explicitly expounded ambiguous words, while a minority did not devote time to the unfamiliar lexicon. On the other hand, a significant portion of teachers did not teach vocabulary learning strategies whereas some implicitly suggested reading, note taking and dictionaries use. Furthermore, over half of the teachers stated using contextualized instruction whereas visual aids and word games were the least employed which might be more advantageous for students to better understand and retain new vocabulary. In terms of students' involvement, teachers declared that a set of variables stimulated learners' sometimes participation, expressly confidence, vocabulary, the teaching method, and submitted activities.

In a nutshell, many teachers proclaimed that there was no gender distinction in English vocabulary use but it was influenced by the year of study. Contrariwise, some teachers discerned that female learners engaged in note-taking and dictionary use during teaching space practice. They added that undergraduate students consolidated the same VLSs throughout their academic progression.

4.1.2 Classroom Observation

The classroom observations for first, second, and third-year EFL students were conducted to comprehend the way male and female students react in real-life situations while dealing with vocabulary learning in classroom sets. The observation sessions centered first on students' vocabulary use, communication skills, behaviour engagement when stumbling upon an accustomed or unfamiliar lexicon, and attitudes. Hereafter, teachers' performance and commitment were examined, vocabulary time allocation, and use of instructional materials and technology.

The classroom observation evidence collected from first-year students indicated a promising learning environment with fully committed teachers who utilized a variety of instructional methods to enhance students' learning process. The lecturers encouraged learners' interactions through pair or group work practice to strengthen their restraining skills. Nonetheless, the pace of participation was constrained and teachers regularly interfered by designating students to answer or provided supportive feedback. Additionally, first-year students used a constricted range of lexicon, and recurrent VLSs such as taking notes, bilingual dictionaries, and translation. The observation also indicated a gender divergence in terms of classroom engagement as well as vocabulary usage. Female students employed sophisticated lexical items and participated more often compared to males who were a reserved minority, barring some decorous ones. Ultimately, first-year students avowed through the think-aloud protocol that being freshmen was an oppressive situation, they strived in conveying appropriate words to the appointed subjects.

The second-year classroom observation reported that learners required a constant lecturer's assistance as they were confronted with the informative academic program

subways and struggled with their confined lexicon. University lecturers demonstrated outstanding tutoring to consolidate students' vocabulary learning evolution. Concerning the participation rate, it was noted that female students were the most initiative and preemptive in assembly. Conversely, male students were more interactive once approached individually; they ironically corroborated their trivial interference with the preeminence of females. Moreover, a conspicuous interaction was detected between second-year students as an abecedarian strategy for productive classroom vocabulary exchanges. The strategies of highlighting new words and bilingual dictionaries were predominantly used as well.

The third-year of study observation showed that university teachers had a strong understanding of the subject matter and a compelling skill ability to efficiently communicate their knowledge to learners. Third-year students demonstrated exceptional devotion and willingly engaged in structured conversations. Besides, they were accustomed to ICT materials and had a withstanding mastery, from basic use of digital media to software programs and the internet universe. They also often interacted independently and in groups with trifling gender variance. Additionally, third-year students developed critical reading and thinking skills that foster their vocabulary array and educational training. As regard to the deployed VLSs, the vast majority of third-year students vindicated the utilization of note-taking, bilingual and monolingual dictionaries.

4.1.3 Vocabulary Levels Test

The vocabulary levels test was administered twice (pre and post) to two equally divided homogeneous groups (control vs. experimental) to measure undergraduate students' vocabulary proficiency levels (2.000 and 3.000) considering the major variables; year of study and gender. The pre-test results indicated significant differences as better shown in Chart 4.1. The correct answers ratio noticeably changed as students progressed through their academic year of study. It infers that students become more proficient in understanding and matching definitions as they advance in their studies and become more acquainted with the language. The 2,000 level which covers more familiar vocabulary yield higher response rates compared to the less

common lexical items found in the 3,000 level. However, there was a minor interference regarding the gender variable which revealed a relative level of discernment as better shown in Table 4.1. Surprisingly, male participants demonstrated a moderate pattern of comprehension and marked the highest mean rate of correctly matching definitions at both the 2,000 and 3,000 levels, regardless of their years of education. This finding highlights the potential influence of gender on vocabulary acquisition and comprehension. While the reasons behind this gender variance in performance were not explicitly clear from the given information, factors such as learning styles, personal interests, study habits, and exposure to the language outside the classroom could contribute to this discrepancy.

Vocabulary proficiency levels		2.000		3.000	
	Gender	Male	Female	Male	Female
Year of study	First year	0.666	0.696	0.469	0.449
	Second year	0.766	0.766	0.576	0.577
	Third year	0.854	0.862	0.726	0.714

Table 4.1: Pre-test Levels Results

By visually representing these variables, the figure below offers a comprehensive overview of the research findings and accentuates the relationship between them. The clear and concise presentation serves in encapsulating the primary parameters and their significance within the context of undergraduate EFL education.
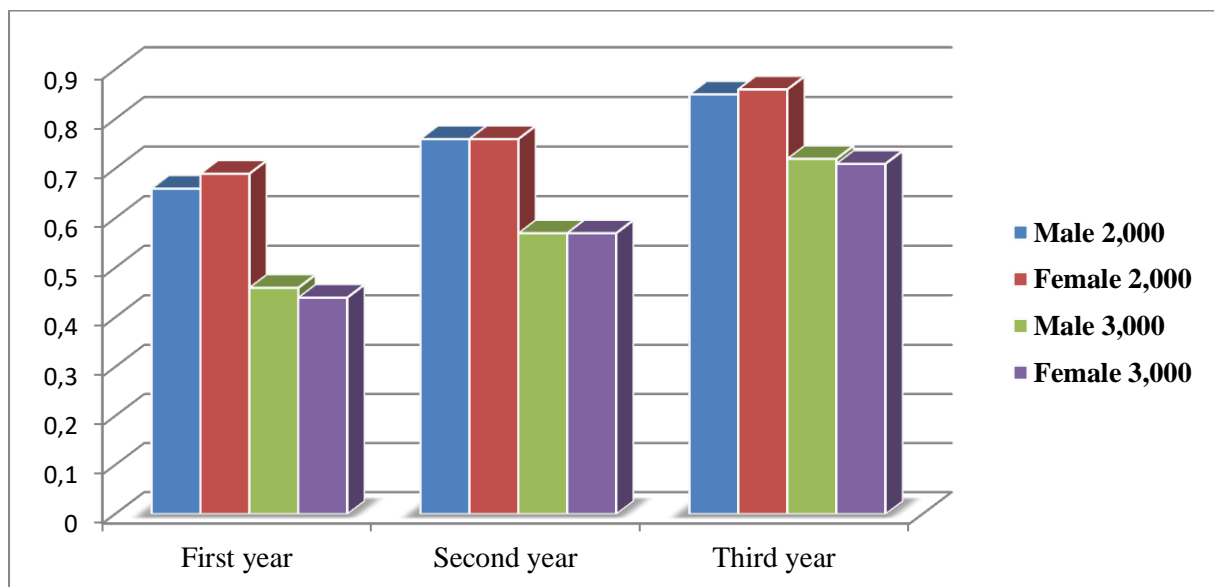
Figure 4.1: Pre-test Levels Results

Concerning the post-test, it was filled by the experimental students' group after receiving the VLSs training, compromising the same proficiency matching items and levels that were filled by the control group. The findings revealed a noteworthy range of performance by the total of participants as the training results preceded all the years of study. The gap between the pre and post-tests was significantly superior.

The group of participants involved in the experiment demonstrated remarkable average scores with minimal gender-related variations in both the first and second-year. When examining the performance of first-year and second-year students, their mean scores were quite similar, showing only slight regression from the 2,000 to the 3,000 level of vocabulary proficiency.

Notably, the presented Figure 4.1 provides a detailed and meticulous display of these findings. It visually represents the performance levels of the participants across the different stages of their education, highlighting the consistency observed among both male and female students. The impressive mean rates achieved by the participants revealed a strong overall grasp of the vocabulary being assessed, while the minimal gender interference construed that gender alone did not significantly influence vocabulary proficiency in this particular context. Conclusively, students in general were capable of maintaining consistent levels of proficiency as they progressed from the 2,000 to the 3,000 level of vocabulary.

Vocabulary proficiency levels		2.000		3.000	
Gender		Male	Female	Male	Female
Year of study	First year	0.937	0.930	0.752	0.72
	Second year	0.949	0.945	0.813	0.774
	Third year	0.988	0.990	0.978	0.973

Table 4.2: Post-test Results

On the other hand, third-year students showed similar progress in both the 2,000 and 3,000 levels of vocabulary proficiency, with minimal gender-related differences. This finding connoted that junior students reached a relative level of understanding and were able to handle a wider range of vocabulary once they were explicitly introduced to various VLSs.

The results implied that third-year students have developed a certain level of proficiency and are better equipped to engage with and expand their vocabulary repertoire. This may be attributed to their increased exposure to and experience with vocabulary learning throughout their academic cursus.

Furthermore, the inconsequential gender alteration observed indicated that gender did not significantly influence vocabulary progression and understanding among third-year students. Both male and female students demonstrated comparable levels of proficiency, indicating that gender was not a determining variable in vocabulary acquisition at this stage.
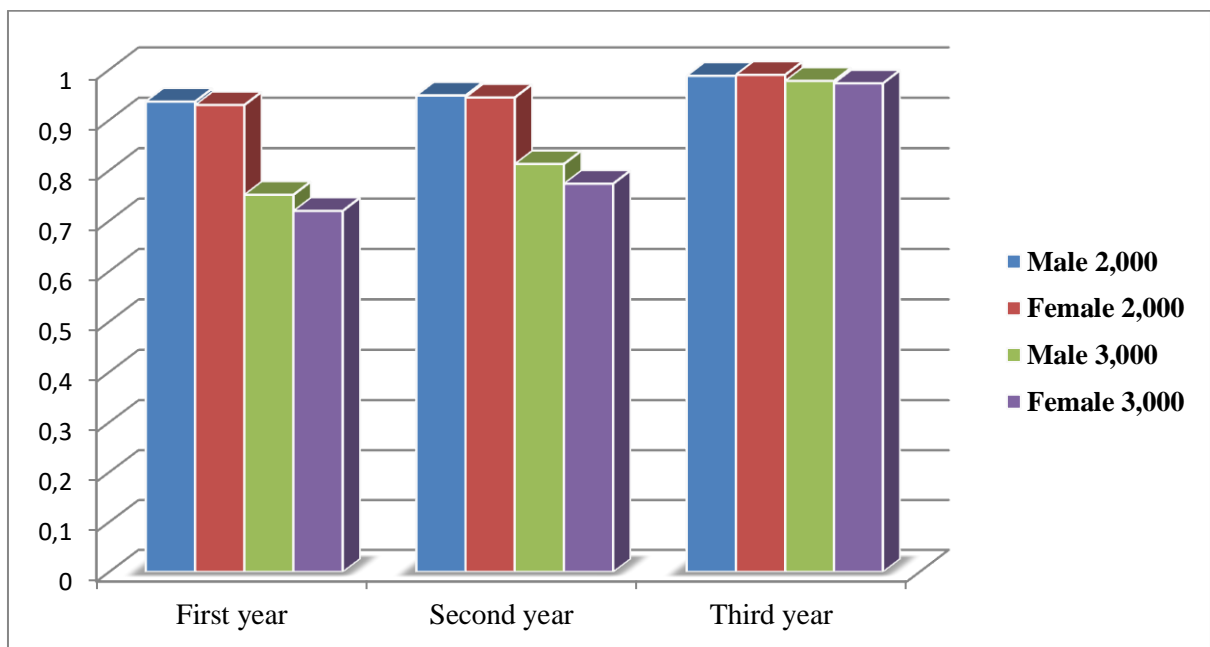
Figure 4.2: Post-test Results

In addition, the experimental group participants were requested to deliver written or oral sentences using the test levels' lexical items to consolidate their retention and examine their words' comprehension and use in context. Forming sentences proved to be challenging for undergraduate students, as it required them to carefully monitor their writing skills and effectively convey complete thoughts or ideas. Among the different academic levels, third-year students stood out with their ability to construct well-formed and articulate sentences. Their extensive educational background and experience contributed to their proficiency in producing concise and precise statements.

Second-year students also demonstrated their competency in constructing coherent clauses, although some occasional errors in verb tenses and subtle word meanings were evident. Nonetheless, their overall ability to organize their ideas and express themselves effectively was noteworthy. In contrast, first-year students struggled the most with sentence formation. Many of them produced confusing compositions and had difficulties with accurately interpreting and expressing their ideas. This could be attributed to their relatively limited exposure to academic writing and their on-going adjustment to the demands of higher education.

The findings emphasized the prominence of providing targeted support and instruction in sentence formation for undergraduate learners, particularly for first-year students who were still adapting to the rigors of academic writing. By providing explicit guidance and practice opportunities, educators will help students to improve their sentence construction skills and develop their overall written communication abilities. Moreover, they should make a conscious effort to provide concrete examples that demonstrate how new words are used in context and incorporate regular practice activities that reinforce the use of VLSs. By encouraging students to actively engage with these strategies, teachers boost students' ability to independently acquire and retain new vocabulary.

4.1.4 Focus Group

The outcomes of the focus group have proven to be instrumental in identifying key pedagogical implications and training strategies recommended to both students and teachers to develop vocabulary teaching in general and lexicon language learning in particular. The focus group results brought to light students' areas of weakness, providing valuable insights that have informed subsequent instructional adjustments. They confessed that they struggled during their first-year and then got accustomed through the eons. Considering the recommendations provided by the focus group participants, tailored pedagogical instructions were suggested to overcome the identified challenges and promote a suitable vocabulary learning process.

Accordingly, it was reasserted that vocabulary learning strategies training is primordial for EFL learners as acknowledged by all the three years participants of the focus group. The findings of this study suggested that incorporating effective VLSs into teaching would engender a prodigious evolution in language and vocabulary learning. Furthermore, learners acclaimed a list of VLSs that endorsed their vocabulary learning challenges to wit: using flashcards, reading extensively, playing online games, incorporating hands-on activities into classes, breaking down complex words, practicing pronunciation through podcasts, using memics to create word associations, and putting oneself in challenging situations to promote learning. The aforementioned strategies would not only build their lexicon, but also improve their confidence in using new words in conversations and reinforce their vocabulary maintenance. Moreover, incorporating gaming and other interactive elements into vocabulary learning activities would make the vocabulary learning process more appealing and entertaining for all age of learners.

4.1.5 Vocabulary Survey

The principle objective of conducting the survey was to reconnoiter the vocabulary learning strategies used and alleged useful by EFL undergraduate students, taking into account variation based on gender and year of study.

4.1.5.1 First Year

According to the provided data, the most commonly used VLSs category by first-year students was determination. As its labeling indicates, the findings revealed that first-year students prioritized problem-solving skills and placed a pronounced value on setting goals by being persistent and self-motivated while determining vocabulary connotation. Nevertheless, females were highly dedicated to discovering the word's meaning as they very often used the majority of the embedded category strategies compared to males occasionally usage. Both genders asserted employing bilingual dictionaries the minute guessing from context founders in decoding the new items' significance. The French or Arabic thesauruses were frequently deployed as a referential pivot language.

	Determination	Social	Memory	Cognitive	Metacognitive	TOTAL
Male	3,62	3,54	2,58	3,26	1,9	2,98
Female	4,26	3,08	2,6	3,32	2,14	3,08
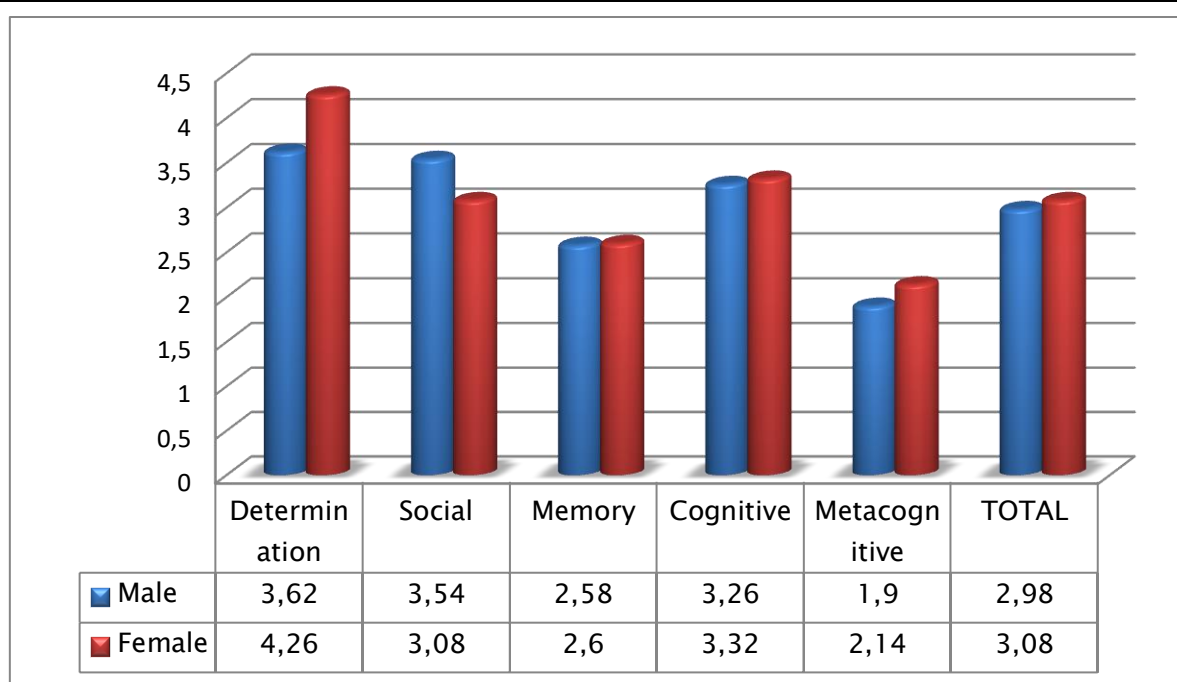
Figure 4.3: First Year VLSs Category Use

Social and cognitive strategies came second by being *sometimes* exerted barring for males astounding use of B5 (talking to native speakers) compared to females seldom recourse. Moreover, teachers' assistance (B1) and group works (B2) were students' occasional support systems. They admitted that the lecturer's monitoring was relatively beneficial, whereas peer cooperation was not that useful. The strategy of note-taking (D5) was also mandatory for first-year students, particularly for females. On the other hand, the memory and metacognitive strategies categories received the lowest average scores apart from females' frequent use of English language media (E1). Respondents did not rely on memorization procedures as six strategies were sometimes used while eight were seldom deployed. In addition, they never self-evaluated themselves. Regarding the overall gender deviation, findings indicated a minor difference as thoroughly illustrated in Figure 4.3. Female first-year students had higher scores in determination and metacognitive strategies, while males preceded in social strategies.

In retrospect, first-year students demonstrated autonomous behaviour as they relied more often on themselves first to discover vocabulary meaning using contextual guessing and bilingual dictionaries. Furthermore, they fitfully requested tutor or peer assistance when failing to decode the unfamiliar lexicon as they are newbie tutees.

They also appraised some aforementioned strategies, such as females' note-taking deployment and males' conversing with native speakers. However, they never consolidated the acquired lexicon and utilized it in no circumstances while writing sentences or paragraphs.

Concerning the usefulness of the vocabulary learning strategies, it varied among first-year students with some being seldom used and perceived as not useful; while others were occasionally employed, yet regarded as very useful. The determination category was also classified as highly useful by all first-year participants with the same prominent strategies; guessing from context (A4) and bilingual dictionaries (A5). The fact that both male and female students rely on these strategies for vocabulary learning induces the efficiency of this technique and befall very useful.

	Determination	Social	Memory	Cognitive	Metacognitive	TOTAL
Male	4,04	3,87	3,46	3,81	1,89	3,41
Female	4,33	3,59	3,56	4,15	2,33	3,59
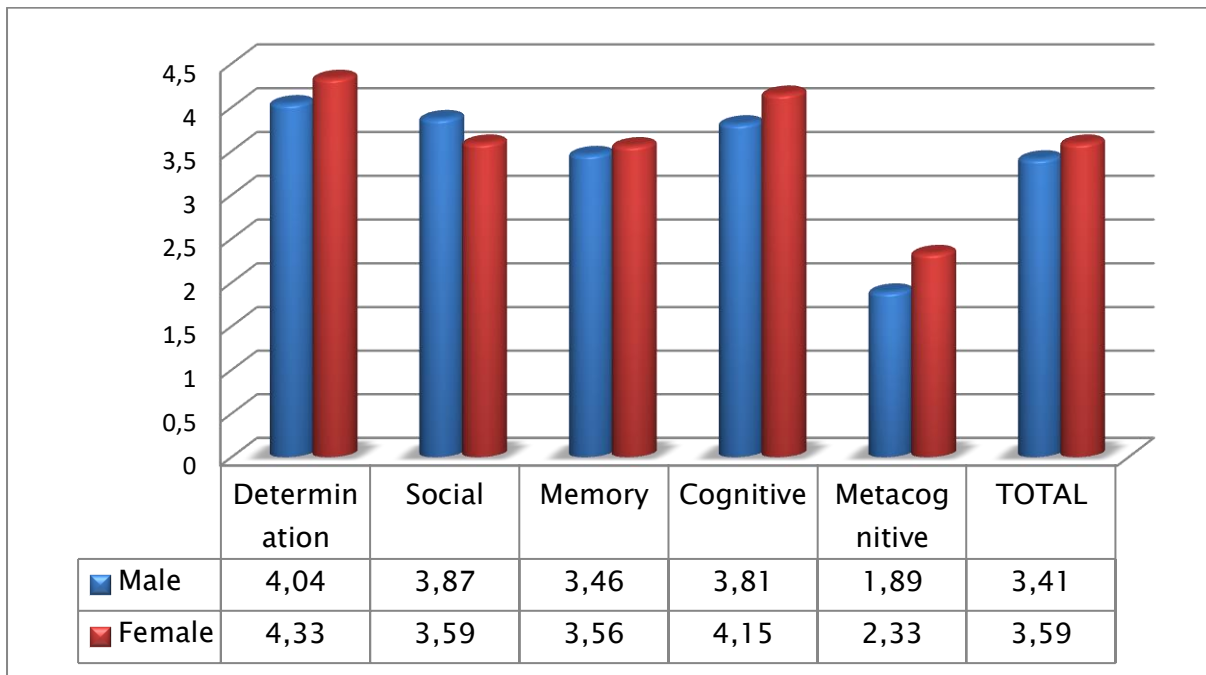
Figure 4.4: First year VLSs Category Usefulness

The above figure displayed data gathered from first-year students' survey revealed that male and female students fluctuated in their VLSs convenience identification. For instance, female students perceived social and memory strategies as quite useful while they were not sure about metacognitive usefulness; yet E1 (using English language media) was esteemed extremely useful. Likewise, male students advocated the same strategy (E1), though the category was also listed as not useful. These findings

unveiled that first-year learners depended more often on classroom context to enlarge their vocabulary repertoire and rarely strengthened it once outside. However, males alleged the usefulness of social and cognitive strategies; where taking notes (D5) and keeping a vocabulary notebook (D7) were rated extremely useful. In addition, the teacher's regular monitoring enhanced students' confidence in overcoming the faced hurdles and was discerned very useful, exceeded by the strategy of talking to native speakers (B5). Besides, conversing with foreigners would unquestionably deepen students' vocabulary utilization and fortify their lexical understanding, articulation, and remembrance.

4.1.5.2 Second Year

The second-year data inferred that second-year students heavily relied on the determination strategies category to decode unfamiliar words' significance. The most frequently used determination strategies were seeking bilingual dictionaries (A5) and guessing word meanings from context (A4). Students used very often the surrounding sentences in a text looking for clues to figure out the words' meaning as well as looking up for translated lexicon. These two strategies demonstrated being practical for preliminary build-up vocabulary though their limited immersion. Additionally, female students tended to use determination strategies more frequently and exhibited a greater inclination towards utilizing perseverance to resolve the faced challenges compared to males sometimes resort.

Cognitive strategies were the second customarily employed category; second-year students relied on mental processes and techniques to enhance their vocabulary understanding, followed by social strategies. Interestingly, when considering the gender diversion, females frequently resorted to the subsequent rated category by engaging their thinking abilities and facilitating better their comprehension through vocabulary notebook (D7) whereas males had mutual expedience in both categories. The strategy of notes taking (D5) was highly proponent by all second-year participants. This unanimous endorsement signified its value recognition in organizing information and aiding in lexis consolidation. Regarding the third ranked category,

males' scores prevailed talking to native speakers (B5) as their topmost strategy whereas females were more likely to ask teachers (B1) for clarification.

	Determination	Social	Memory	Cognitive	Metacognitive	TOTAL
■ Male	3,87	3,36	2,69	3,35	2,03	3,06
■ Female	4,39	3,18	2,93	4,01	2,07	3,31
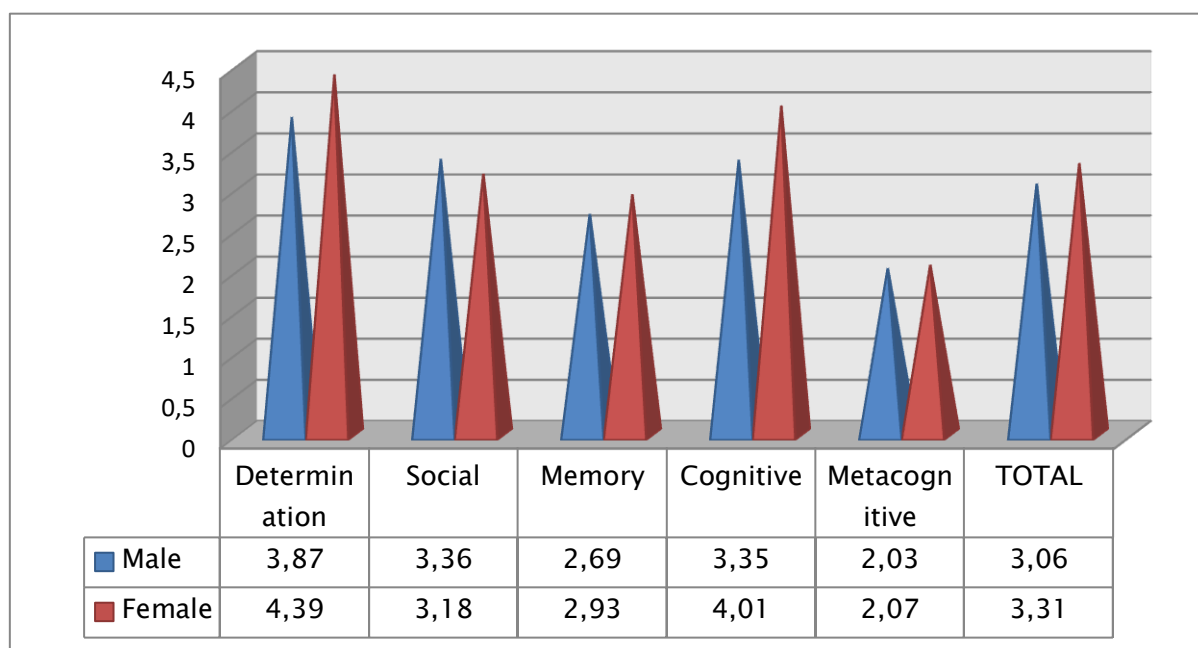
Figure 4.5: Second Year VLSs Category Use

Conversely, memory and metacognitive categories were seldom utilized by sophomore students. Second-year students rarely deployed memory enhancement strategies to encode, store, and retrieve processed vocabulary. The least equally graded strategies were corresponding: drawing a picture of the new word (C1), memorizing the lexical items that follow or precede it (C4), and finally using physical action when learning it (C17). Furthermore, they never tested themselves (E2) nor studied new words many times (E3). They did not actively manage their language thinking or monitor their vocabulary progress. Nonetheless, they promoted their self-regulation and developed a deeper reflective thinking through English language media usage (E1) which was eagerly exploited by many sophomore respondents. This strategy exposes learners to a wide variety of lexical items and vocabulary in context.

As regard to the convenience of VLSs, second-year students overwhelmingly found the category of determination and its associated strategies to be highly valuable. They recognized the importance of resilience in their vocabulary learning journey. However, one strategy within this category which is using pictures or gestures to help them guess the meaning of words (A3) was not considered highly useful. Although it still deemed

quite useful, it was not their preferred technique to discover words' meanings. Students leaned more towards other strategies such as contextual guessing (A4) and bilingual dictionaries (A5) being unruffled in their pursuit of vocabulary acquisition. These results induced that learners focused more on their determination and perseverance rather than relying heavily on visual aids or gestures.

The determination category was tracked by social and cognitive strategies. According to second-year findings, they used a mechanical process in decoding words' meanings. They primarily counted on themselves to resolve the ambiguous lexicon, then queried for aid from an outward cycle to finally settle for their decision-making. On the social front, female learners sought support and encouragement from teachers (B1) and their peers (B2) claiming their high benefit. In the meantime, male respondents advocated teacher's assistance and conversing with native speakers (B5). Collaborating with classmates, engaging in discussions, and participating in language exchange programs provided opportunities for mutual motivation and shared learning experiences. Simultaneously, cognitive strategies facilitated learners' vocabulary comprehension and retention.

The cornerstone strategies that were regarded as extremely useful by second-year students were chatting with Anglophones (B5), recording new words (D5), keeping a vocabulary notebook (D7), and the use of English language media (E1). By employing these strategies, they enhanced their inclusive language skills and bolstered their determination to master vocabulary. Inversely, the least professed useful VLSs categories were memory and metacognitive. Learners were less inclined to enhance their memory of vocabulary through repetition and organization. They also lacked awareness, self-reflection, and learning assessment. The less professed useful strategies were word icons (C1), corporeal exercising when learning (C17), and studying new lexicons many times (E3). They argued that those strategies might be effective for some learners but were not useful for their case as they were not skilled at drawing and did not realize the relevance of repeating words time and again.

	Determination	Social	Memory	Cognitive	Metacognitive	TOTAL
■ Male	4,2	4,04	3,88	4,09	2,94	3,83
■ Female	4,38	4,34	3,86	4,23	3,08	3,97
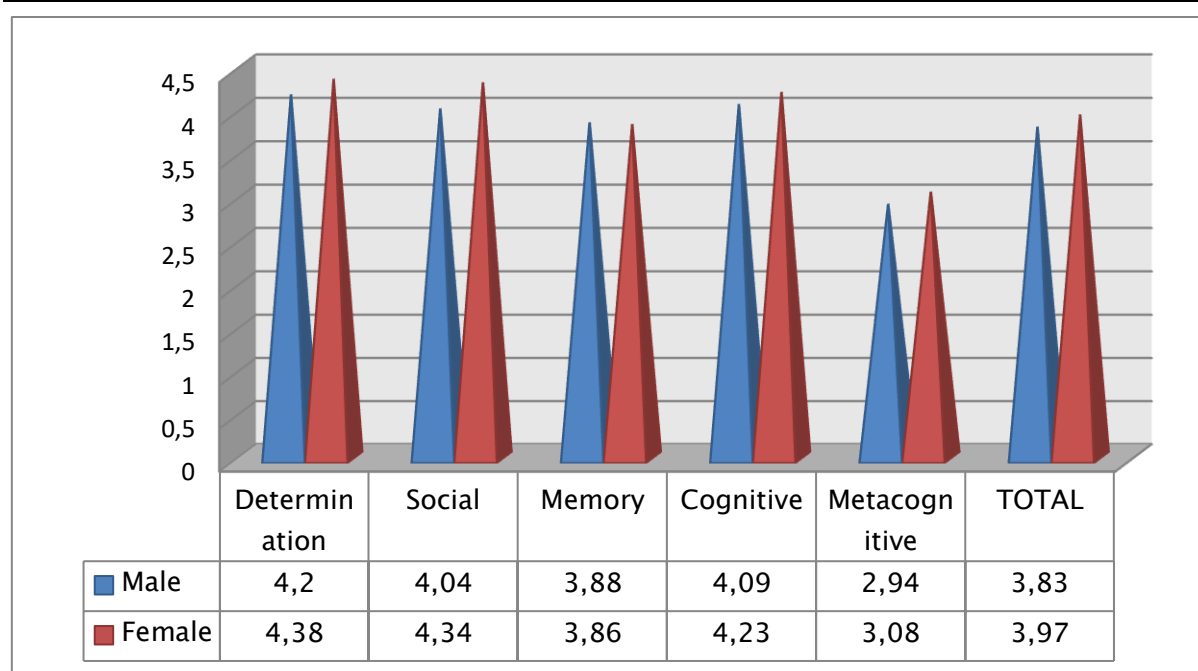
Figure 4.6: Second Year VLSs Category Usefulness

In respect of gender evidence, females' trivial interference was noticed as they were more comfortable in seeking help from peers or teachers and motivated in learning the material being taught. They were also goal-oriented and acknowledged the usefulness of memory enhancement strategies in improving the ability to retain and recall vocabulary more effectively and efficiently. Contrariwise, male learners were less likely to ask for assistance barring native speakers' discourses as yet devoted to reaching their educational objectives.

4.1.5.3 Third Year

The third-year results were notably different in terms of VLSs utilization and perceived effectiveness. The determination strategies were the most commonly employed category. The use of contextual clues (A4) and bilingual dictionaries (A5) were also dominant among junior students. These strategies allowed them to leverage the surrounding context as they utilized autonomous resources to extend their understanding of unfamiliar words. Surprisingly, the foremost advocated strategy was the monolingual dictionary (A6) which was recognized as a valuable tool for advanced learners who were seeking to immerse themselves into the target language, deepen language understanding intricacies, and become more fluent in the target language.

The students' endorsement of this strategy implies that they were motivated to push further their language skills and delve into the language in its authentic form.

The frequency of use took a significant drop while ranking the second and third categories, namely cognitive and metacognitive strategies. This ominous descent demonstrated a shift in learners' VLSs usage such as keeping a vocabulary notebook (D7) that experienced a decline in the frequency of use. For various reasons, third-year students started to rely less on this particular strategy. They might have found alternative methods of vocabulary retention or preferred digital tools or applications for managing their word lists. Besides, there was a tendency for self-testing (E2) to be seldom practiced, indicating that they did not frequently engage in activities that assessed their knowledge of new words through quizzes or tests. The infrequent use of self-testing suggests that they may rely on other strategies to evaluate their vocabulary understanding. They might prefer interactive activities such as contextual usage or casual discussions that gauge their comprehension and vocabulary application. On the other hand, studying new words many times (E3) was occasionally employed, implying that students recognized the value of repeated exposure and review of vocabulary items. By revisiting and reviewing words on multiple occasions, they solidified lexicon understanding and enhanced their retention of the learned material.

The cognitive and metacognitive categories kit was usually sometimes exploited by third-year students apart from note taking (D5) which was the sole highly used strategy considering its category. By actively jotting down new words during classes, they created a personal referential path that they could trace back to strengthen their lexical retention. This strategy not only aided their understanding during lessons but also provided a tangible record of lexical items that they could review and reinforce their on-going vocabulary learning. Additionally, English language media (E1) was still vastly utilized affirming its valuable position in vocabulary acquisition. By actively listening, watching, and engaging with these media sources, students exposed themselves to a diverse array of vocabulary, idiomatic expressions, and cultural references.

The last classified categories were social and memory strategies. The decline in frequency was quite noticeable, indicating a decrease in the active utilization of teachers (B1) and classmates (B2) support among third-year students. However, there was one spotted strategy, talking with native speakers (B5) that stood out as being frequently deployed mainly male participants. They demonstrated a particular inclination towards it, likely recognizing the value of first-hand interaction with native speakers by plunging themselves into authentic language contexts. This strategy sharpened their pronunciation, grasp colloquialisms, and gain insights into cultural nuances, fostering a more comprehensive language learning experience. Moreover, third-year students were less persuaded to employ mnemonic and grouping strategies such as making a mental image of the word's meaning (C2) or form (C13) and remembering words in scales (C6) or groups (C7) to trigger their memory retention.

	Determination	Social	Memory	Cognitive	Metacognitive	TOTAL
Male	4,23	2,67	2,67	3,37	2,96	3,18
Female	4,49	3,01	2,91	3,69	3,3	3,48
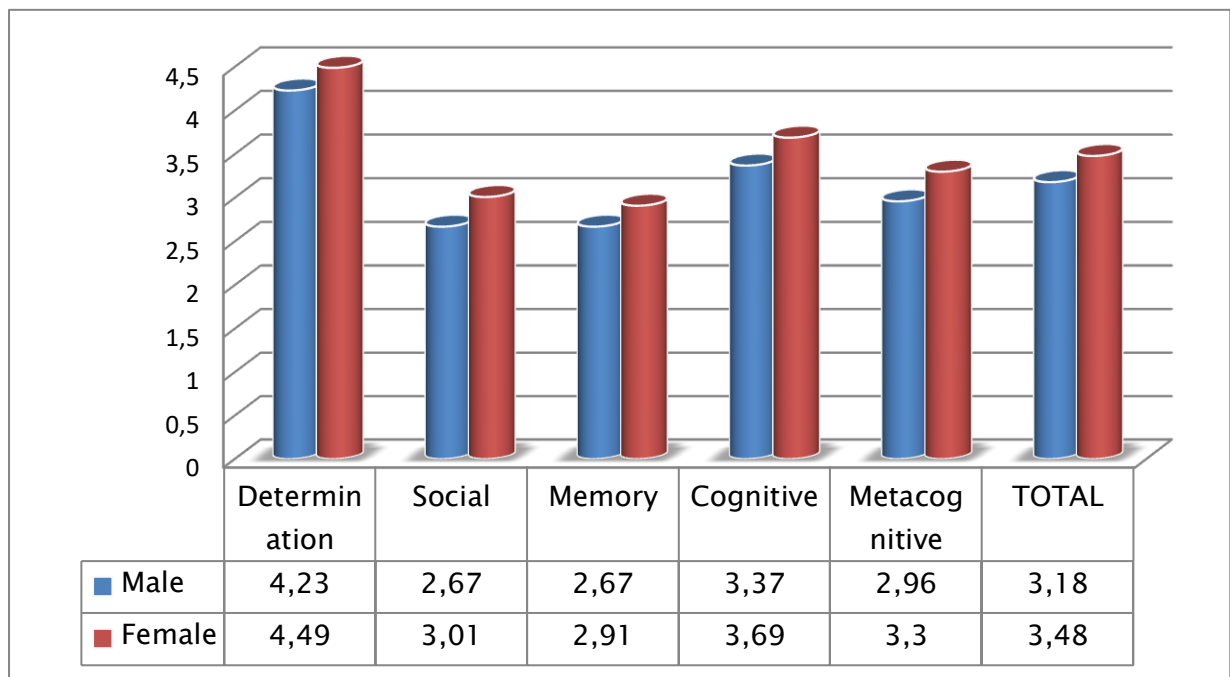
Figure 4.7: Third Year VLSs Category Use

Regarding gender interference, females marginally prevailed all through the VLSs categories as shown in Figure 4.7. They were generally proclaimed to be more engaging and goal-directed compared to males who had the propensity to be hard-pressed. Nevertheless, female participants appeared to be less inclined to employ testing strategy, while males showed no usage of it at all. On the other hand, the third and final strategy, studying new words many times (E3), was reported as sometimes

used by females and seldom used by males. This strategy emphasizes repeated exposure to new words, allowing learners to solidify their understanding and retention of vocabulary through consistent review.

When it came to the most widely recognized and valued VLSs categories, third-year students had an interesting preference pattern. Surprisingly, the category that garnered the highest approval was social strategies accrediting social interactions' significance for vocabulary development. The upmost valued encompassed strategies were engaging in conversations with native speakers (B5), and seeking clarification from teachers (B4 and B1) or peers (B3). Following closely behind was the cognitive category which reflected learners' prized recognition of cognitive processes in vocabulary acquisition. The most advantageous strategies according to third-year respondents were taking notes (D5) and keeping a vocabulary notebook (D7). It reflected their proactive approach to vocabulary learning by independently navigating with the material, capturing significant information, and creating personalized resources to enlarge their language repertoire.

The determination category which underscored diligence ranked third in terms of agreement. It induced that third-year are determined and persistent in their efforts to decode words meanings. Strategies such as context clues (A4) and using monolingual dictionaries (A6) were graded very expedient. By paying attention to the context, such as the words, phrases, or sentences that accompany the unknown word, learners could make rigorous guesses about its meaning. This aberrant pattern of approval with the social strategies leading the way, tracked by cognitive, and determination strategies signified that third-year students placed a substantial emphasis on the social aspect of language learning.

The metacognitive and memory categories were descried as quite useful. Whereas the former promoted self-awareness, and self-monitoring progress, the latter focused on memorization and recall of vocabulary items. Among the recommended strategies, utilizing English language media (E1) emerged as the second most favoured approach, right after came using new words in sentences (C8) or paragraphs (C9), which were deemed exceptionally practical. Third-year students acclaimed the effectiveness of

incorporating newly acquired vocabulary into their sentences. Ironically, the last ranked category (memory) comprised 13 VLSs that were certified very useful out of 17. Strategies like analyzing word roots (C14) and making connections with prior knowledge (C3) were perceived of great utility. Nonetheless, the memory category embedded the least valued VLSs; drawing a word's picture (C1), using physical action (C17), and remembering the words that follow or proceed (C4). Despite being despicable, it is important to note that these strategies help learners create mental associations, engage multiple senses, and establish connections between words, ultimately aiding in their remembrance.

	Determination	Social	Memory	Cognitive	Metacognitive	TOTAL
■ Male	4,15	4,36	3,57	4,19	4,03	4,06
■ Female	4,11	4,52	3,81	4,31	3,91	4,13
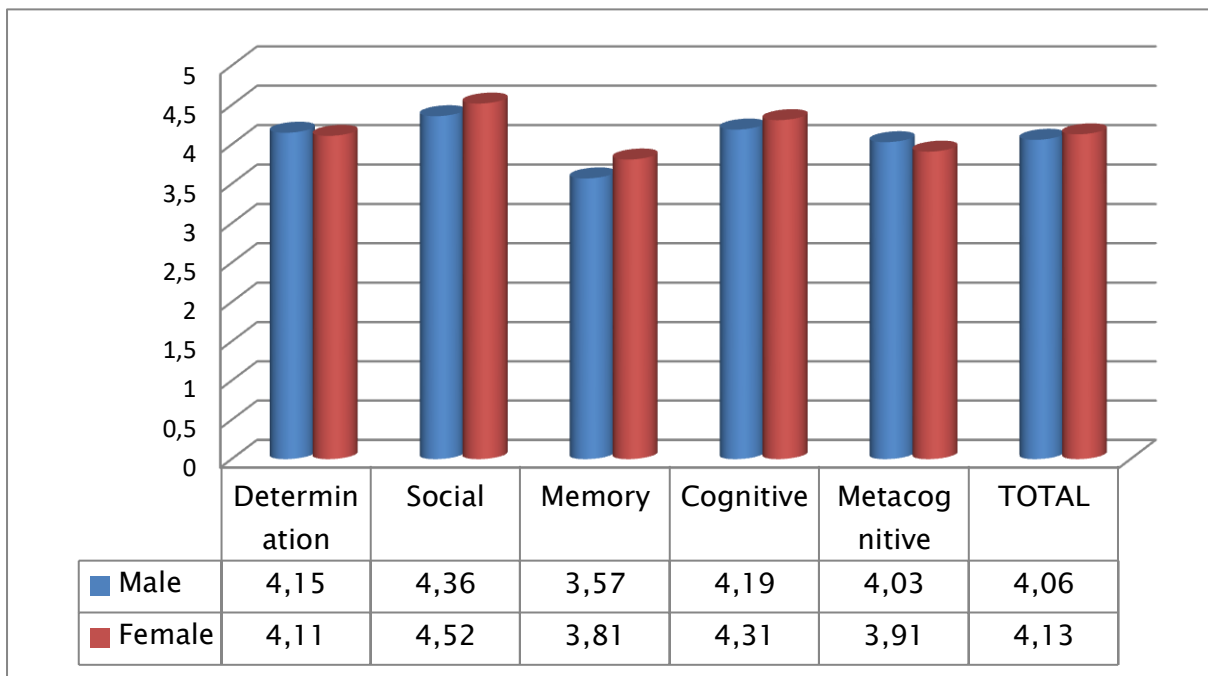
Figure 4.8: Third Year VLSs Category Usefulness

On the subject of gender variable, there was a slight interloping between third-year students where males supervened in determination and metacognitive (Figure 4.8) and females ensued in the residual. In the determination category, males demonstrated a strong inclination toward employing strategies that emphasized perseverance and goal-setting. These strategies empowered them to maintain a determined mindset and overcome challenges during the vocabulary learning process. They recognized the importance of staying focused and driven to achieve their language learning goals. On the other hand, females emerged as prominent users of strategies within the other categories, such as social, cognitive, and memory strategies. They appeared to harness

the power of social interactions, seeking clarification from teachers or classmates, engaging in discussions, and utilizing memory-enhancing techniques. These strategies allowed them to benefit from collaborative learning environments and leverage their cognitive abilities to acquire and retain vocabulary effectively.

For example, female students tended to prioritize analyzing the language and recording the meanings of new words. They showed a keen interest in delving into the intricacies of word usage, exploring different contexts, and gaining a deep understanding of vocabulary items. On the other hand, male students exhibited a higher propensity for engaging in challenging situations and expressing themselves through writing. They embraced opportunities to step out of their comfort zones pushing their language skills to the limit, earnestly seeking tasks that put their knowledge to the test.

In a nutshell, the divergent preferences between female and male students in VLSs use suggested that they both brought unique strengths and preferences to their vocabulary learning endeavours. Males' focus on determination and meta-cognitive strategies showcased their resilience and self-regulatory skills compared to females' proficiency in other categories highlighting their sociability and cognitive adaptability. While females excelled in analytical thinking and meticulous record-keeping, males thrived in dynamic and challenging environments, harnessing their language skills through practical applications.

4.2 The Use of Vocabulary Learning Strategies

The current division addresses the first investigated research question by successfully aligning the data analysis, offering a comprehensive understanding of the vocabulary learning strategies that were commonly utilized as well as the less frequently employed by EFL undergraduate Algerian students at the English Department of Algiers 2 University. Through this vigorous examination, meaningful derived insights and accurate conclusions were drawn as follows.

4.2.1 Most and Least Used Vocabulary Learning Strategies

Determination strategies proved to be the most widely utilized category among EFL undergraduate Algerian students throughout their entire academic education, with an

average mean of 4.14. These strategies had a pivotal role in guiding and supporting their vocabulary learning development, showcasing their commitment and perseverance.

From the beginning of their educational journey as first-year and second-year students, they demonstrated a preference for employing determination strategies to navigate the challenges of learning a new language. They also refined this category as third-year students since it encompassed various aspects such as setting clear goals, maintaining a positive mind-set, and practicing self-discipline. By employing determination strategies, they were able to stay motivated, overcame obstacles, and consistently worked towards improving their language skills.

Contrariwise, metacognitive strategies; thinking about one's learning processes, were less commonly deployed by first and second-year students. This may be attributed to their relatively early stage of language learning and limited exposure to these strategies. However, as students progressed to their third-year, they gradually began to embrace metacognitive strategies more frequently, recognizing their value in enhancing language learning outcomes. Interestingly, memory strategies were categorized as the least utilized among third-year students. This could be indicative of their growing proficiency and confidence in the language, leading to a decreased reliance on explicit memory-enhancing techniques. At this stage, students may have developed more automatic and effortless retrieval of vocabulary, reducing the need for explicit memory strategies.
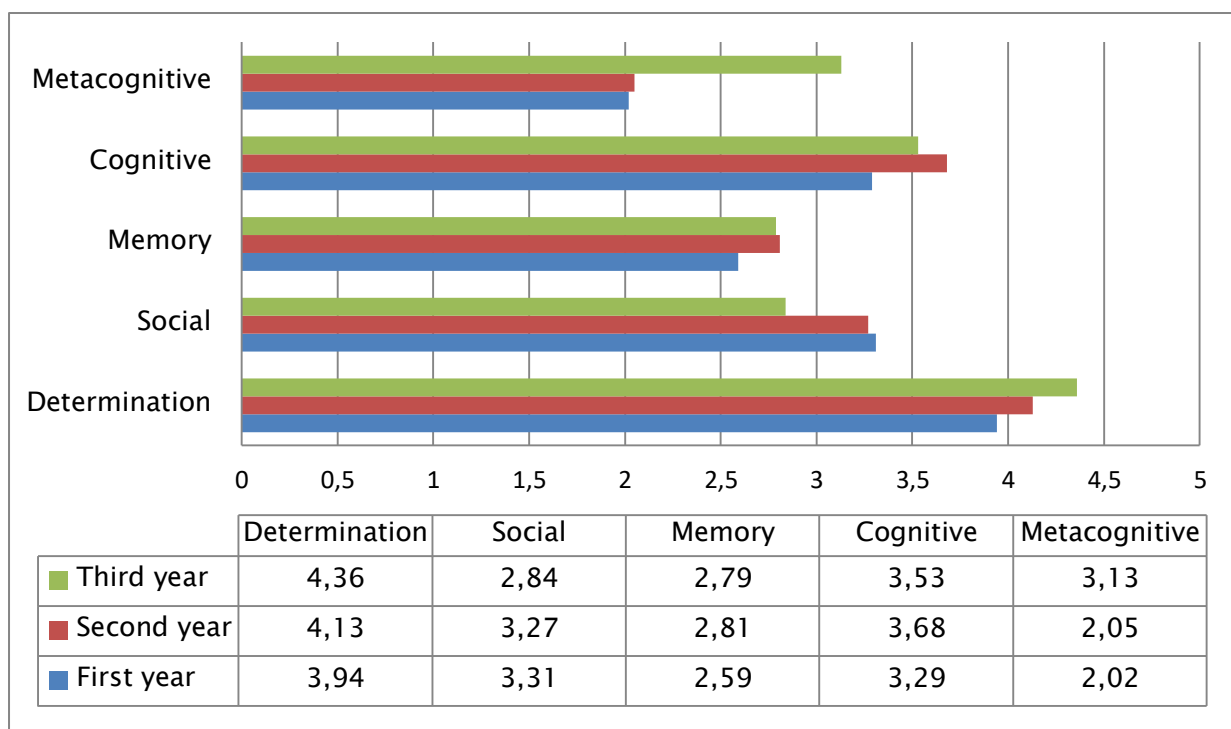
Figure 4.9: VLSs Use Sorting by Undergraduate Students

The differential usage of these strategies among EFL undergraduate Algerian students emphasized their evolving vocabulary learning journey. While determination strategies were consistently fundamental throughout their academic education, the metacognitive and memory strategies deployment varied across different stages. By establishing clear objectives, they created a roadmap that guided their efforts and provided a sense of direction. Moreover, students understood that vocabulary acquisition is a continuous process that required constant effort and dedication.

4.2.1.1 First Year

Based on the obtained results from the conducted instruments that were administered to 50 first-year students, it was concluded that certain vocabulary learning strategies were more commonly employed than others. The strategies that outshined as the most frequently used by first-year students were guessing from context (A4) and utilizing bilingual dictionaries (A5). They proved to be highly effective in helping students decipher the meaning of unfamiliar words within the context of a sentence or text. First-year students demonstrated an impressive mean rating of 4.84 for contextual guesses, indicating a strong reliance on this strategy. Bilingual dictionaries also

received a high mean rating of 4.82, underlining the students' inclination to consult these resources for quick and accurate translations.
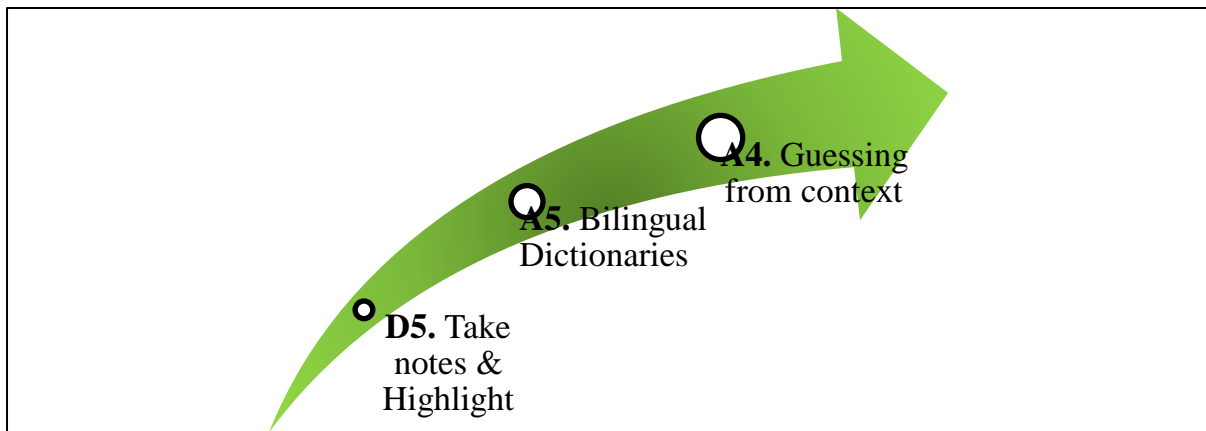
Figure 4.10: First Year Most Used VLSs

Taking notes (D5) emerged as the third notable strategy in the freshmen's vocabulary learning toolkit, although it received a slightly lower mean rating of 4.17 compared to the aforementioned strategies. They recognized the value of recording new vocabulary in their words, allowing them to create personalized references for future review.

In opposition, the least utilized strategies showed a similar pattern of implementation frequency. These strategies were categorized under the memory and metacognitive categories, reflecting their relatively lower inclination among first-year participants. Concerning the memory category, three strategies received an equivalent ratio of 1.01, indicating their infrequent usage. These strategies included drawing a picture of the word to aid in recall (C1), remembering the words that come before or after the new item (C4), and using physical actions while learning vocabulary (C17). First-year students seemed to be less disposed to employ these memory-based techniques, conceivably of their non-familiarity with these strategies or because they found alternatives that were more effective or better aligned with their learning styles.

By the same token, two strategies falling under the metacognitive category received comparatively low rates. Testing oneself (E2) and studying new words repeatedly (E3) respectively received rates of 1.03 and 1.05. These findings suggested that the surveyed students did not heavily rely on these particular metacognitive strategies

when it came to vocabulary learning. It is possible that they may have favoured other approaches or perceived these strategies as less beneficial in their language acquisition process.

E3. Studying new words many times

E2. Testing oneself

C1. Drawing a picture of the word

C4. Remember the word in a sentence

C17. Using physical action
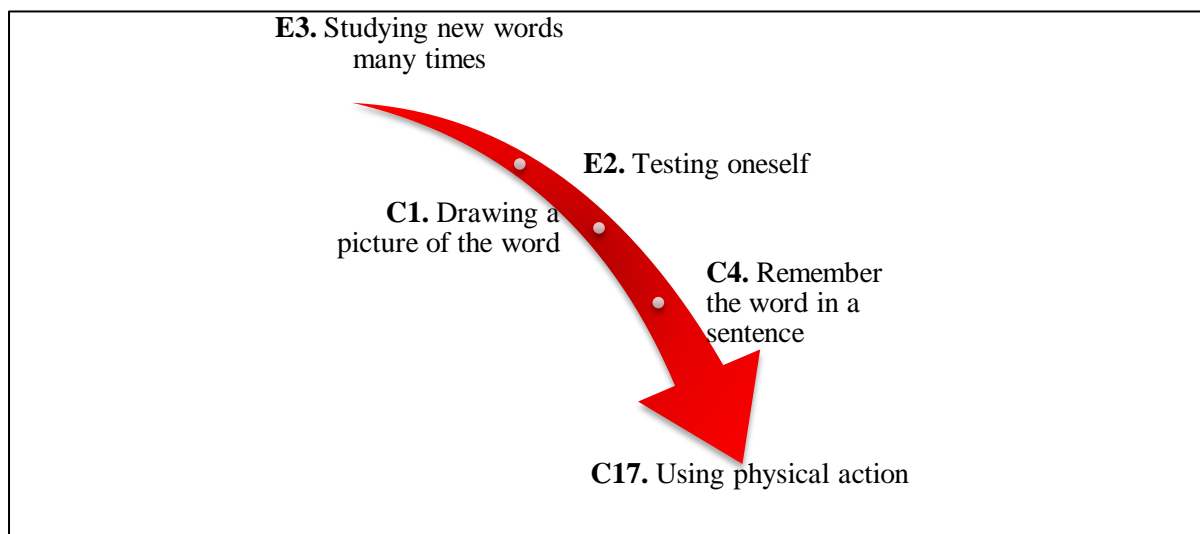
Figure 4.11: Fist Year Least Used VLSs

The above figure highlights the varying degrees of utilization among different vocabulary learning strategies. While some strategies, such as drawing pictures or using physical actions, were less frequently employed, it is important to note that individual students may have had their preferred methods based on their learning preferences. The low rates associated with these strategies signposted that they were less commonly chosen by first-year students, but it does not diminish their potential effectiveness for other learners.

The findings of first-year students brought forth significant insights. They shed light on the preferences and tendencies of first-year students when it came to vocabulary learning. These interpretations revealed that first-year students tended to prioritize immediate problem-solving when encountering unfamiliar words, rather than delving deeper into the consolidation of their understanding.

The strategies of contextual guessing, utilizing bilingual dictionaries, and highlighting words emerged as common discovery strategies among EFL learners from various cultural backgrounds. These strategies served as effective tools for quickly deciphering the meaning of unknown words in different contexts. First-year students, regardless of

their cultural backgrounds, gravitated towards these universal strategies to navigate the challenges of vocabulary acquisition (Schmitt, 1997; Catalán, 2003).

Conversely, the use of memory strategies (such as drawing pictures of words, remembering words that precede or follow, and using physical actions) was found to be neglected by the surveyed first-year students. It appeared that these memory-based approaches received less attention and were not considered prominent strategies. Similarly, metacognitive strategies, specifically studying new words repeatedly (E3) and testing oneself (E2), were also underutilized.

These findings suggested that the surveyed first-year students prioritized immediate comprehension and retrieval of word meanings, rather than centring on profound encoding and consolidation of vocabulary. The neglect of memory and metacognitive strategies could be attributed to various factors, including limited awareness of their potential benefits, lack of exposure to effective instructional methods, or personal learning preferences.

4.2.1.2 Second Year

Concerning the outcomes gained from second-year students, it was inferred that some VLSs were commonly utilized to acquire and comprehend new vocabulary. Bilingual dictionary use (A5) emerged as the most frequently employed VLSs receiving a notable mean grade of 4.83. The ability to consult these dictionaries enabled second-year students to bridge the gap between their native language and the target language, facilitating their understanding of unfamiliar words.

Guessing from context (A4) was the second most used strategy, with a mean grade of 4.82. This strategy demonstrated students' facility in extracting significance from the surrounding context and derived conceivable guesses about the unknown words. Taking notes in class (D5) also ranked high in terms of frequency of use as illustrated below, with a mean score of 4.67. This strategy reflected students' active engagement in the learning process by actively recording new vocabulary during class lectures or

discussions. Taking notes provided them with a personalized reference that aided in their retention and review of the learned words.
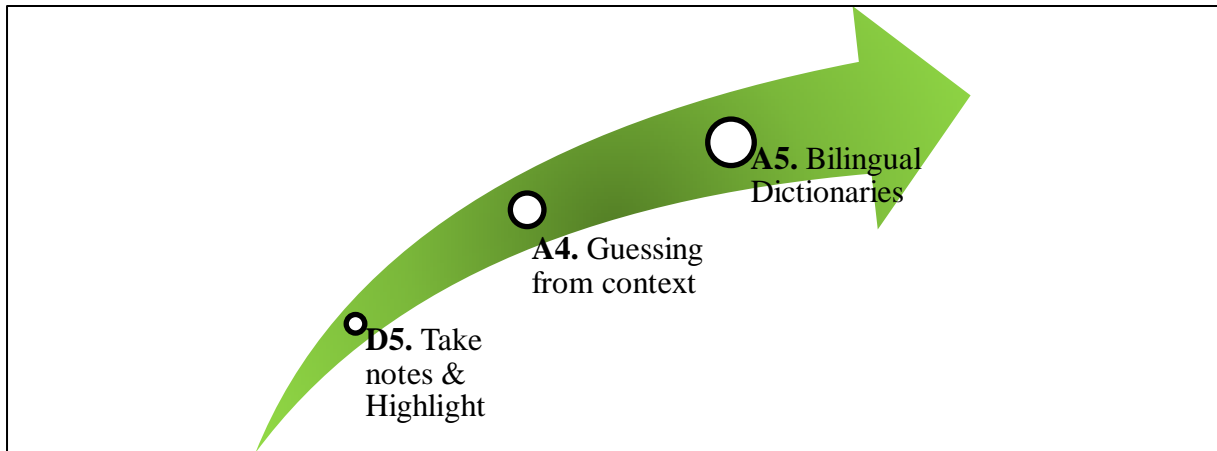
Figure 4.12: Second Year Most Used VLSs

In contrast, second-year students certified that other VLSs were less frequently used among their peers. These strategies (C1, C4, E3, and E2) received the lowest mean rates, suggesting students' inclination towards the above stated strategies.

Drawing a word's picture (C1), which involved visually representing the meaning of a word, was reported to be one of the least utilized strategies, with a mean rate of 1.01. This implied that second-year students seldom resorted to this strategy as a means of enhancing their understanding and retention of vocabulary. Recording the words that follow or precede a new word (C4) was also received minimal attention, with a mean score of 1.01. This suggested that students rarely employed this approach to create associations and contextual connections with the new encountered words. Similarly, the strategy of using physical actions when learning vocabulary (C17) received a low mean rate of 1.01. It indicated that second-year students rarely employed gestures or physical movements to aid in their vocabulary acquisition process.

In addition, studying new words repeatedly (E3) and self-testing (E2), which fell under the metacognitive category, were reported to be never deployed by second-year students, with respective mean rates of 1.03 and 1.07. This induced a lack of engagement with these particular strategies for self-directed learning and evaluating one's vocabulary knowledge.
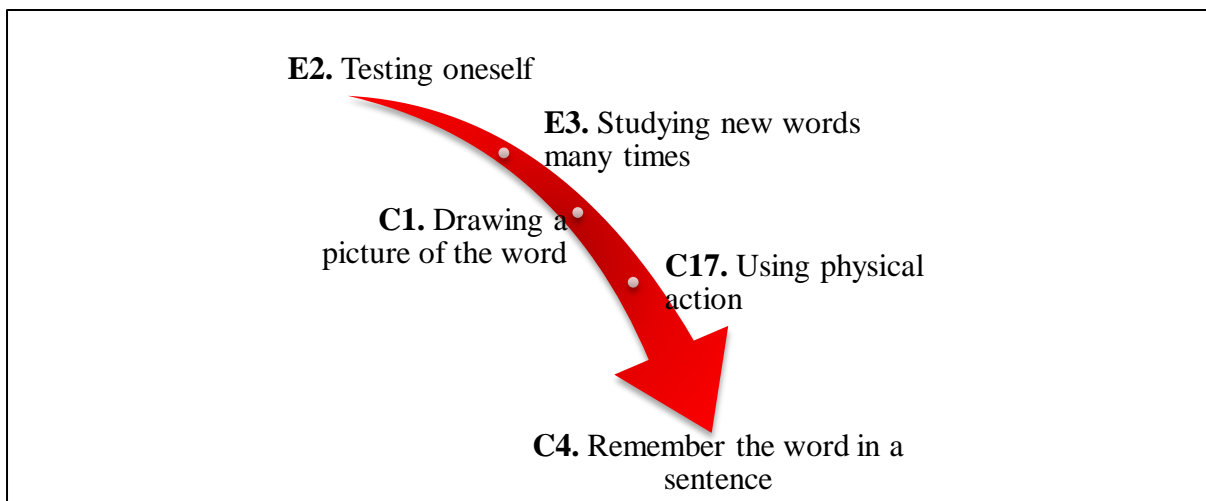
Figure 4.13: Second Year Least Used VLSs

Conclusively, second-year students heavily lingered on decoding words' connotations through bilingual dictionaries for its hasty relevance, textual context guessing for their systemicity, and notes taking for being personalized with no additional consolidative practice. However, it is imperative to note that these strategies alone are not always accurate to retain or internalize words' meaning; students should solidify it by using consolidation strategies through practice.

It could be deduced that though second-year students prioritized some strategies, they were not fully aware of the potential benefits of the least utilized ones. It is important for educators and language instructors to address these findings and consider ways to encourage the integration of these strategies into vocabulary learning activities. By highlighting the advantages and providing guidance on the effective implementation of drawing pictures, recording contextual associations, using physical actions, studying words repeatedly, and self-testing, lecturers could support students in diversifying their vocabulary learning strategies and enhancing their overall language proficiency.

4.2.1.3 Third Year

In the case of third-year students, certain vocabulary learning strategies stood out as the most commonly employed. These strategies were instrumental in their vocabulary learning and were significant for their overall vocabulary acquisition.

The use of English language media (E1) was the most prominent VLSs, with a high mean score of 4.83. This suggested that third-year learners frequently engaged with various forms of English language media, such as books, articles, videos, or online platforms, to expand their vocabulary. By immersing themselves in authentic English language content, they were exposed to a wide range of lexical items and vocabulary in context, which contributed to their language development. Ensuing closely behind was the use of monolingual dictionaries (A6), which received a mean score of 4.78. Third-year students recognized the value of consulting monolingual dictionaries to excavate their understanding of word meanings and explore refined definitions, synonyms, and examples of word usage.

Another highly utilized strategy was guessing from context (A4), with a mean rate of 4.77. Third-year students demonstrated their ability to infer the meaning of unfamiliar words based on the surrounding context in which they were encountered. Additionally, notes taking in the classroom (D5) received a mean score of 4.76, indicating that third-year students created a tailored reference that helped them strengthen their understanding and retention of the words.
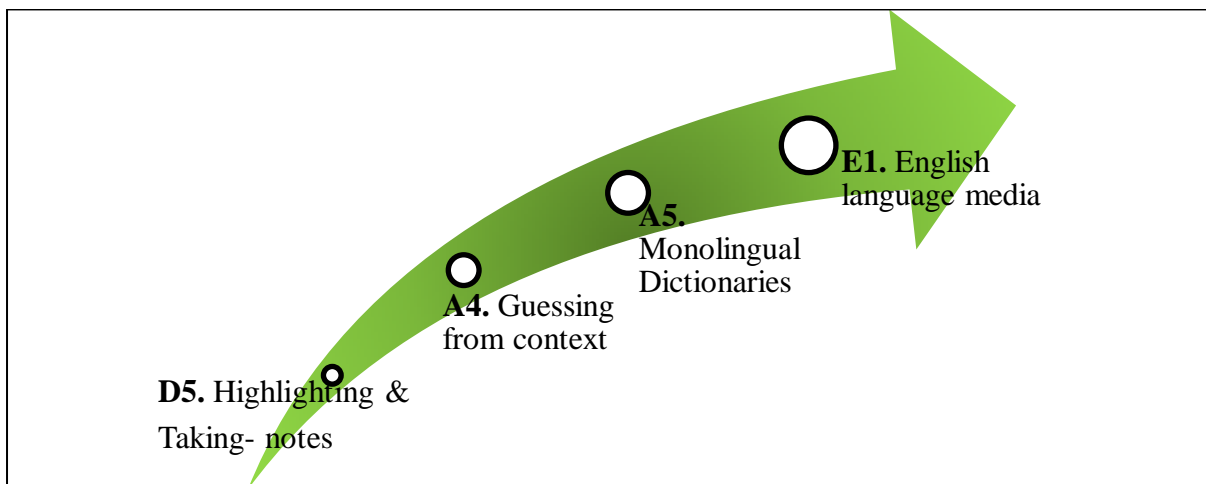
Figure 4.14: Third Year Most Used VLSs

The above findings highlighted the effectiveness of these strategies in supporting the vocabulary development of third-year students. The use of English language media, monolingual dictionaries, contextual guessing, and note-taking facilitated their exposure to new words, enhanced their comprehension of word meanings, and promoted a deeper commitment to the language.

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In contrast, the strategies of portraying the word's picture (C1), retaining the words that follow or precede the new vocabulary (C4), and using physical exercises (C17) were the least depicted strategies among third-year students. These strategies received equal inferior mean scores of 1.01, demonstrating that they were less frequently utilized compared to other vocabulary learning strategies.

Portraying a word's picture (C1) embroiled creating visual representations or mental images of new words as a means of enhancing memory and recall. Retaining the words that follow or precede the new vocabulary (C4) involved paying attention to the surrounding context in which a word appears. By understanding the words and phrases that come before or after the target word, learners could gain insights into its meaning and usage. The use of physical exercises (C17) as a means of learning vocabulary involved incorporating physical movements or actions to reinforce word associations and facilitate memorization. This hands-on strategy makes the learning process more interactive and engaging.
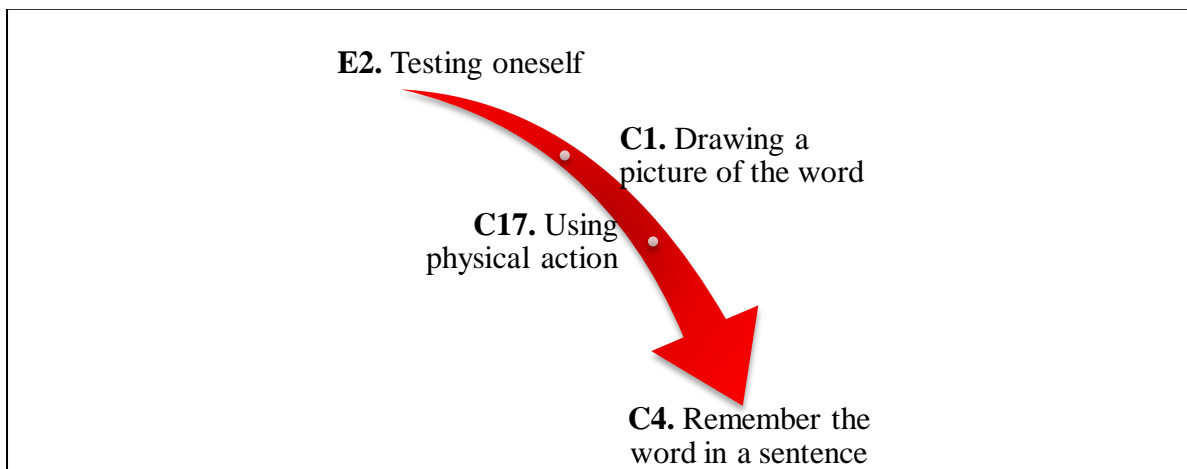
Figure 4.15: Third Year Least Used VLSs

The lower utilization of these strategies by third-year students may be attributed to various factors, such as personal learning preferences, limited exposure or guidance regarding these strategies, or a greater emphasis on other strategies that aligned more closely with their learning styles or educational context. Although these strategies were not frequently employed, it is central to note that the effectiveness of a vocabulary learning strategy can vary depending on individual learners' preferences and needs. Different strategies resonate differently with different students, and it is

crucial to provide a diverse range of strategies to accommodate their varied learning styles and preferences.

Unlike first and second-year students, third-year students placed a higher emphasis on consolidation strategies such as using English language media (E1) and taking notes in the classroom (D5) to heighten their vocabulary learning experience. These strategies were seen as essential for identifying unfamiliar words encountered during language immersion and for effectively storing them in long-term memory.

The use of English language media, including subtitled videos, proved to be particularly valuable for third-year students. This strategy provided them with ample opportunities to expose themselves to authentic language usage and a wide range of vocabulary. The incorporation of subtitles allowed for better comprehension and aided in vocabulary retention, as noted by Zhang and Yang (2020). Third-year students recognized the benefits of using authentic materials like newspapers or magazines to expand their vocabulary range and refine their language skills. These resources provided them with real-world examples of language usage and enriched their understanding of various contexts and domains of knowledge (Cobb, 2007; Read, 2004).

On the other hand, memory strategies such as drawing word pictures (C1), retaining surrounding words (C4), and using physical actions (C17) were not commonly employed by third-year students. These strategies, although potentially beneficial for pre-activating and reinforcing new vocabulary, were given less priority by third-year participants. Additionally, self-testing (E2) was not frequently utilized, limiting their opportunities for assessing their vocabulary knowledge and identifying areas for improvement.

These findings suggested that third-year students had developed a preference for strategies that focused on consolidating and internalizing vocabulary through exposure to authentic materials and systematic note-taking. While memory strategies and self-testing were not widely employed, it is important to consider individual learner preferences and the contextual factors that influence strategy selection. Providing a

balanced range of vocabulary learning strategies and promoting metacognitive awareness can support students in making informed choices and developing a personalized approach to vocabulary acquisition.

4.3 The Usefulness of Vocabulary Learning Strategies

The second research question was fulfilled in the forwarding section by carefully relying on thorough scrutinizing data. It tackled the prevalence and effectiveness of different vocabulary learning strategies according to EFL undergraduate students' perception across the three academic years.

According to the analyzed results from undergraduate students, it was found that the determination category was considered as the most useful by first and second-year participants. This assembly incorporated strategies that intricate discovering the word's significance. Students recognized the importance of staying determined and dedicated to expanding their vocabulary. It was trailed by cognitive strategies, which were also deemed valuable by first and second-year students. These strategies involved lexicon consolidation by tracing vocabulary retention using regular record transcription.

Interestingly, when examining the perspective of third-year participants, there was a notable shift in the perception of the usefulness of social strategies. The latter consisted of interacting with others such as native speakers, teachers, or classmates for language learning purposes, which was the upmost advocated category. They recognized the benefits of engaging in conversations and seeking clarification from others to enrich their lexis array. These conclusions highpointed the variations in students' perceptions of the VLSs' usefulness based on their academic level. First and second-year students placed a higher emphasis on determination and cognitive strategies, whereas third-year students valued the importance of social strategies in their vocabulary development.

In the contrary, metacognitive strategies were the least utilized by first and second-year learners and ranked just above memory strategies in terms of usefulness. The statistical analysis of the data demonstrated this pattern, indicating a lower preference

for metacognitive strategies among these groups of students. These strategies implicated students' awareness of the learning process. They included self-monitoring to elevate one's proficiency level through self-evaluation. While these strategies were highly advantageous for vocabulary endorsement, it appeared that first and second-year students may not have fully recognized their value or may not have been sufficiently exposed to their benefits.

On the other hand, third-year students exhibited a slightly higher engagement with metacognitive strategies compared to first and second-year participants. It could be induced that as students progress in their academic journey; they may become more aware of the importance of metacognition and begin to incorporate these strategies into their vocabulary learning practices.

	Determination	Social	Memory	Cognitive	Metacognitive
Third year	4,13	4,44	3,69	4,25	3,97
Second year	4,29	4,19	3,87	4,16	3,01
First year	4,18	3,73	3,51	3,98	2,11
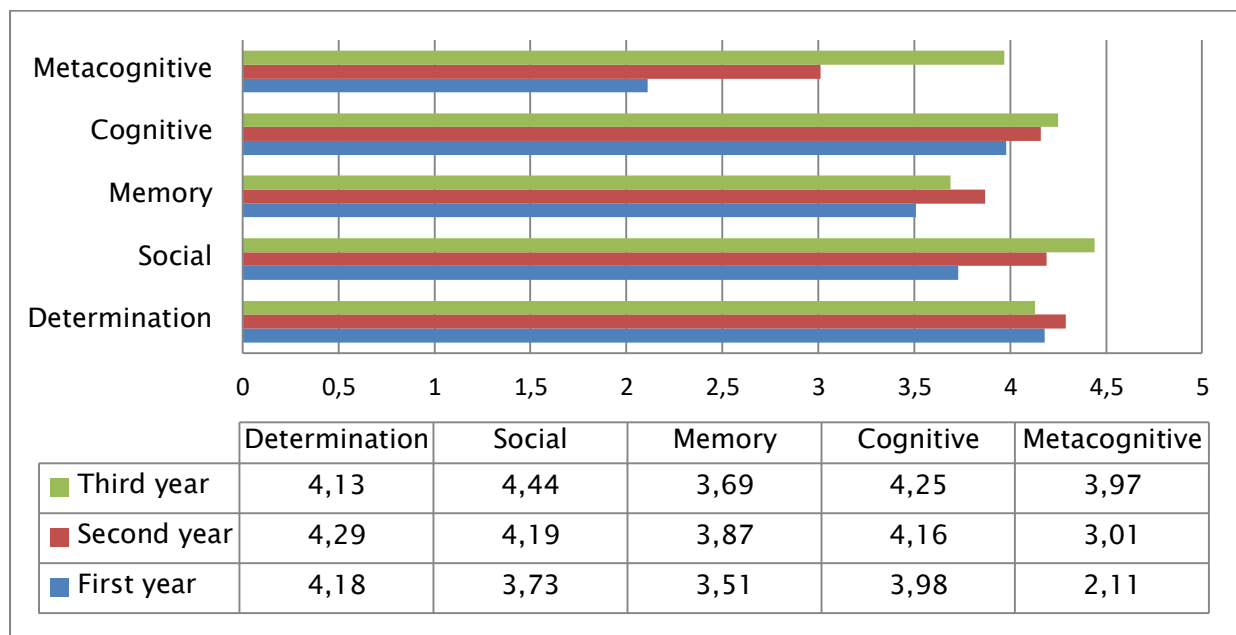
Figure 4.16: VLSs Usefulness by Undergraduate Students

In a nutshell, these findings highlighted the evolving perceptions of EFL undergraduate Algerian students regarding the most helpful VLS categories. First and second-year students leaned towards determination and cognitive strategies, while third-year placed a stronger emphasis on social strategies. These differing perceptions may be attributed to students' growing understanding of effective VLSs and their

evolving language learning needs and goals as they progressed through their academic cursus.

4.3.1.1 First Year

First-year students highly esteemed recording new words in class (D5) and keeping a vocabulary notebook (D7) being the most constructive strategies for expanding their vocabulary, with respective striking mean scores of 4.86 and 4.81. It revealed that first-year students recognized the value of organizing new words in a structured manner for better retention and reliable future reference.

In addition to these cognitive strategies, first-year found the strategies of guessing from context (A4) and using a bilingual dictionary (A5) to be very useful in interpreting unfamiliar words meaning. These strategies scored means of 4.65 and 4.4, indicating their significant role in facilitating vocabulary comprehension.

D5. Taking notes

D7. Keeping a vocabulary notebook

A4. Guessing from context

A5. Bilingual Dictionaries
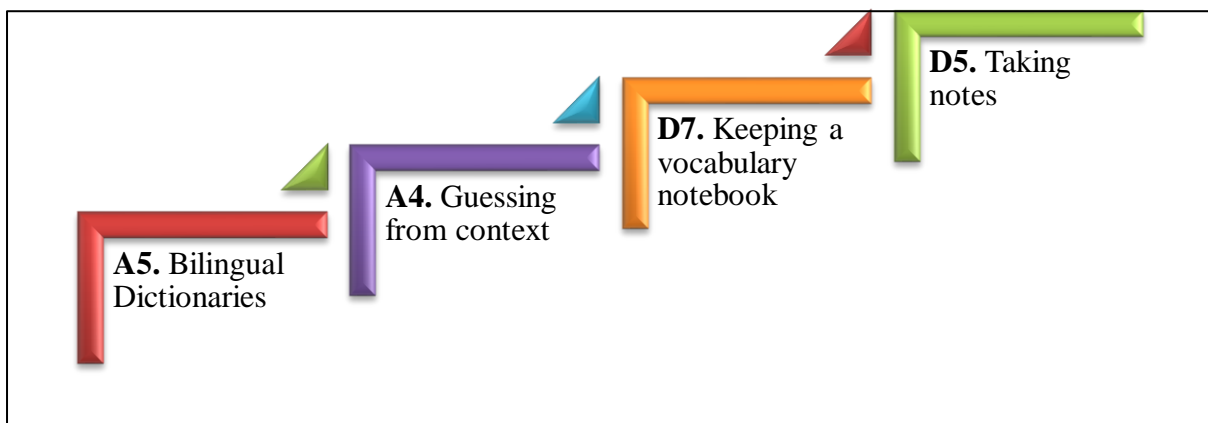
Figure 4.17: First-year Most Praised VLSs

The preference for the above listed strategies among first-year students reflected their early stage of language learning, where they relied on effective strategies that directly aided in understanding and acquiring new words. By actively participating in class and maintaining a dedicated vocabulary notebook, they demonstrated a proactive approach to vocabulary development.

In sharp contrast, first-year students ranked drawing a picture of the word (C1), remembering what follows or precedes the new word (C4), and using physical action

when learning words (C17) as the least useful strategies, all with a mean score of 1.01. It induced a possible preference for more direct and immediate strategies to learning new words. Similarly, the strategies of self-testing (E2) and studying the new word many times (E3) were perceived as not useful by first-year students. It elucidated that they did not consider these strategies effective or relevant in their vocabulary acquisition. They rather prioritized strategies that provided clearer and faster results, such as contextual guessing and bilingual dictionaries use.

1.06	• **E3.** Study the word many times
1.03	• **E2.** Self-testing
1.01	• **C1.** Drawing word's picture • **C4.** Remember what follow or precede the new word • **C17.** Physical action
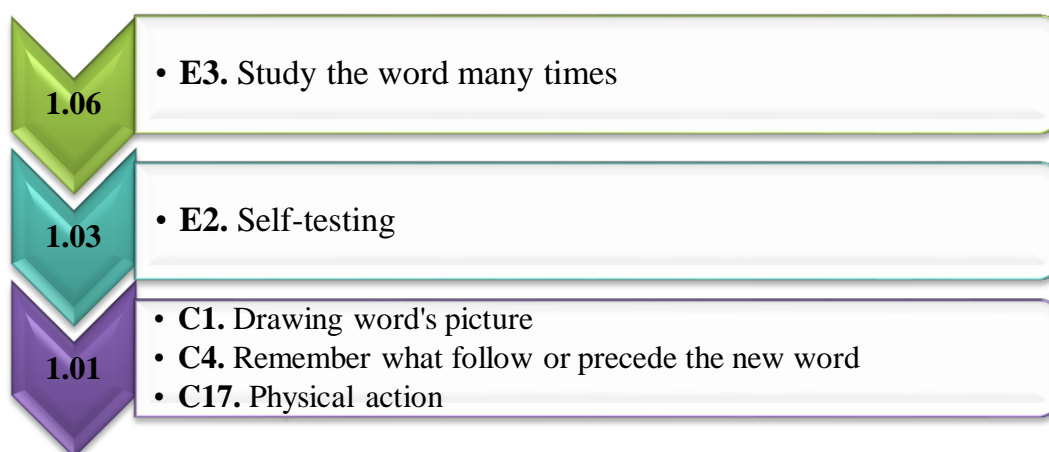
Figure 4.18: First-year Least Favoured VLSs

Inclusively, the displayed findings revealed that first-year students tended to focus more on active engagement with words through cognitive and hasty strategies, while showing less inclination towards strategies involving visualization, contextual associations, physical actions, self-testing, and repeated studying.

On the line of most regarded useful strategies, first-year students alleged writing down notes as it strengthens the words' consolidation by retaining the key concepts presented in classrooms. It also improved their language comprehension and involvement through attentive listening to the teacher during the lesson and could be tailored reference material to learners' needs for eventual review or revision. Likewise, keeping a vocabulary notebook was deemed beneficial as it enabled first-year students to organize and process encountered information as well as classify and summarize the main ideas that could deftly be recalled afterward.

Both the practice of writing down notes and maintaining a vocabulary notebook reflected the students' desire for active involvement in their learning. These strategies provided a sense of structure and organization, allowing them to better internalize and understand the language material. By employing these strategies, first-year students facilitated their ability to recall and retrieve words more efficiently when needed and eventually build a solid foundation for their language skills.

Nonetheless, creating a visual representation of a word was perceived as not useful though it enhanced the encoding and retrieval of lexical items. Similarly, connecting new words with the former or latter ones created a mental association that was not advocated by first-year participants, nor the kinesthetic learning strategy which generated a multisensory experience. Moreover, self-testing was an effective strategy that fortified vocabulary leaning, identified areas of weaknesses and built knowledge confidence; whereas studying new words multiple times reinforced the neural connections associated with the acquired lexis were perceived as not useful in the long run for Algerian first-year students.

It is worth noting that while these strategies had proven effective for vocabulary acquisition and retention in research and language learning contexts. The perceptions of the investigated first-year participants may have been influenced by various factors such as their individual learning preferences, prior experiences, or cultural backgrounds. The discrepancy between their perception and the potential benefits of these strategies highlighted the importance of understanding students' preferences and tailoring instructional approaches accordingly to optimize their learning outcomes.

4.3.1.2 Second Year

Second-year students identified the use of English language media (E1) as the most effective strategy for language learning, with a high mean rating of 4.94. This indicated that they highly valued engaging with various forms of English media, such as podcasts, anime, TV shows, and online content, exposing themselves to authentic language use. Note-taking (D5) was also recognized as an extremely practical strategy, with a mean rating of 4.9. Highlighting new lexicon in class allowed students to

actively engage with the material, capturing relevant information, and creating a customized reference for eventual recall.

Additionally, the strategy of keeping a vocabulary notepad (D7) was regarded as valuable with a mean rating of 4.8. This practice embroiled recording and forming new vocabulary words, for future reviewing. They also prized the significance of contextual deduction (A4) in understanding unfamiliar words in context, with a mean rating of 4.77. This strategy implied using contextual clues to deduce the meaning of unknown words.

Furthermore, the use of bilingual dictionaries (A5) was recognized as a useful strategy, scoring a mean rating of 4.67. Bilingual dictionaries provided students with handy translations of unfamiliar lexical items, aiding them in having better comprehension. Lastly, conversing with native speakers (B5) was professed as a treasured strategy with a mean rating of 4.64. Engaging in conversations with native speakers provided opportunities for real-life language practice, cultural exchange, and the acquisition of idiomatic expressions.
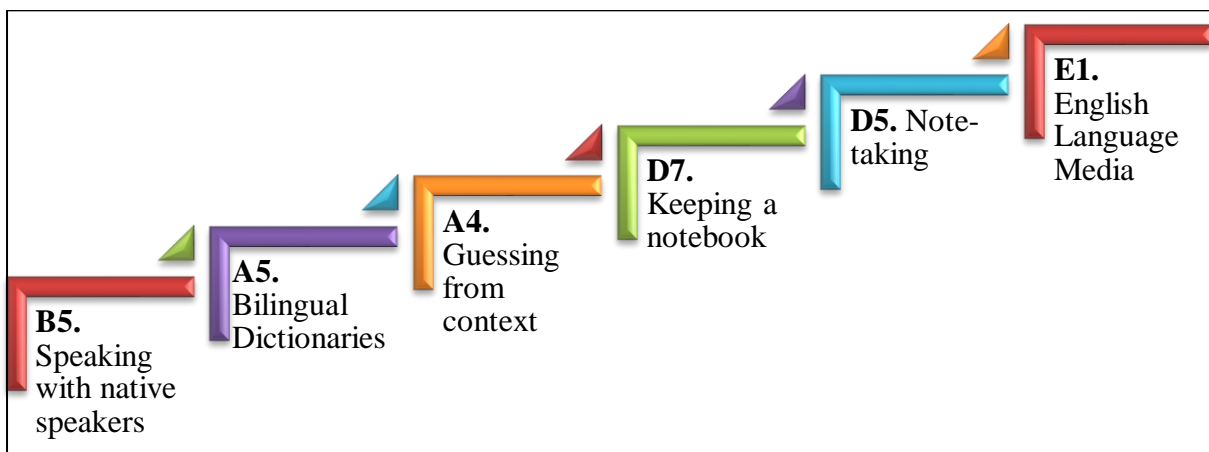
Figure 4.19: Second-year Most Perceived Valuable VLSs

In sum, the illustrated figure demonstrated that second-year students placed a high value on engaging with English language media, actively participating in class through note-taking, utilizing vocabulary notepads for organization, employing contextual deduction, utilizing bilingual dictionaries, and seeking opportunities for conversational practice with native speakers.

On the contrary, second-year students rated the strategies; drawing a picture of the word (C1), using physical action when learning words (C17), studying new words multiple times (E3), and remembering what follows or precedes a new word (C4) as the least useful VLSs as shown below.

1.86 • **C4.** Remember what follow or precede the new word

1.83 • **E3.** Study new words many times

1.81 • **C17.** Physical action

1.79 • **C1.** Drawing word's picture
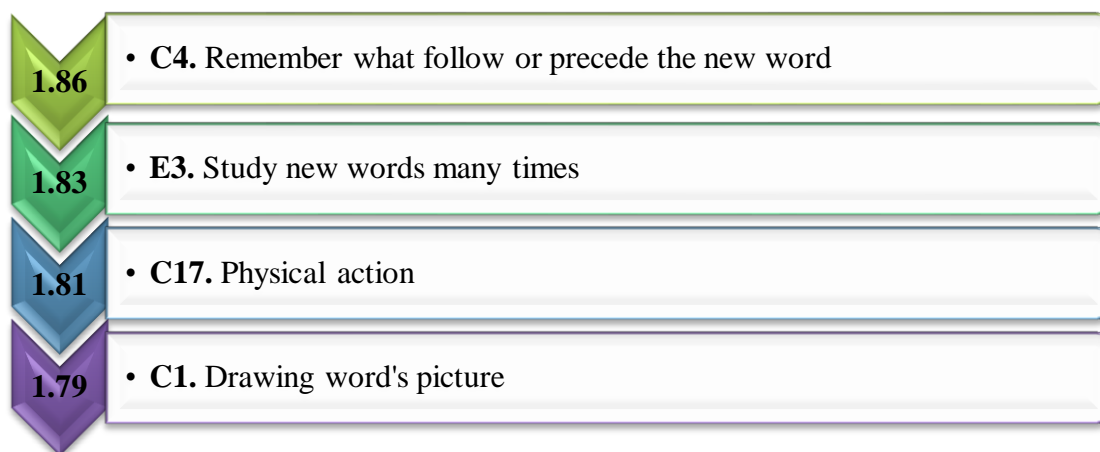
Figure 4.20: Second-year Least Perceived Valuable VLSs

These lower ratings indicated that second-year students did not prioritize or find significant value in the aforementioned strategies. They may not have yielded significant benefits for the examined sample, but it did not necessarily reflect their effectiveness for all learners. It induced that their focus and preferences lied more in the use of English language media, note taking, vocabulary notepads, contextual deduction, and bilingual dictionaries, as previously mentioned.

4.3.1.3 Third Year

Third-year students demonstrated a strong endorsement of various vocabulary learning strategies. They acclaimed the use of highlighting new words (D5) as extremely useful, with a mean rating of 4.91. By highlighting key vocabulary during their studies, students were able to visually accentuate relevant words and concepts for further recall.

In parallel, the utilization of English language media (E1) was highly prized by third-year students, receiving a mean score of 4.9. Engaging with certified content that was compelling and bigger than a mere book or syllabus, such as documentaries, online

games, and YouTube videos offers valuable exposure to the TL in realistic frameworks. This disclosure promoted students' listening and speaking skills, as well as expanded their vocabulary repertoire.

Additionally, engaging in language exchange with Anglophones (B5) was considered highly beneficial, with a mean rating of 4.86. Having conversations with native speakers provided an opportunity to practice the language, by receiving feedback on pronunciation and grammar as they gained insights into cultural nuances. Keeping a vocabulary notebook (D7) and using contextual clues (A4) were also recognized as valuable strategies, with an equal mean rating of 4.73. The act of noting down new words and their meanings in a vocabulary notebook enabled students to consolidate and review their lexicon systematically. Meanwhile, the use of contextual clues helped in untangling unfamiliar words meaning.
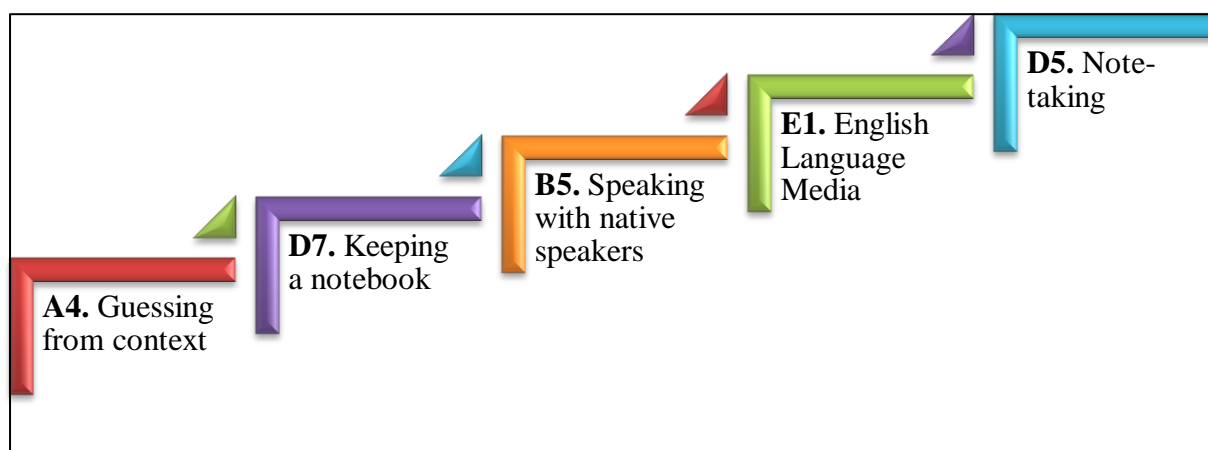
Figure 4.21: Third-year Most Perceived Valuable VLSs

The above figure concluded that third-year students prioritized a combination of strategies that involved active engagement, exposing them to authentic language sources, and opportunities for language exchange. By employing these strategies, they strengthened their vocabulary retention, language proficiency, and English language learning experience.

In contrast, third-year students did not show a strong preference for memory strategies, namely drawing a picture of the word (C1), using physical action (C17), and remembering the words that follow or precede the new word (C4). These strategies

received lower ratings in terms of usefulness compared to other categories as displayed below.

- **C1.** Drawing the word's picture
- **C17.** Physical action

1.27

- **C4.** Remember what follow or precede the new word

1.01
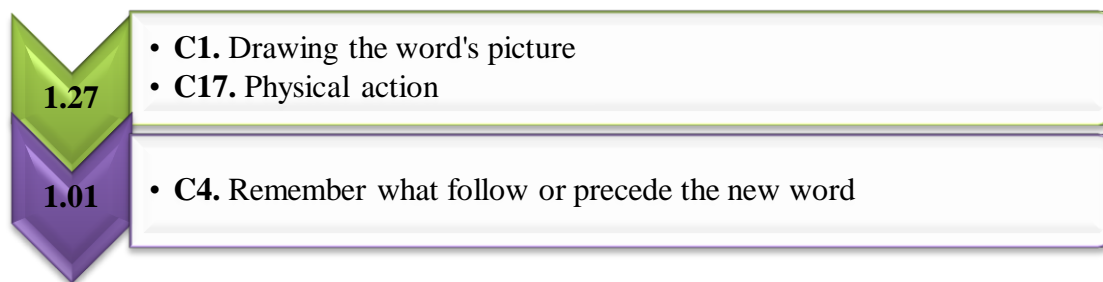
Figure 4.22: Third-year Least Perceived Valuable VLSs

Third-year students selected other strategies that were more effective in their vocabulary learning process. Rather than focusing on visual representations or physical actions, they placed more emphasis on strategies like interacting with English language media (E1) or engaging in language exchange with native speakers (B5). These strategies provided a natural learning context where learners involved with the TL effortlessly. These outcomes propounded that third-year may have gravitated towards strategies that fostered active engagement, authentic language exposure, and meaningful interactions while placing less emphasis on memory-based approaches.

4.4 Learning Approaches

This section tackles the fifth research question, which centers on the approaches adopted by EFL undergraduate Algerian students in their vocabulary learning endeavours. By examining the data and analyzing participants' responses a deeper understanding of their vocabulary learning process was spawned paving the way for further research and development in this area. Two principal theories were relied on; Sanaoui (1995) and Clouston (1996). These theories provide a solid framework for understanding the approaches used by EFL undergraduate Algerian students in their vocabulary learning journey.

In order to answer the fifth research question, approximate statistical percentages were generated by combining the responses from four questions in the students' questionnaire, which were question 12 (self-initiate activities), question 13 (record new vocabulary), question 14 (review the recorded lexicon), and question 15 (practice

using the new lexical items). Additionally, the VLSs survey results were considered, specifically C8, C9, D5, D7, E2, and E3. These ratios provided a quantitative representation of the students' preferences and usage of specific strategies for vocabulary learning. It also delivered an overview of the students' tendencies and patterns regarding these vocabulary learning strategies. The combination of these questions and VLSs abetted in having acumens into the students' embroilment in self-initiated activities, their recording and review of new lexical items, as well as their practices for using the acquired lexicon.

According to the collected data from questionnaires administered to both students and teachers, as well as analyzing the findings from various assessment instruments, significant conclusions were drawn about the predominant approach adopted by these learners. It was deduced that the majority of EFL undergraduate students tended to adopt a semi-structured approach to vocabulary learning as thoroughly clarified below.
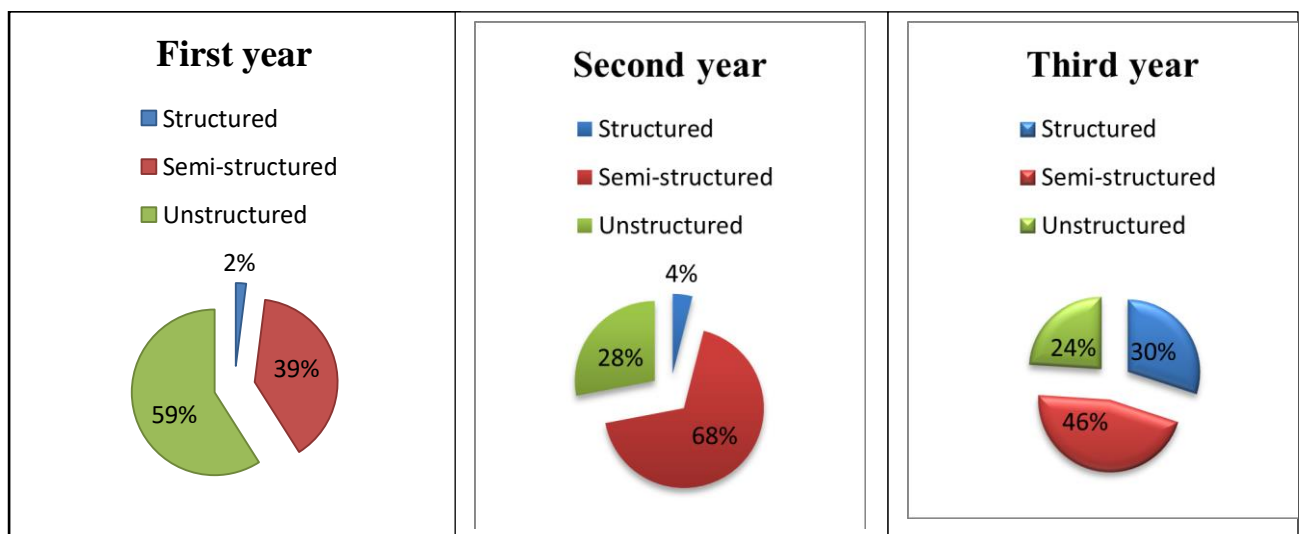
Figure 4.23: Undergraduate Adopted Approaches

The semi-structured approach involved a combination of structured learning activities, such as memorization and repetition of vocabulary lists, as well as more exploratory and unstructured activities like reading or listening to realistic materials in the target language. This approach enabled students to strike a balance between the need for structured practice and the desire for autonomy and engagement with the language. By merging both structured and unstructured activities, EFL undergraduate students will benefit from a well-rounded vocabulary learning experience. The structured activities

provided a solid foundation and helped reinforce the acquisition of new words, while the unstructured activities promoted the application and contextual understanding of the vocabulary in real-life situations.

In their first-year of studying, many students expressed feelings of being overwhelmed by the diverse curriculum they encountered. As a result, they sought a more dependant and teacher-guided approach to their vocabulary learning. They favoured an environment where they could receive clear guidance and instruction from their teachers. However, there were a minority of first-year students who had a more proactive approach regarding their vocabulary development. Some of them engaged in self-directed activities such as reading books or enrolling in private courses outside of their regular coursework. These students were motivated to explore alternative methods of vocabulary acquisition and sought additional resources to enrich their learning experience. For the majority of first-year students, the traditional methods of recording new vocabulary were still prevalent. They used notebooks or flashcards to jot down and review new words, relying on handwritten notes as a tangible reference whereas for their learning process.

Interestingly, as students progressed into their second and third year, there was a noticeable increase in their dedication to vocabulary learning. This could be attributed to a growing familiarity with the language and a profound understanding of the vocabulary position in their overall language proficiency. As their scores improved, students became more motivated to explore different strategies and utilize technology to track and practice their vocabulary progress. They embraced various vocabulary apps and websites as tools to support their learning journey. This escalation in learners' devotion demonstrated their evolving awareness of the vocabulary significance in language acquisition. It also reflected their growing autonomy and willingness to explore different avenues for enhancing their vocabulary skills. The shift from relying solely on teacher guidance to actively seeking out resources and technology indicated their increasing independence and self-directed learning approach.

In their second-year of studies, students became more accustomed to the learning pace and dynamics of their program. The majority of second-year students chose to adopt a

more unstructured approach to their vocabulary learning. While they still relied on the guidance and support of their teachers and the resources provided in the classroom, they also sought external opportunities to personalize their learning experience. They recognized the value of taking ownership of their learning and pursued ways to tailor their vocabulary acquisition to their individual needs and interests. They were no longer merely reliant on the administered activities and materials provided by their teachers but resorted to additional resources and opportunities to supplement their learning. These external opportunities included compelling materials in the TL, such as reading books, watching movies, TV shows, or listening to podcasts.

Furthermore, second-year students were more leaned to technology usage. They embraced various digital tools, apps, and websites that offered interactive exercises, vocabulary games, and online communities for language learners. These resources permitted them to involve with the language beyond the confines of the classroom. Conclusively, second-year students demonstrated a growing desire for autonomy and a willingness to explore their learning paths while still appreciating the assistance and resources delivered by their teachers. They recognized the importance of supplementing classroom instruction with external resources and pursued opportunities to personalize their vocabulary learning bucket.

In their third-year of education, undergraduate students demonstrated a remarkable level of independence and autonomy. They developed a strong foundation of knowledge and skills, allowing them to take a more self-directed approach to their vocabulary learning. While some students sustained an organized approach to vocabulary acquisition, the majority embraced a more unstructured one. They tailored their learning routine and strategies that worked best for them. Despite their independence, third-year students remained active in classroom learning. They acknowledged the value of the delivered assignments instructed by their lecturers and continued to participate in class discussions. They avowed that classroom interactions and guidance from their teachers endorsed their understanding and retention of new words.

Moreover, they demonstrated a strong commitment to integrating new vocabulary into their everyday language usage. They regularly reviewed and practiced using the newly acquired lexical items in various contexts, such as incorporating them into written paragraphs, essays, and speeches. A significant portion of 62% followed a mechanical learning path, where they relied on established rules and habits in their vocabulary acquisition. They were diligent in reviewing and practicing the new words they encountered, ensuring that they became ingrained in their active vocabulary.

The main distinction between structured, semi-structured, and unstructured learners was witnessed in their preferred approaches to learning. Each of these approaches had its merits and suited different learners' preferences and needs. Structured learners found comfort in a clear learning path, unstructured learners thrived on independence and autonomy, and semi-structured learners stroke a balance between structure and flexibility. Ultimately, the effectiveness of each approach depended on the individual learner's learning style and their ability to adapt their strategies to suit their own needs and goals.

4.5 Investigated Variables

The present research took into account two significant variables: gender and year of study, including the first, second, and third-year of EFL undergraduate Algerian students. By examining the data through the lens of gender, the study aimed to understand if there were any notable differences in vocabulary learning strategies between male and female students. This exploration offers valuable discernments into potential gender-related preferences or tendencies when acquiring and retaining new vocabulary. Furthermore, the year of study variable investigated how VLSs may evolve and diverge while students went through their academic cursus.

4.5.1 Gender

The following section highlights the findings of two primary research questions (question number three and six) that explored the influence of gender on vocabulary acquisition.

Regarding research question three, it aimed to examine if there were any discernible differences in the utilization of vocabulary learning strategies between male and female students and their considered effectiveness. It sought to identify any gender-related patterns or tendencies to VLSs' use and usefulness. Concerning research question six, examined whether there were any significant variations in the vocabulary approaches employed by undergraduate students across different years of study (first, second, and third-year). By analyzing the collected data, the study intended to identify potential shifts or trends in adopted approaches based on their gender academic progression.

4.5.1.1 Vocabulary Learning Strategies Usage

Conferring to the previously analyzed and presented findings, there were remarkable gender differences in the use and perception of vocabulary learning strategies among male and female students. These differences manifested in the frequency and preferences of certain strategies employed by each gender.

On the subject of vocabulary learning strategies usage, first-year students equally exploited some strategies whereas diverged in others. For example, the determination strategies of checking the new word's form (A1), looking for any word parts I know (A2), using any pictures or gestures to help me guess (A3), and using monolingual dictionaries were more advocated by female learners. However, both genders relied on bilingual dictionaries (A5) and guessing from context (A4) to decipher the meaning of unfamiliar words. On the other hand, first-year students had a similar rate of use concerning social strategies barring for males' remarkable use of talking to native speakers (B5) who employed this strategy twice as often compared to their female counterparts. Similarly, memory, cognitive, and meta-cognitive were found to be equally utilized by all first-year students except for females' greater inclinations toward the use of note-taking (D5).

In the case of second-year learners, the use of determination, social, and memory strategies was relatively similar among participants excluding females' notable employment of looking at any familiar part (A2) and monolingual dictionaries (A6).

They also exhibited a preference for teachers' assistance (B1), whereas male students leaned towards conversing with natives (B5). In parallel, cognitive and meta-cognitive strategies were also likewise deployed except for females' notebook use (D7).

In view of third-year students, they correspondingly employed the five categories of vocabulary learning strategies. Nonetheless, there was a noticeable female use of any picture or gesture to help them guess (A3) and inclined more toward teachers' and peers' support (B1, B2). Moreover, they occasionally remembered words in scale (C6), frequently repeated the word aloud (D1), and made a list of new words (D3). Contrariwise, males demonstrated a greater penchant for chitchatting with native speakers (B5). A sample of this tossing divergence is illustrated in the figure below, demonstrating different strategies employed by undergraduate male and female students in their quest for vocabulary clarification.

	A 4	B 5	D 5	E 1	B 1
Male	4,86	4,52	3,88	4,04	3,03
Female	4,83	2,64	4,47	4,08	4,13
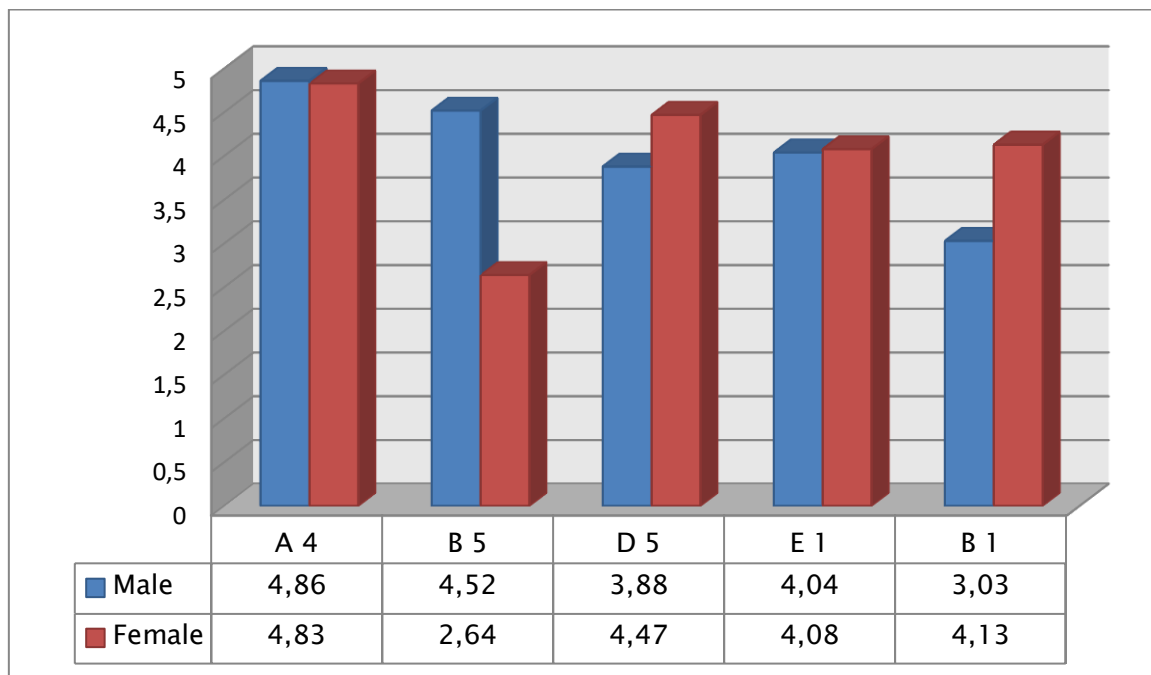
Figure 4.24: Gender Variation Use Sample

As depicted in the figure, male students exhibited a tendency to rely on strategies such as consulting with native speakers and seeking out challenging situations to enhance their vocabulary skills. On the other hand, female students leaned towards analyzing the language, recording the meanings of new words, and seeking clarification from teachers or classmates. This divergence highlighted the varied learning preferences

and strategies employed by male and female students. While male students may be more inclined towards hands-on experiences and direct interactions, female students seem to place more emphasis on language analysis and collaborative learning.

On this particular point of VLSs usage, the present gender results were compared to the previously presented research of Catalán (2003) in chapter two where both studies employed Schmitt's taxonomy of VLSs. Catalán studied gender differences in VLSs used by native Spanish speakers learning Basque and English as a second language (L2), indicating that learners used more discovery strategies (determination and social) than consolidation ones (cognitive, memory, and metacognitive). The most popular strategies deployed to discover the word's significance were bilingual dictionary (A5), guessing from textual context (A4), and asking the teacher (B1) or classmates (B2). Whereas, the strategies of note-taking in classrooms (D5), repeating the word aloud when studying it (D1), English-language media (E1), and utilization of new lexicon in sentences (C8) were the most advocated to consolidate vocabulary meaning. These findings did partially corroborate the current exploration outcomes in terms of A5, A4, D5, and E1. However, social strategies (B1, B2) and memory (C8) were sometimes used by Algerian EFL undergraduate students.

Catalán's results affirmed the present derived conclusions disclosing that nonnative learners focused more on discovering the meaning of unfamiliar words than consolidating its retention. Furthermore, in both studies, participants used more elicitation strategies such as teachers' assistance whereas males had a restricted reliance on classmates' support. Nevertheless, Catalán signposted that there were no significant variances between male and female L2 students in the use of VLSs and they employed the same strategies. Her proclamations did not entirely align with the current conducted research. As it is shown in Figure 4.24, there were clear variations in the strategies utilized by male and female undergraduate Algerian students in the present study. It demonstrates that female students exhibited a higher frequency of VLS employment compared to males keen toward conversing with native speakers.

4.5.1.2 Vocabulary Learning Strategies Perceived Usefulness

Regarding the subject of the differences in perceived vocabulary learning strategies' usefulness between genders; it was found to be contemporary. This means that both male and female students demonstrated varying perceptions regarding the effectiveness of certain strategies.

In the case of first-year students, the set of vocabulary learning categories were regarded equally expedient, barring a slight gender deviation considering some strategies. For example, looking for any familiar parts (A2) and use of monolingual dictionaries (A6) were more advantageous according to females' perception. They also prized making a mental image of the word's significance (C2) and connecting it to other similar/opposite meanings (C5) as well as the use of flash cards (D4). Conversely, male participants valued talking to native speakers (B5), word spelling (C10), and sound (C11).

Concerning second-year students, they generally shared similar opinions with minor gender-based variations observed. Both male and female students acknowledged the benefits of employing various strategies, although there were trivial differences in their VLSs preferences. For instance, females endorsed the advantage of checking the new word's form (A1), besides seeking guidance from instructors (B1) and classmates (B2, B3). Furthermore, they strongly abetted the use of words in scales (C6), and writing paragraphs using several new words (C9). They also regarded the strategy of writing the words many times (D2) and listing them (D3) as very helpful, whereas males privileged talking to Anglophones (B5) indicating their recognition of the usefulness of these strategies.

In their final year of study, third-year students expressed a collective consensus regarding the effectiveness of vocabulary learning strategies. Their perceptions aligned closely, indicating a shared understanding of the practicality and usefulness of these strategies. However, it is worth noting that some minor variations were observed among female learners. Female learners, in particular, showed a slightly higher inclination towards utilizing strategies such as asking classmates for the meaning (B2), connecting the word to personal experiences (C3), remembering words in a scale or

hierarchy (C6), and creating a mental image of the word's form (C13). These preferences may stem from individual learning styles, personal backgrounds, or previous experiences with language learning.

	D 5	E 1	A 5	A6	C6
Male	4,85	4,93	4,28	4,23	3,94
Female	4,97	4,87	4,07	4,54	4,44
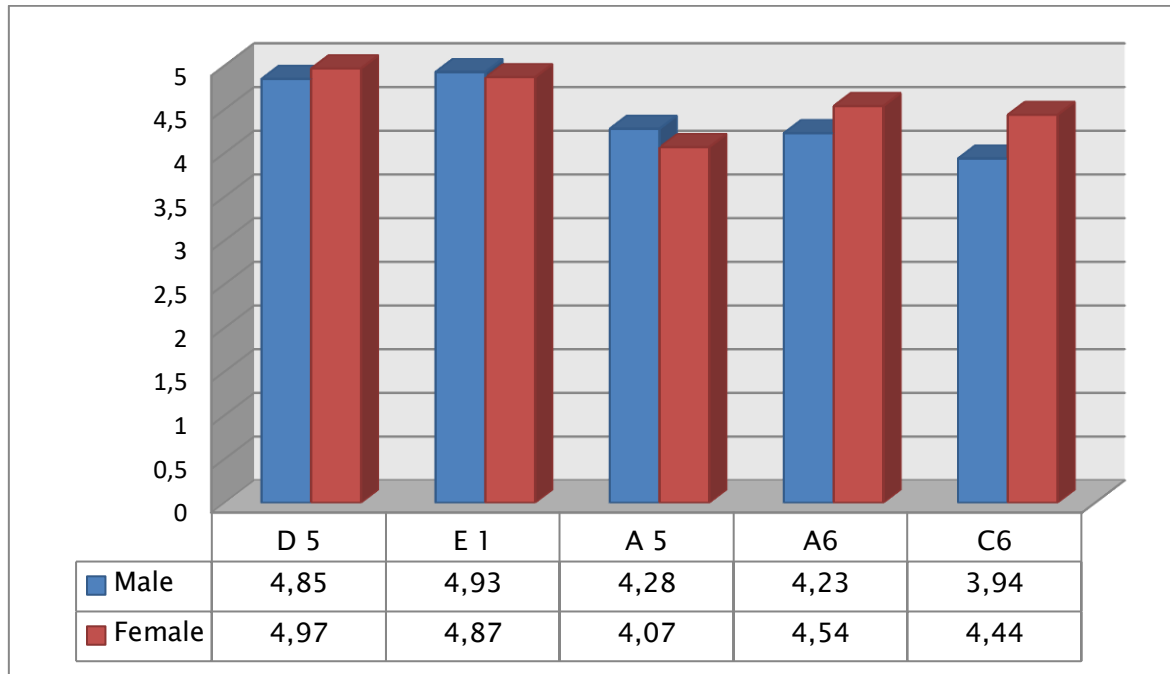
Figure 4.25: Gender Deviation Usefulness Sample

Conclusively, referring to the figure above and synthesized data, it became apparent that undergraduate students employed vocabulary learning strategies interchangeably, with only minor variations influenced by factors such as individual preferences, learning levels proficiency, and prior background experiences. While there may be some students who excelled in visual learning, others preferred auditory or kinaesthetic approaches. Additionally, students' prior background experiences and exposure to different VLSs can influence their preferred ones. For instance, students who had previous exposure to language immersion programs or extensive interaction with native speakers may lean towards strategies that involved conversing with native speakers or engaging with English language media. In the meantime, students with a strong academic background or familiarity with certain strategies may gravitate towards note-taking or self-testing approaches. It is worth noting that these differences cannot be universally applied to all EFL students and may vary depending on the specific context and investigated population.

4.5.1.2 Adopted Vocabulary Learning Approaches

The assembled findings shed light on the notable gender disparity in the vocabulary learning approaches adopted by EFL undergraduate students. The data analysis unveiled that female students demonstrated a more strategic and intentional approach toward vocabulary acquisition.

More specifically, the results revealed that a significant proportion of female first-year students (36%) engaged in self-initiated activities to acquire new vocabulary, showing their proactive attitude to learning. Furthermore, a substantial number of female participants (56%) actively practiced using the newly learned lexicon in sentences, showing their dedication to applying and integrating vocabulary into their language use. In contrast, male students exhibited a lower inclination toward employing new vocabulary in written or oral output. Only 16% of male learners reported practicing the use of new words in their discourse, indicating a relatively lower level of engagement in active language production.

Interestingly, the findings also demonstrated a noticeable increase in students' commitment to vocabulary learning over the years, particularly among female students. It was observed that female students exhibited a remarkable progression in their vocabulary learning practices, showing a higher level of dedication and use of consolidative strategies compared to male participants. One area where this commitment manifested was in the act of recording new vocabulary. The majority of female students, with percentages ranging from 76% in the first-year, 80% in the second-year, to 86% in the third-year, vigorously engaged in recording new vocabulary. They recognized the importance of documenting new words and took the initiative to review and refine their recorded vocabulary regularly. This systematic approach heightened their vocabulary retention and expansion.

On the other hand, a considerable portion of male students displayed a different approach to vocabulary learning. They leaned towards unstructured and empirical methods, often relying on hands-on electronic devices such as watching movies, listening to music, and engaging with native speakers. Some male students even considered online video games as a significant initiative activity, valuing it more than

reading books. This preference for technology-driven activities might reflect their inclination towards more interactive learning experiences.

The contrasting approaches between male and female students shown in Figure 4.24 elucidated that there were diverse learning styles and preferences among individuals. While female students tended to prioritize structured and organized approaches, male students seemed to gravitate towards more experiential and technology-based learning methods.
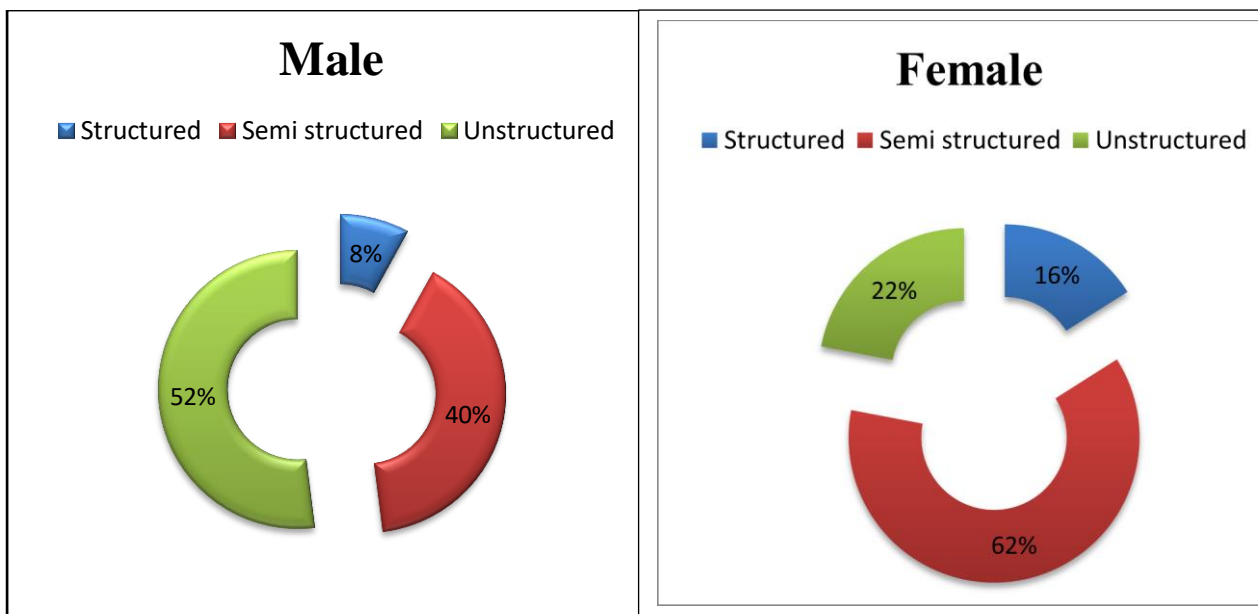
Figure 4.26: Males and Females Adopted Approaches

The gender differences exposed in the data disclosed distinct patterns in the approaches adopted by EFL undergraduate Algerian students while acquiring vocabulary. These alterations were evident in the varying percentages of usage across different approaches, expounding the contrasting learning strategies embraced by male and female learners.

Female students demonstrated a more organized approach to vocabulary learning, as indicated by their reported engagement in self-initiating activities, recording and reviewing new vocabulary, and actively practicing it. They exhibited a preference for structured learning methods, such as highlighting new words (D5) and keeping records of new lexical items. However, when it came to self-testing with word tests (E2) or studying new words multiple times (E3), female participants indicated that they rarely

or never utilized these strategies. This induced a leaning towards an unstructured approach, as they primarily relied on recording new words for their vocabulary learning.

In contrast, male participants also recorded unfamiliar words but showed a lesser inclination towards checking or reviewing them. Their vocabulary record was occasional, often resorting to the noted words when writing paragraphs. It divulged a more ad hoc and unstructured approach to vocabulary acquisition, where male students relied on their existing knowledge and did not prioritize regular review or practice.

These gender differences in vocabulary learning approaches indicated that male and female students had distinct preferences and strategies when it came to acquiring new words. Female learners opted for a more organized and systematic approach, emphasizing note-taking and reviewing vocabulary, while male learners displayed a more casual and spontaneous approach, often relying on their immediate needs and context.

4.5.2 Year of Study

The subdivision of the research explores the potential influence of the year of study on the use and perceived usefulness of vocabulary learning strategies among EFL undergraduate Algerian students enrolled in the Department of English at Algiers2 University. By examining the data collected from students at different academic levels (first, second, and third-year), the research sought to identify any variations in the usage and effectiveness of VLSs based on the students' year of study.

The fourth conducted question was: **Do EFL undergraduate students resort to different VLSs during their academic learning while progressing from first, second, to third-year of study?**

Based on the findings of the present study, it appeared that EFL undergraduate Algerian students exhibited both similarities and differences in the use of VLSs as they progress from first to third-year.

One notable observed drift was the shift in the choice of dictionaries used by participants. First and second-year students reported a higher mean score for utilizing a bilingual dictionary, indicating their reliance on translation as a strategy for understanding unfamiliar words. However, third-year students demonstrated a preference for a monolingual dictionary, suggesting their growing proficiency and ability to rely on target language resources for vocabulary clarification.

Additionally, the study revealed a consistent use of determination strategies (such as guessing from context A4) across all three years of study. It induced that students recognized the value of context in deciphering the meaning of unfamiliar words, regardless of their academic level. Additionally, there was a significant increase in the utilization of meta-cognitive strategies (such as using English language media E1) from the first to the third-year. It indicated that students became more proficient in utilizing various resources and tools to promote their vocabulary learning process as they advance in their studies.

Ironically, the use of social strategies; interacting with others for language learning purposes, decreased over time, with the exception of strategy B5 (discoursing with native speakers), which remained highly employed. It inferred that as students progressed in their academic cursus, they relied less on social interactions and more on individualized learning approaches to develop their vocabulary.
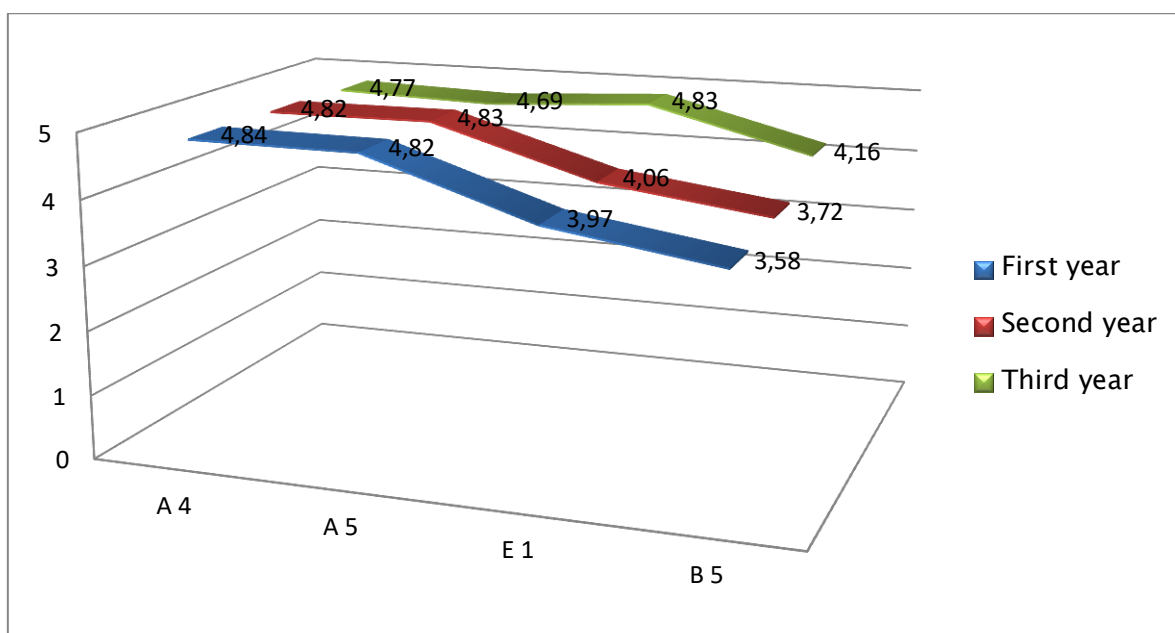
Figure 4.27: VLSs Rate of Use Sample

In a nutshell, these findings highpointed the evolving nature of vocabulary learning strategies among EFL undergraduate students, with certain strategies becoming more prominent while others diminished in significance as students advanced through their year of study.

With regards to assessing the usefulness of VLSs, undergraduate students considered three strategies to be extremely valuable in elevating their vocabulary acquisition. The strategies of highlighting new words (D5), keeping a vocabulary notebook (D7), and using English language media (E1) received full agreement from the participants as being the most beneficial in their learning process. These strategies likely provided them with effective tools for organizing and storing new vocabulary.

Surprisingly, the social category, particularly the strategies of seeking help from teachers (B3) and classmates (B4), regained substantial esteem as students progressed through their academic year. It indicated that students increasingly recognized the benefit of collaborative learning and the support of teachers or peers in vocabulary development. The assistance provided by teachers and the collective support from classmates were deemed particularly useful by third-year students, paving a growing appreciation for the social dimension of language learning.
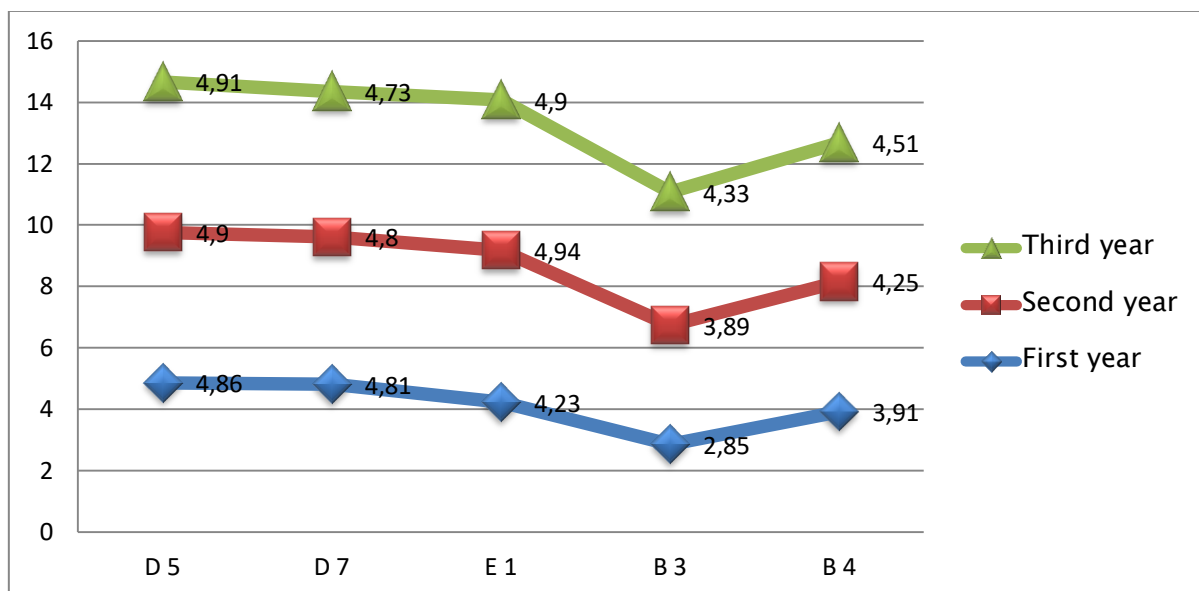
Figure 4.28: VLSs Usefulness Variation

The findings of the research affirmed the significance of a well-rounded approach to vocabulary learning, encompassing both individual strategies such as highlighting and keeping a vocabulary notebook, as well as social strategies involving interaction with teachers and classmates. This recognition of the usefulness of social strategies aligned with the understanding that language learning was not solely an individual endeavour but also benefited from the support and guidance of others. By acknowledging the efficacy of various VLSs, students can make informed choices and incorporate a diverse range of strategies into their vocabulary learning practices.

To conclude, there was a close correspondence between the vocabulary strategies that were predominantly used by undergraduate students and the ones that were highly regarded as beneficial. This alignment signposted that students were not only employing the strategies they found helpful, but they also recognized the effectiveness of those strategies in their vocabulary learning. These interpretations serve as the backbone of the research, helping to validate or refute the initial hypotheses and research objectives.

4.6 Validation of Hypotheses

Hypotheses are suggested guesses or predictions that researchers make about the possible outcomes of their research. They serve as guiding principles that help researchers interpret the results of their study. In the upcoming section, the formulated hypotheses are rigorously tested through statistical analysis to determine their validity and whether they are confirmed or contradicted by the data collected to finally draw meaningful conclusions.

4.6.1 First Hypothesis

It is expected that the most dominant VLS undergraduate students resort to is dictionary use and the least used is interacting with a native.

In order to confirm or deny this hypothesis, a survey was conducted propelling 38 VLSs that were used by 150 undergraduate EFL students at Algiers 2 University. Participants were asked to rate the strategies they frequently utilize when encountering

an unfamiliar word and how they consolidated it using a 5 points scale where 1 represents *never*, 5 represents *very often*. The results indicated that dictionary use (A5, A6) was indeed one of the most dominant VLSs alongside with guessing from context (A4) and notes taking (D5) for first and second-year students, while third-year students advocated utmost English language media use (E1).

Nonetheless, the least used VLSs by undergraduate students was not interacting with a native (B5), but was rather promoted by the three years of study. The lattermost deployed strategies were; drawing a picture of the word (C1), remembering the words that follow or precede the new one (C4), and using physical action when learning words (C17) with an average rate of 1.01 (never).

4.6.2 Second Hypothesis

It is predicted that connecting words to personal experience is perceive as highly useful by undergraduate students, and the least supposed useful is verbal/written repetition.

The outcomes pointed out that linking personal experience to words (C3) was perceived by undergraduate students as very useful with an average rating of 4.19. However, the uttermost praised strategy was highlighting new words in class (D5) besides keeping a vocabulary notebook (D7). On the other hand, verbal/written repetition (D1, D2) was rated as quite useful, whereas the least regarded expedient VLSs was drawing the word's picture to help remember it (C1) with a mean score of 1.27 aside with the use of physical action and remembering words that follow or precede the new one.

4.6.3 Third Hypothesis

It is presumed that male and female students use and perceive useful the same VLSs.

The findings unveiled that there was a gender variation in the use and perception of VLSs among male and female undergraduate EFL students. While some VLSs were equally employed by both genders (A4, E1), others exhibited substantial differences (B2, B5) as thoroughly shown in figure 4.18. For instance, first-year female students

often used A2 (looking for any word parts I know) and rated it as *very useful* whereas males *sometimes* did employ that strategy and perceived it as *quite useful*. Additionally there were trivial gender variances in the perceived usefulness of some VLSs as better displayed in figure 4.19.

4.6.4 Fourth Hypothesis

There is a significant difference in use and usefulness between first, second, and third-year students.

The fourth suggested hypothesis was quite accurate as the results revealed a momentous alteration in the use and usefulness of VLSs among first, second, and third-year students as illustrated in Figures 4.21 and 4.22. In terms of VLSs use, the statistics disclosed that a large proportion of undergraduate students used determination strategies to discover words' meaning. Besides, students' use of metacognitive category highly amplified from first-year to third-year, whereas the use of social strategies diminished across the years.

Regarding the usefulness of VLSs, they were alleged as quite useful by the majority of undergraduate EFL students' concording on the upmost utility of D5, D7, and E1. In addition, the social strategies; teachers' supervision and classmates' sustenance received an uprising recognition particularly from juniors.

6.4.5 Fifth Hypothesis

It is forecasted that the majority of EFL learners adopt the structured approach to enlarge their vocabulary repertoire.

Participants were asked via investigating tools to indicate which approach they employed to enlarge their vocabulary repertoire, the fallouts revealed that 51% of EFL undergraduate students adopted a semi-structured approach when learning vocabulary. This approach encompassed structured learning activities such as memorizing, taking notes and repeating words' lists, as well as unstructured habits like not reviewing or practicing the recorded lexicon to consolidate the acquired vocabulary.

6.4.6 Sixth Hypothesis

Female students are more likely to be structured compared to male participants.

The final hypothesis quite concorded with the obtained results which revealed that EFL undergraduate female students were more likely structured when it came to vocabulary learning compared to males' unstructured approach (figure 4.20). There is a potential variability within both genders though there was no inherent inconclusive gender approach. Each learner demonstrated dissimilar approaches that were suitable in discovering words' meaning yet a minority consolidated it.

In closing, the presence of common patterns and approaches in the use of vocabulary learning strategies among EFL undergraduate Algerian students, as well as similarities between genders, did not contradict the possibility of deviations or variations. While they shared strategies and tendencies, it was also expected to find individual differences and unique preferences within the same group.

4.7 Recommendations and Pedagogical Instructions

The comprehensive results obtained from the diverse assessment tools employed in this study, including questionnaires, classroom observation, think-aloud protocol, pre/post-tests, focus group discussions, and vocabulary survey, yielded valuable insights and recommendations for both EFL teachers and learners. These recommendations address the challenges encountered in vocabulary learning and provide guidance for teaching undergraduate EFL students, regardless of their gender.

4.7.1 Recommendations for Teachers

The role of teachers in an EFL context is decisive for EFL leaners; not only they contribute in monitoring students during their academic educational cursus but also enhance their awareness and motivation. As previously stated Sheerin (1997), cited in Benson and Voller, 1997: 63), *"...teachers have a crucial role to play in launching learners into self-*access *and in lending them a regular helping hand to stay afloat".* Therefore, the role of teachers in language learning is by no means redundant and learners who lack autonomy are capable of getting actively involved in their own

learning through teacher's assistance (Dam, 2003). According to Candy (1991), learner autonomy involves a dynamic process learned partly through educational experiences and interventions. Accordingly, in order to support learners in assuming greater control over their own learning, it is important for teachers to enlighten students' awareness towards identifying the VLSs that they could potentially use.

Many lecturers asserted teaching implicitly or explicitly VLSs and considering the comparison directed between the experimental and controlled groups, the attained results abetted in generating the subsequent recommendations that teachers might use to foster learners' autonomy. Different pedagogical implications and activities are offered that would ennoble the language learning process in general, and vocabulary learning in particular. It emphasizes the teaching context study and the selection of the teaching materials, in order to meet teachers' objectives and learners' needs in a relaxing and enjoyable atmosphere.

4.7.1.1 Encouraging Cognitive and Metacognitive Strategies

Training teachers to employ the various cognitive and metacognitive strategies in order to monitor learners retain new vocabulary is quite decisive. Strategies such as repetition, guessing from context, association, and memorization aid learners store new lexical items and expand their vocabulary repertoire. Therefore, lecturers should provide explicit instructions such as explicitly teaching cognitive and metacognitive strategies (note-taking, summarizing, and self-questioning). They should also model these strategies for their students by thinking aloud as they read or solve problems.

Encouraging self-reflection is another key component in teaching EFL learners. Teachers' encouragements and constructive feedback reflect on students' learning process by asking questions such as; what strategies did you use to solve this problem? or what did you find challenging about this task?. Self-reflection would thrust students to become aware of their thinking process and feedback would help them improve their learning performance. Moreover, promoting graphic organizers alike mind maps or concept maps would be beneficial for students' thinking process and organization of

in information. Teachers should provide graphic organizers or have students create their own to position them think through complex concepts or problems.

4.7.1.2 Selected Activities for Vocabulary Practice

The prominence of providing learners with frequent opportunities to practice their vocabulary through significant and engaging activities through the four skills is requisite. The exposed exercises would consolidate learners' use of new vocabulary in context and improve their ability to communicate effectively. Creating a word wall in classrooms that displays key vocabulary words for the unit or subject being studied is an interesting exercise that would serve as a visual reminder for students to refer to when needed. Teachers could also scaffold students' interest for reading by providing access to assigned books, magazines, and newspapers that are compelling and relevant to their level. Lecturers should also emphasize the reading aloud practice, model students' own reading habits, and encourage them to read for pleasure.

In addition, the writing skill provides opportunities for self-expression, such as journaling or writing prompts since many reserved learners prefer to manifest through written records. On the other hand, teachers should devote more time to this category of learners and hearten them to interact in with spoken words classroom discussion by creating small groups or through games and puzzles activities. The use of technology such as audio and video recordings while presenting an activity also enhances students' listening and speaking skills. Another noteworthy point that would foster students' interaction is making connections to real-life situations by introducing topics that are relevant to students' lives and authentic context.

4.7.1.3 Classroom Interaction and Gender Variation

The importance of promoting collaboration and teamwork is imperative to break down gender barriers and endorse impartial interaction in classrooms as well as respect and tolerance. Teachers should encourage all students to work equally, together and value each other's contributions. They should ensure that both male and female students are provided with equal opportunities to participate in class activities and discussions. It could be implemented by applying strategies like think-pair-share, where students

share their ideas in pairs before sharing with the whole class. It also develops empathy and understanding for different experiences and worldviews. The foremost objective of creating a homogenous classroom environment is that it supports all sort of students regardless their gender and anticipates any eventual discrimination incidents or bullying situations.

Nevertheless, lecturers should be mindful of any gender prejudices or stereotypes that may affect their interactions with students. It is recommended for lecturers to be aware of their biases and work to overcome this standpoint as it could reflect on their assumptions and beliefs. In order to avoid gender stereotypes, it is suggested to deploy language and images that are inclusive of all genders. For example, instead of using gendered pronouns like "he" or "she," teachers could use gender-neutral pronouns like "they" or "them."

Concerning inclusive collaboration and teamwork practice, teachers could start by setting clear procedures and establish classroom instructions that are based on respectful communication, active listening, and constructive feedback. Icebreakers and team-building activities are expedient techniques for students to get to know one another and would certainly prompt discussion. Another collaborative activity that would endorse students' involvement is group work assignments such as group projects; it develops their communication and critical thinking skills in general and their ability to work effectively with others in particular.

By incorporating these strategies into teaching techniques, teachers would definitely create a classroom environment that not only promotes alliance and teamwork, but also grant success for all students.

4.7.1.4 Vocabulary Learning Strategies Incorporation into Classroom Instruction

The approach of incorporating VLSs training into classroom practice teaches learners how to properly use each strategy, strengthen their vocabulary acquisition and retention. An explicit instruction about how to use context clues to infer meaning and in what manner to break down and analyze new words was proven being very advantageous for students' autonomy. As Thanasoulas (2000: 95) explained, *"learner*

autonomy mainly consists in becoming aware of and identifying one's strategies, needs and goals as a learner and having the opportunity to reconsider and refashion approaches and procedures for optimal learning". Teachers' guidance will assist learners' comprehension and retention of new information and promote learning the TL. Consequently, teachers should consider administering multiple exposures to new vocabulary by incorporating new words into different contexts, such as reading passages, discussions, and writing prompts; as well as enhancing independent learning. The incorporation of vocabulary learning strategies into teaching practices would enrich and vary students' vocabulary, expand their vocabulary repertoire and promote their academic success.

For instance, the least used VLSs in the present research were C1, C4, and C17 though many previous studies (Paivio, 1991; Tulving, 1983; *Craik* 2002; *Craik* and *Lockhart,* 1972; Asher, 1977; Ekuni, Vaz, and Bueno, 2011; Boroditsky, 2018) asserted their effectiveness. The first strategy C1; drawing a picture of the word to remember it, creates a visual representation of the word and encodes it into learners' neural pathways through imagery. Different parts of their brain are activated in the visual processing and creativity. When learners associate the lexical item with a visual image, it would be easier for them to retrieve it. The second strategy C4, remember the words that follow or precede the new one is beneficial too as students learn about its grammatical function and syntactic position. Besides, they will correctly integrate it with the related group pieces and existing knowledge. Last, the use of physical action when learning a new word C17 might be useful for kinesthetic learners who learn best through movement and physical sensations. Associating a physical action with word retention creates a multisensory experience that enhances memory and recall. Therefore, it could be deduced that undergraduate leaners were not familiar with the connotations of these strategies and introducing them to the precise denotation of VLSs would reinforce their learning.

The next sub-suction stresses other recommendations for EFL learners that have proven being constructive such as using online games and vocabulary-building apps.

This approach emboldens students to involve with vocabulary learning in a fun and interactive way.

4.7.2 Recommendations for Learners

On the verge learning collapse, unexperienced learners could reconnect with the estranged world of English learning by using online resources. Students have to become autonomous as they are the only ones, by their volition, to cause things to happen (Rathbone, 1971). According to Benson (2001), the autonomous learner is the one that constructs knowledge from direct experience, rather than react to the teacher's instructions. Similarly, the scholar Little affirmed, *"Only learners can know what materials - from whatever source - are genuinely relevant to them"* (1991: 49). Since students cannot memorize every encountered vocabulary, they resort to substantial material that reckoned practical in endorsing their vocabulary storage and understanding such as the use of apps and websites. Some popular building apps have been selected based on participants' recommendations that are scrupulously presented in the following sub section.

4.7.2.1 Self-esteem, Confidence, and Motivation

According to the gathered results from instruments, it has been observed that male students exhibit a tendency towards a lack of participation in classrooms and a reluctance to ask their classmates questions. Therefore, it is recommended that these students should focus on building their self-esteem, confidence, and motivation. These factors would have a significant impact on their learning ability and educational achievement.

One of the best ways for students to build self-esteem and confidence is to set achievable goals and work towards them. When students set and accomplish goals, no matter how small they might be, they would feel a sense of accomplishment and build their confidence. Additionally, motivation is another important factor for EFL students. One way to increase motivation is to find meaning and purpose in their language studies. For example, students can set goals to use their language skills in

real-life situations, such as traveling or communicating with people from different cultures.

Interacting with classmates and asking for help from teachers have also been revealed essential for undergraduate students. By collaborating with their peers, leaners share ideas and knowledge which would enhance their language understanding. Moreover, asking for help from teachers would help students clarify concepts and overcome challenges, which can boost their confidence and motivation.

4.7.2.2 Vocabulary Building Apps

Conferring from the collected data, it was ascertained that EFL undergraduate students have a positive attitude towards using media for language learning. They acclaimed that using language learning applications as a medium to acquire new vocabulary and practice using it regularly is very advantageous and learners should deeply consider it. Digital apps are software applications designated for digital devices such as smartphones, tablets, and computers. These applications cover a wide array, spanning from games and entertainment to productive and educational tools. They are typically designed to be user-friendly and provide a variety of features and functions.

Language learning apps allow apprentices to learn vocabulary at their pace and on their schedule, which is particularly beneficial for unorganized students who might know how to manage their free time once outside of classroom walls. These apps are easily accessed from anywhere with an internet connection, learners can practice their vocabulary skills on the go or from the comfort of their home. Additionally, many language learning apps are free or low-cost that makes them an affordable option for students who might not have the budget for expensive language books or private classes. Moreover, the apps often offer personalized lesson plans and adaptive learning algorithms that support students' vocabulary learning more efficiently and effectively based on their individual needs and learning styles. Many language learning apps incorporate interactive features like games, quizzes, and speech recognition that make learning vocabulary more engaging and enjoyable for students. By staying up-to-date

with the best tools in vocabulary teaching and learning, like language learning apps, students will improve their language skills and achieve their learning goals.

There are several vocabulary apps available for students to exploit; one of the famous language learning apps which was highlighted several times during the collected feedbacks and that is accepted by over 4000 universities (Duke, Georgia Tech, Yale, Bowdoin, and John Hopkins) to certify learners' English proficiency is **Duolingo**.

Duolingo is a language learning platform exclusively designed to offer a variety of language courses in a fun, engaging, and interactive way. It is ideal for students who are willing to learn a new language in an enjoyable way.

Figure 4.29: Duolingo App Icon

One of the greatest aspects about Duolingo is its cost-free to use, students can easily download the app onto their smartphone or tablet and start learning right away. It offers gratuitous teacher tools and numerous activities designed to help them improve their vocabulary, grammar, listening, and speaking skills. An additional key feature is its gamification element. The app uses game-like elements to motivate learners to continue learning and practicing. For example, they earn points and unlock achievements as they complete exercises and progress through the different levels of the course.

In the English course for non-native speakers, there are currently 25 levels. However, the number of levels varies depending on the specific course learners select and the updates made by producers over time. Additionally, it often adds new content and features so the number of levels and the course structure may gradually change hereafter. In the initial levels (from 1 to 3), basic vocabulary and sentence structures are introduced that focuses on building listening and reading comprehension skills.

The displayed activities include listening to short phrases, matching words with pictures, and translating simple sentences from English to the target language and vice versa. As learners progress to higher levels (4-6), they are presented to more complex grammar structures and vocabulary, and incorporated to speaking and writing tasks. The exercises comprise speaking and repeating phrases out loud, writing short sentences, and translating longer texts. In the levels 7-14,

Learners will also start to encounter more challenging tasks concerning cultural context and idiomatic expressions. Levels 15-25 are the highest levels; emphasizing advanced grammar, complex vocabulary, and fluency-building activities, such as conversation practice and writing longer essays. They will face authentic content, such as news articles and videos, and have opportunities to interact with other participants who are already using the app and compete with them in a friendly way to see who can progress the most. Duolingo offers a social aspect to learning which is particularly motivating for competitive learners who crave to challenge themselves.

The second suggested app is **Cambly**. It allows learners to select their preferred language and connect with a tutor for live conversation practice. They choose from numerous tutors, each with their specialties and teaching styles. The app also affords learners access to a library of lesson materials, including videos, articles, and conversation prompts, to help them practice specific language skills.

Figure 4.30: Cambly app icon

During the live video chat sessions, learners can practice their listening and speaking skills, receiving immediate feedback and corrections from the tutor. It will endorse learners' pronunciation and build confidence in using the language in real-world situations. In addition to the live chat feature, Cambly includes a messaging feature that allows learners to practice their writing skills and receive written feedback from their tutor.

In brief, Cambly provides language learners with a unique opportunity to practice their language skills in a live, conversational setting. By connecting with native speakers, learners will develop their fluency, accuracy, and confidence in using the targeted language. The app's library of lesson materials and messaging feature also provide additional opportunities for extra practice and constructive feedback.

Retrospectively, the use of building apps encourages cybernetic learners to take full responsibility of their language learning by accurately exploiting their screen devices and identifying the main learning areas that require more consideration.

4.7.2.3 Reading Resources

Reading is the primary way in which learners acquire new words and refine their understanding of the familiar ones (Nagy & Herman, 1987). According to Krashen's theory (1982), reading provides the necessary input for vocabulary acquisition and grammar in a foreign language.

Nonetheless, comprehending effectively what is being read requires directed cognitive effort known as metacognitive processing. As Alexander and Jetton state, *''...the reader must make a deliberate and conscious effort to focus on the task at hand...''* (2000: 295). They further assert that while reading, strategies are deployed as a form of metacognitive processing which requires a deliberate and intentional effort from the reader. These strategies are characterized as procedural, purposeful, effortful, willful, essential, and helpful. It is imperative for students to monitor their assimilation of the text as they read. Similarly, Al Melhi's research (2000) suggests that proficient readers employ a series of reading strategies such as underlining, making predictions, rereading, utilizing metacognitive awareness, and maintaining self-confidence. These techniques enable learners to come across the same vocabulary in various contexts, facilitating the internalization of their orthography and leading to the enhancement of their vocabulary proficiency.

Numerous studies suggest that reading has a significant heading in endorsing literacy skills as thoroughly discussed in section 1.4.3.4. While reading alone might be defined to guarantee a high language level of competence (Waring & Takaki, 2003), it is

undoubtedly a treasurable medium in enhancing language development and vocabulary acquisition (Krashen, 2004). From its inception, reading assumes a paramount role in the process of language learning and it does not delimit to printed books but refers to all forms of reading. Notwithstanding of the medium employed, whether it is a captivating panel of a graphic novel, the immersive narratives of audiobooks, the informative articles found in magazines, the interactive nature of read-aloud sessions, the textual subtitles accompanying movies, or even the seemingly inconsequential content adorning the back of a cereal box, each instance of reading fosters language and vocabulary development.

Graphic novels for instance have their unique fusion of visual imagery and textual elements that might be uploaded on learners' digital gadgets. Their artwork ranging from detailed panels to full-page spreads not only enhances the aesthetic appeal but also serves as a visual representation of the narrative. It engrosses the reader by stimulating their imagination and facilitating a profound understanding of the material. Moreover, the textual elements in graphic novels like dialogue, captions, and thought bubbles work in harmony with the visuals to deepen the reader's engagement. The combination of words and images allows a seamless integration of storytelling techniques. While the artwork visually portrays the story, the text provides essential information, character development, and subtle nuances that might not be explicitly depicted in the illustrations.

Audiobooks are another example that endorses learners' listening skills and enables them to absorb pronunciation nuances and intonations while actively engaging with the narrative. Audiobooks became increasingly popular in recent years, offering an exclusive and immersive way to experience literature. They are particularly beneficial for learners who struggle with reading or have visual impairments, as they offer an alternative that promotes literacy and literary enjoyment. By removing the barriers imposed by printed materials, audiobooks ensure that individuals of all abilities can partake in storytelling felicity and target language.

In the meantime, magazines have long been a popular source of information, entertainment, and cultural exploration. With their diverse range of articles and

captivating visuals, learners are exposed to a breadth of subject matter and writing styles that would thereby expand their cultural knowledge. One of the notable magazines' pros is their ability to effortlessly enrich the vocabulary array. While flipping through the magazine pages, readers encounter variegated articles covering a large bucket of topics, ranging from science and technology to fashion, travel, and current events. Consequently, bookworms are eventually induced to specialized vocabulary, terminology, and jargon associated with the presented fields.

Additionally, the read-aloud sessions promote learners' linguistic skills, whether conducted in pairs, groups or as a solitary exercise. It reinforces correct pronunciation, rhythm, as well as fluency. When performed in collaboration with a companion or a tutor, the read-aloud practice creates a supportive and interactive environment for language users. The presence of a partner allows immediate feedback, correction, and guidance, ensuring that pronunciation errors are instantly identified and promptly addressed. This active engagement in the learning process facilitates the development of accurate intonation as learners receive real-time input on their speech patterns.

Last, watching subtitled movies grants a dual-learning experience wherein learners concurrently read and comprehend the dialogue, hereafter expanding their vocabulary acquisition and strengthening their listening comprehension. The presence of headings in movies enables viewers to read along with the spoken dialogue and also affords a textual reinforcement of the auditory input. This simultaneous exposure to both spoken and written language is highly advantageous for vocabulary achievement. Captions offer visual cues that help viewers connect the written word to its correct pronunciation and are expedient for long-term vocabulary retention.

Even seemingly mundane sources such as the pint-sized commonplace information presented on the back of a cereal box deliver valuable input for learners to exercise their reading and comprehend everyday language in a natural context. Therefore, it is supreme to embrace every conceivable reading opportunity regardless of its form, as each one substantively contributes to a multifaceted language learning journey.

Conclusion

Chapter four set in motion a comprehensive process that covered vocabulary learning, and investigated the approaches employed by undergraduate EFL students of Algiers 2 University while taking into consideration the effects of gender and year of study. It responded to the aroused research questions; the different categories and strategies of vocabulary learning that EFL undergraduate students used and perceived as useful. It also drew out the approaches that students adopted while learning vocabulary. The construed conclusions were that some VLSs were deployed by all students throughout their academic cursus while other strategies were predominantly favoured by males or females. Accordingly, the more learners used strategies, the more their chance to learn vocabulary was great and the less they used strategies, the less they acquired vocabulary. Moreover, the majority of students ought to a semi-structured approach while dealing with vocabulary whereas the majority of females opted for the structured one.

In light of the registered results, some insightful pedagogical implications were outlined at the end of this chapter to raise students' awareness of vocabulary learning and foster teachers' teaching context. The recommendations were instigated by underscoring the importance of encouraging cognitive and metacognitive methods as effective strategies for vocabulary learning. Meaningful activities for vocabulary practice were then tackled, tailed by classroom interaction and gender deviation. The incorporation of VLSs into classroom instructions was the last debated point in teachers' devoted division. The second section highlighted the role of self-esteem, confidence, and motivation in learners' learning process. It concluded by presenting the topmost trending vocabulary building apps that would facilitate students' English learning journey.

The present research investigated the vocabulary learning strategies' frequency of use and perceived usefulness by EFL undergraduate Algerian students majoring in English at Algiers 2 University while considering two main variables; gender and year of study. The study shouldered a mixed method which involved (multiple instruments) questionnaires, classroom observations, vocabulary levels test, focus group discussion, think-aloud protocol, and a vocabulary survey to gather data. The research objectives were determining the diversity of vocabulary learning strategies (VLSs) deployed by first, second, and third-year students, as well as their perceived convenience. It also sought to identify the usance approaches by undergraduate students when discovering and consolidating vocabulary. Additionally, it examined gender interference through vocabulary learning strategy handling, effectiveness, whether male and female students engaged in the same routines for vocabulary learning besides the year of education. It exploited undergraduate students' tendency to VLSs use and usefulness as they progressed from first-year to the third and last one.

This study illustrated, to a certain extent, shreds of evidence about the aroused questions, which were the most/least dominant VLSs used by undergraduate EFL students, professed as useful. It also elucidated the approaches that first; second, third year students adopted while learning vocabulary, and revealed whether there was any gender altercation during their academic learning from first and second to third-year of study. Moreover, it promoted students' awareness of the empirical substance of numerous vocabulary learning strategies and acquainted its usage and utility past the experimental and control group training findings.

To scrutinize the roused questions and validate the conjectural hypotheses, the quasi-experimental research was divided into four chapters initiating with a general introduction that highlighted the background, problem, purpose, and rationale of the study. The first chapter entitled review of the literature provided a detailed description of the theoretical framework. It included fundamental definitions of the conducted study, tinted the importance of vocabulary learning strategies then delved into prominent taxonomies and classifications. The second chapter delivered additional support by bestowing the research design, questions, and objectives then presented the

participants' profiles and their educational background. It also outlined the conducted corpus which consisted of qualitative and quantitative data collection devices; including students' and teachers' questionnaires, classroom observation, vocabulary levels test (pre and post-tests), focus group, think-aloud protocol, and vocabulary survey. It concluded by discussing the major factors influencing the selection of vocabulary learning strategies from learner individual differences, learners' learning upshots to social and situational ones. I t concluded with an examination of the pioneer research theories namely; Schmitt's Taxonomy (1997), Sanaoui's classification (1995), Clouston's investigation (1996), and Catalán's exploration (2003).

Chapter three focused on displaying the collected records attained from the various piloted sources. The data was processed both quantitatively; in graphs and tables, and qualitatively through descriptions. The outcomes were then analyzed to draw meaningful conclusions and valuable discernments to unveil constructive acumens about vocabulary acquisition. The fourth and last chapter interpreted and deliberated the evaluated findings. Besides validating and disconfirming the implied hypotheses, it provided a better understanding of the acquisition procedure which could be exploited as a guideline for introducing vocabulary teaching techniques.

The thorough examination of the dichotomized data engendered that vocabulary learning strategies were *sometimes* utilized with a rate mean of 3.18. Determination strategies were *often* resorted to (4.14) by all three years of study, traced by cognitive and social (3.50, 3.14), then comes last the seldom resurrection of memory and metacognitive (2.73, 2.40). First-year students' utilization rate of VLSs was restrained (3.03) amid infrequently and occasionally (from 2.02 to 3.94), whereas second-year and third-year students ratios were higher (3.18, 3.33) as they scored ascendant means of 4.13 and 4.36. The utmost used strategies were guessing from context (4.81), bilingual dictionary expense (4.78), and taking notes (4.53). However, third-year students predominantly employed the strategy of English language media (4.83), pursued by monolingual dictionaries (4.78). Conversely, the least deployed strategies by the whole set of respondents were drawing the word's picture, remembering the words that follow or precede the new one, and using physical action when learning

vocabulary with a mean of 1.01. These strategies were also perceived as the least useful.

Undergraduate students perceived VLSs as *quite useful*, where third-year students prized the social category most, coursed by cognitive then determination. On the other hand, first and second-year students professed the expedience of determination first yet diverged on the second acknowledged practical category as the former opted for cognitive strategies while the latter advocated the social ones. Subsequently, the least useful classified categories were metacognitive and memory strategies with the entirety of examined EFL participants. Meanwhile, the strategy of highlighting words in classrooms received a soared rate of 4.86 being the most treasured, shadowed by keeping a vocabulary notebook and guessing from context. The sum of learners also valued English language media, although second and third-year students particularly endorsed talking with native speakers being very useful.

Concerning gender correlation, findings revealed that barring some trivial predilections, undergraduate students generally loom to be using VLSs correspondingly. For instance, second-year female students often requested teacher's assistance whereas males preferred classmates' support. Further, the strategy of conversing with natives was seldom deployed by all females cast in opposition to males' extensive use. Moreover, monolingual dictionary use was recurrent for second-year female students compared to males' infrequent resort, yet they both coequally utilized contextual guessing clues as statistically demonstrated in figure 4.18. In addition, gender usefulness deviation was slightly noticeable as in first-year females favouring the memory strategies of making a mental image of the word's meaning and connecting words using synonyms/antonyms reverse with males' vision as they appraised it being as quite useful.

Furthermore, the year of study did impact undergraduate students' recourse to vocabulary learning strategies. While some first-year students take extensive notes when studying, others were slow reserved novices who needed additional supervision. For instance, the present soundings indicated an immutable usage of contextual guessing and dictionary use inversely to the social strategies lessening. Certain

learners testified through the think-aloud protocol and focus group discussion that devouring infinite books countlessly would not presumably enrich their vocabulary range, it was rather taking the time to assimilate the recorded information, think laterally to reuse and repurpose it, and most importantly to genuinely enjoy the process. However, it is essential to note that these disparities are not universal for all EFL undergraduate Algerian students and may vary based on the situation and demographic investigated sampling.

Regarding the approaches adopted while learning vocabulary, around half of EFL undergraduate students implemented a semi-structured tactic where female learners demonstrated strenuous effort. They utterly prioritized the lexicon that was recently used or likely to be needed and systematize the recorded words using different buckets to improve their memory in the long run. Correspondingly, males tried earnestly to enhance their vocabulary array through the digital world, mitigating their use of VLSs across the years but still lest of being gender stereotyped. Consequently, becoming an organized learner is putting in work all of Sanaoui's criteria from taking notes, revisiting, and revising to making use of it but is not a merely condition for doing well. Some students demonstrated these tenets and did well during the post-test task but avowed that they did not work hard while others equally worked as good students but scored lower grades. Therefore, it is not about the number of learners' words remembrance, it is the way they utilize what they stored. While some learners mechanically record words, others examine first what needs to be engrossed, evaluated then improve for eventual required recurrence.

Conclusively, the present research showed that some most and least frequently used and perceived vocabulary learning strategies were partly shared by male and female students. Nevertheless, it also indicated the coexistence of different patterns and percentages of usage and utility by the two genders. The overwhelming majority of undergraduate Algerian students used VLSs to decode unfamiliar words' meanings, although a minority exerted it to consolidate the retention and recall of the assimilated lexis. It is widely recognized within foreign language acquisition schemes that

systemacity in language learning processes goes hand in hand with vocabulary learning variation due to individual and contextual differences.

Nevertheless, it is important to note that these results are based on a specific dataset and may not necessarily apply to all populations or contexts. Further research and analysis would be compulsory to confirm and determine the underlying factors contributing to the observed gender differences in vocabulary learning procedures. The findings of the two compared groups (control vs. experimental) revealed eminent insights about the benefit of training students on the convenient use of VLSs to enhance their vocabulary storage and performance. Besides the fact that presenting vocabulary learning strategies implicitly is unlike devoting instructional time to define and explain them separately, teaching in large groups or individually might make quite a difference. Exposing students to the VLSs varieties plays an important part in any course (Schmitt and Sökmen 1997). It prepares learners to deal with and learn words that might be encountered and dealt with when necessary. It not only raises students' autonomy but also makes them more aware of the language/vocabulary learning resources available to them (Wenden 1991, Cohen 1998). Valuable recommendations were generated addressing both teachers' teaching context and learners' vocabulary encountered challenges.

Finally and for further exploration, it is advised to conduct the same research with a larger proportion and more varied sample, taking into consideration students' English proficiency. It would provide a more nuanced understanding of the learning process. Additionally, it would be advantageous to consider exploring the cultural and linguistic differences in vocabulary learning strategies as well as examine the effectiveness of different instructional approaches in promoting vocabulary acquisition among learners of different genders.

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o First year	**APPENDIX N°1**	*Male* ☐
o Second year		
o Third year	**Students' Questionnaire**	*Female* ☐

Dear student,

Would you please answer the following questions and put a tick (x) where appropriate. The information collected will serve this particular research only and will remain confidential. Please feel free to share your opinions and experience.

SECTION ONE: Background information

1. How long have you been studying English? _____

2. Why did you choose to major in the English language?

a- Have been directed to ☐
b- For personal interests ☐
c- For career advancement ☐

3. Do you enjoy/appreciate studying English?
-Yes ☐   -Neutral ☐   -No ☐

SECTION TWO: Students' attitude towards English

4. How important do you think English is in today's world?
-Very important ☐   -Important ☐   -Not important ☐

5. How would you rate your English proficiency?
a- Able to speak ☐
b- Able to write ☐
c- Able to read and understand ☐
d- Able to listen and understand ☐

6. Please indicate you current level of English:

☐ **a. Elementary:** very limited vocabulary, basic grammar, and pronunciation heavily influenced by mother tongue.

☐ **b. Intermediate:** comprehend & communicate quiet easily in familiar topics but still have limited vocabulary and difficulties with more complex subjects.

☐ **c. Advanced:** ability to converse in a variety of context fluently and naturally, strong command of vocabulary, grammar and pronunciation.

7. The above rate & level of English proficiency is mainly due to your:
a- Personal efforts ☐
b- Teachers in formal Education ☐
c- Others _____

8. To what extent are the following useful in English learning?

a. Personal efforts   Very useful ☐   Useful ☐   Not useful ☐
b. Formal Education teachers   Very useful ☐   Useful ☐   Not useful ☐
c. Private English classes   Very useful ☐   Useful ☐   Not useful ☐

9. What do you think is the most relevant to communicate effectively in English?
a. Vocabulary ☐   b. Grammar ☐   c. Pronunciation ☐

SECTION THREE: **Students' attitude towards Vocabulary learning**

10. How important do you think vocabulary learning is in learning English?

-Very important ☐   -Important ☐   -Not important ☐

11. When it comes to learning vocabulary, you generally rely on:
-Yourself ☐   - Teacher ☐   - Coursebooks ☐

12. Do you self-initiate activities to enlarge your   - Yes ☐   - No ☐
      vocabulary repertoire?

13. Do you record the new vocabulary words?   - Yes ☐   - No ☐

14. Do you review the recorded lexical items?   - Yes ☐   - No ☐

15. Do you practice using the new lexical items learnt? - Yes ☐   - No ☐

16. Through which of the following skills do you prefer to learn vocabulary?

    a- Listening ☐   b- Speaking ☐

    c- Reading ☐   d- Writing ☐

17. Are you familiar with Vocabulary Learning Strategies?
    - Yes ☐   - No ☐

18. How important is using Vocabulary Learning Strategies to you?

-Very important ☐   -Important ☐   -Not important ☐

19. Do you feel self-conscious when resorting to Vocabulary Learning Strategies?
    - Yes ☐   - No ☐

20. How often do you take part in the classroom discussion?

    a. Never ☐   b. Rarely ☐   c. Sometimes ☐   d. Often ☐

21. Your above answer is determined by:

    a. Vocabulary repertoire ☐   b. Pronunciation fluency ☐
    c. Grammar skills ☐   d. Teacher's activity ☐
    e. Teacher's motivation ☐

22. Learners seldom interaction in classroom is because of:

    a. Lack of vocabulary ☐   b. Pronunciation problems ☐
    c. Grammar mistakes ☐   d. Teacher's teaching ☐
    e. Uninterested ☐   method and attitude
    f. Others _____

Thank you for your precious time and co-operation

APPENDIX N°2

Teachers' Questionnaire

Dear teacher,

The aim of this questionnaire is to find out your attitude towards teaching vocabulary in your classes and approaches that you use. Your cooperation will be genuinely appreciated. The information collected will serve this particular research only and will remain confidential. Please feel free to share your opinions and experience.

SECTION ONE: General information

1. Highest academic qualification:
    a. Bachelor ☐   b. Master ☐
    c. Magister ☐   d. PhD ☐
Other _____

2. Job title position:
    a. Teaching assistant ☐   b. Lecturer ☐

    c. Assistant professor ☐   d. Associated professor ☐

    d. Professor ☐

3. Teaching experience:
    a. Less than 3 years ☐   **b.** 4 to 9 years ☐
    c. 10 to 15 years ☐   **d.** More than 16 years ☐

4. Teaching level/year:

   - First year ☐   -Second year ☐   - Third year ☐

5. Modules/courses you teach:

    ➢ _____

SECTION TWO: Teacher's opinion towards vocabulary

6. To what extent is vocabulary important to EFL learners?

-Very important ☐   -Important ☐   -Not important ☐

7. How would you classify your students' vocabulary level?
    -Good ☐   - Average ☐   - Weak ☐

8. Do you believe that it is the teacher's duty to introduce new vocabulary?
    - Agree ☐   - Neutral ☐   - Disagree ☐

9. Do you ponder that students' motivation and self-esteem influence their vocabulary acquisition?
    - Agree ☐   - Neutral ☐   - Disagree ☐

10. The availability of English language resources outside the classroom has an impact on students' vocabulary acquisition:
    - Agree ☐   - Neutral ☐   - Disagree ☐

SECTION THREE: Teaching methodology & Strategy use

11. Do you present new items in every lesson?   - Yes ☐   -No ☐

12. Do you explain all the fuzzy/unknown words?   - Yes ☐   - No ☐

13. Do you teach vocabulary learning strategies?   - Yes ☐   - No ☐

14. How do you incorporate vocabulary learning into your lessons and activities?

☐ **a. Direct instruction:** explicit teaching by giving definition.

☐ **b. Contextualized instruction:** in the context of story or real life situations.

☐ **c. Visual aids:** such as pictures, videos, diagrams or flashcards.

☐ **d. Word games:** such as hangman, charades or crossword puzzle.

15. How often do students participate in English conversation practice?

a. Never ☐   b. Rarely ☐   c. Sometimes ☐   d. Often ☐

16. Learners interaction in classroom depends on:
a. Student's confidence   ☐
b. Student's vocabulary   ☐
c. Teacher's teaching method   ☐
d. The type of activity used   ☐
f. Others _____

17. How do you typically assess your students' vocabulary acquisition?
☐ a. Written exams   ☐ b. Oral exams
☐ c. Classroom activities   ☐ d .Other _____

18. According to you, which of the following vocabulary learning strategy is the most useful? Please, rank them from the most useful to the least useful.
- Translation   ☐
- Use of monolingual dictionaries   ☐
- Use of bilingual dictionaries   ☐
- Reading and guessing from the context   ☐
- Asking others   ☐
- Note taking   ☐
If there are others, please state them
_____

19. In your experience, do you observe any difference in English vocabulary use between male and female students?

-Yes ☐   -Not sure ☐   -No ☐

20. Have you noticed a difference in vocabulary learning strategies use between first, second or third year students?

-Yes ☐   -Not sure ☐   -No ☐

Thank you for your precious time and co-operation

APPENDIX N°3

The grid below was utterly employed to accurately track the targeted evident points using validated answers **F.E**, **S.E**, and **St.E** for *'few evidence', 'some evidence', 'strong evidence'*, plus the comments section.

Identification data

Date & Time	Disciplinary field	Year, Cycle of study

Teacher Performance & Commitment

	F.E	S.E	St.E	Comments
Communication skills (accuracy, articulation & proficiency)				
Behaviour engagement				
VLSs instructions				
Use of ICT materials				
Vocabulary time management				
Focus on students				

Students' Behaviour, Engagement, & Attitudes

Commitment	F.E	S.E	St.E	Comments
Participation rate				
Initiative (engaging, making questions)				
Active vocabulary				
Use of VLSs				
Gender interference				

o First year
o Second year
o Third year

APPENDIX N°4

Vocabulary Levels Test

Male	☐
Female	☐

This is a vocabulary test. You have to choose the right word that goes with each meaning.

Write the number of that word next to its meaning. Here is an example.

1 business	
2 clock	_____ part of a house
3 horse	_____ animal with four legs
4 pencil	_____ something used for writing
5 shoe	
6 walls	

You answer it in the following way.	
1 business	
2 clock	__6__ part of a house
3 horse	__3__ animal with four legs
4 pencil	__4__ something used for
writing	
5 shoe	
6 walls	

The 2,000 word level

1 birth	
2 dust	_____ game (A)
3 operation	_____ winning (B)
4 row	_____ being born (C)
5 sport	
6 victory	

1 choice	
2 crop	_____ heat (D)
3 flesh	_____ meat (E)
4 salary	_____ money paid regularly for doing a job (F)
5 secret	
6 temperature	

1 cap	
2 education	_____ teaching and learning (G)
3 journey	_____ numbers to measure with (H)
4 parent	_____ going to a far place (I)
5 scale	
6 trick	

1 attack	
2 charm	_____ gold and silver (J)
3 lack	_____ pleasing quality (K)
4 pen	_____ not having something (L)
5 shadow	
6 treasure	

1 cream	
2 factory	_____ part of milk (M)
3 nail	_____ a lot of money (N)
4 pupil	_____ person who is studying (O)
5 sacrifice	
6 wealth	

The 3,000-word level

1 belt
2 climate   _____ idea (a)
3 executive   _____ inner surface of your hand (b)
4 notion   _____ strip of leather worn around the waist (c)
5 palm
6 victim

1 acid
2 bishop   _____ cold feeling (d)
3 chill   _____ animal (e)
4 ox   _____ organization or framework (f)
5 ridge
6 structure

1 bench
2 charity   _____ long seat (g)
3 jar   _____ help to the poor (h)
4 mate   _____ part of a country (i)
5 mirror
6 province

1 boot
2 device   _____ army officer (j)
3 ridge   _____ a kind of stone (k)
4 marble   _____ tube through which blood flows (l)
5 phrase
6 vein

1 apartment
2 candle   _____ a place to live (m)
3 draft   _____ chance of something happening (n)
4 horror   _____ first rough form of something written (o)
5 prospect
6 timber

Nation's Vocabulary Levels test (Nation, 2001:417

APPENDIX N°5

The focus group discussion provides extra empirical data as the study second main topic was exploring the correlation between vocabulary learning strategies and the gender factor.

Focus Group

Group Discussion Schedule

Cycle of study/year: _____

Date: _____

Gender: _____

Communication skill: _____

Vocabulary use: _____

Duration: _____

Asked questions:

Question 1: How effective was the vocabulary strategy training?

_____

Question 2: What do you find most challenging about learning new vocabulary?

_____

Question 3: What tips would you suggest for others trying to learn new words?

_____

Appendices

o First year
o Second year
o Third year

APPENDIX N°6

Vocabulary Learning Strategies Survey

Male ☐
Female ☐

When I ***find*** a new English word that I don't know, I…

		I do this…					I think this is…				
		Never	Seldom	Sometimes	Often	Very often	Not useful	Not sure it is useful	Quite useful	Very useful	Extremely useful
A1	Check the new word's form (verb, noun etc.)										
A2	Look for any word parts that I know (**im**possible, color**ful**).										
A3	Use any pictures or gestures to help me guess.										
A4	Guess from the context.										
A5	Use an Arabic/French-English dictionary.										
A6	Use an English-English dictionary.										
B1	Ask the teacher to give you the definition or a sentence.										
B2	Ask your classmates for the meaning										

When I want to ***remember*** new words and build my vocabulary, I…

		I do this…					I think this is…				
		Never	Seldom	Sometimes	Often	Very often	Not useful	Not sure it is useful	Quite useful	Very useful	Extremely useful
B3	Study the word with your classmates										
B4	Ask the teacher to check your definition										
B5	Talk with native speakers										
C1	Draw a picture of the word to help remember it										
C2	Make a mental image of the word's meaning										
C3	Connect the word to a personal experience										
C4	Remember the words that follow or precede the new word										
C5	Connect the word to other words with similar or opposite meanings										
C6	Remember words in 'scales' (always-often-sometimes-never)										
C7	Group words together to study them										
C8	Use new words in sentences										
C9	Write paragraphs using several new words										
C10	Study the spelling of a word										
C11	Study the sound of a word										
C12	Say the new words aloud when you first meet them										
C13	Make a mental image of the word's form										
C14	Remember the word using its parts (im-, un-, -able, -ful, -ment, ex-)										

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		Never	Seldom	Sometimes	Often	Very often	Not useful	Not sure it is useful	Quite useful	Very useful	Extremely useful
C15	Remember the word using its word form (verb, noun, adjective)										
C16	Make your own definition for the word										
C17	Use physical action when learning a word										
D1	Repeat the words aloud many times										
D2	Write the words many times										
D3	Make lists of new words										
D4	Use flash cards to record new words										
D5	Take notes or highlight new words in class										
D6	Put English labels on physical objects										
D7	Keep a vocabulary notebook										
E1	Use English-language media (songs, movies, the internet)										
E2	Test yourself with word tests										
E3	Study new words many times										

Adapted from P.Bennette work (2006)

استراتيجيات التعلم اللغوي والاختلافات بين الجنسين
دراسة حالة تجريبية لطلاب جامعيين في اللغة الإنجليزية كلغة أجنبية في قسم اللغة الإنجليزية بجامعة الجزائر 2

لا تزال الجامعات تتميز بالمحاضرات والندوات وأساليب التدريس التقليدية. يبدو أن الطلاب مذهولون من الكم الهائل للمواضيع المدرسة باللغة الإنجليزية المراد دراستها، ومقدار المفردات التي يجب الاحتفاظ به الذاكرة الاستكشافية لا يمكن أن تتذكر كل شيء تم تدريسه العديد من الطلاب و لا يمتلكون ذاكرة مثالية لاستحداث الكلمات المخزنة ويحتاجون إلى نظام فعال لتذكر المعلومات. لهذا وجب عليهم تخزينها خارج عقولهم من خلال استعمال تقنيات عملية مثل استراتيجيات تعلم المفردات (VLS). البحث الحالي عبارة عن دراسة تجريبية حول استراتيجيات تعلم المفردات في المرحلة الجامعية لطلاب اللغة الإنجليزية كلغة أجنبية أكثر / أقل استخدامًا وإدراكًا أنها مفيدة لتوسيع نطاق معجمهم. كما أنه يعتزم تحديد نطاق الأساليب التي يتبناها المتمدرسون لتعزيز معرفتهم بالمفردات. تم التأكيد على متغيرين رئيسيين؛ الجنسانية وسنة الدراسة. طُلب من عينة من 150 طالبًا في السنة الاولى و الثانية والثالثة(75 ذكرًا و 75 انثى) متخصصين في اللغة الإنجليزية في جامعة الجزائر 2 لملء استبيان، واختبار مستويات المفردات (2000 و 3000). بالإضافة إلى ذلك، تم مراقبة الفصول الدراسية و استعمال بروتوكول التفكير بصوت عالٍ. تم تشكيل مجموعات التعلم الثنائي أيضًا للاختبار؛ مراقبة وتجريبية لملاحظة انطباع تدريب VLS على تكرار استخدام الطلاب وأدائهم من خلال مقارنة نتائج الاختبار قبل وبعد الاختبار مع المهام والمناقشات التي تم تعيينها لمجموعة التركيز. تم جمع البيانات بمجرد إطلاق البرنامج الدراسي. تم الاعتماد على ثلاث نظريات رائدة لتحليل البيانات التي تم جمعها وهي: تصنيف Schmitt (1997 ، 2000) ، تصنيف Sanaoui (1995) ، وبحث Clouston (1996).

توضح النتائج أن استراتيجيات التحديد مستخدمة بشكل كبير كما تم الإشادة بها باعتبارها الوسيلة القصوى في فئة الاكتشاف ، في المقام الأول القرائن السياقية التخمين ، والقواميس ثنائية اللغة ، وأحادية اللغة. في فئة الدمج ، سجلت الاستراتيجيات المعرفية أعلى معدل فائدة ، خاصة تدوين الملاحظات والاحتفاظ بدفتر مفردات. على العكس من ذلك ، فإن مجموعة ما وراء المعرفية هي الأقل انتشارًا لكنها تشمل واحدة من الاستراتيجيات المتعارف عليها والتي هي منتجع وسائل الإعلام باللغة الإنجليزية. علاوة على ذلك، يكشف الاستفسار عن أن الغالبية العظمى من الطلاب الجامعيين معظمهم من الإناث طوروا مزيجًا من الدمج بين نظام مقاربات منظمة وشبه منظمة للتعامل مع العناصر المعجمية، في حين أن البعض الآخر كان له دور شخصي مخصوص به. لقد أنشأوا جدولهم الزمني الخاص وأيضًا رصدوا ما يحبون القيام به مع ما يحتاجون إلى القيام به. ومع ذلك، فإن كونك غير منظم ليس هو المتنبئ الأول لمدى جودة تعلم الطالب للمفردات. إنها الطريقة التي تعمل بها استراتيجيتهم بنجاح واتساقها على مر السنين. قد يتبع الطلاب نظامًا تناظريًا أو نظام رقمي، لتطوير نظام VLS الخاص بهم. بمرور الوقت ، يطور المتعلمون عملية فرز لمساعدتهم على تحديد ما يجب التمسك به في ذاكرتهم، بينما يقوم الآخرون بتوسيع نطاق التعلم. يمارس بعض الطلاب نفس الاستراتيجيات حتى الآن (تدوين الملاحظات ، وتسليط الضوء) ، واستيعاب المدخول ، وتنفيذ الداخل من خلال النتائج. في نهاية المطاف ، يتم توفير رؤى قيمة وتأثيرات تربوية لتعزيز بيئة التدريس للمعلمين ، واستقلالية الطلاب ، والوعي تجاه أنظمة التعلم الافتراضية.(VLS)

المصطلحات الأساسية: استراتيجيات تعلم المفردات المناهج ، دورة الدراسة ، طلاب في اللغة الإنجليزية كلغة أجنبية ، الجنسانية ، الاستخدام والفائدة.