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Exploring the impact of Mnemonics in Enhancing EFL Learners' Spelling accuracy.

The Case of First-Year LMD Students at Biskra University

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Dedication

To the memory of my beloved grandfather Azza, Mohammed and grandmother Louisa

I miss you beyond words. May Allah grant you "Al Jannah".

To my family: My Father Djamal, My Mother Khaira, My grandmother Aziza, My Brothers Rami, Nizar, Oussama, and Mohammed.

The source of happiness, hope, unconditional love and constant support

To my friends Nour, Yasmin, Romaissa, Saida

You are a golden thread to the meaning of life

Your words of support and tenacity still ringing in my ears

To all colleges who will graduate in 2021

To mu supervisor "Dr.Triki Manel"

To All my beloved teachers

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Abstract

The purpose of this study is to see how Mnemonics can help EFL learners develop their spelling accuracy. It also looks into the possibilities of using mnemonic strategies such as images, key word approaches, questioning, predicting, acrostics, and acronyms to improve learners' spelling accuracy. It focuses on Mohamed Kheider University's first-year LMD learners. The current study is motivated by the fact that spelling is increasingly difficult in the educational field, necessitating the training of learners in order to achieve excellent spelling competence. Because information is fast accumulating and being committed to memory. The capacity to comprehend spelling is the most important skill to improve. In truth, the majority of learners at Mohamed Kheider University struggle to spell words correctly. Learners may have trouble remembering spelling because of the same issues that prevent them from memorizing new words in the text. The researcher uses the qualitative method approach to test the current study hypotheses using two instruments: A questionnaire was administered to a group of 40 students, as well as a teacher interview. The outcomes of this study, which were examined qualitatively, demonstrated that Mnemonics can assist learners in overcoming their challenges with spelling accuracy. As a result, the study's hypothesis was verified.

Key words: Spelling, Spelling accuracy, Mnemonics, Memory, Mnemonic strategies.

List of Acronyms and Abbreviations

EFL: English foreign languages.

MS: Mnemonic Strategies.

List of Appendixes

Appendix1: Teachers' Interview

Appendix2: Learners' Questionner

الملخص

List of Tables

List of Figures

Table of Contents

General Introduction

Chapter One: Spelling Accuracy

Chapter Two: Mnemonic devices (Memory Aid)

Chapter Three: Fieldwork and Data Analysis

General Introduction

Introduction

Teaching and learning English has become the major focus of   many researchers. Hence, many studies are conducted to enhance learners' both written and spoken competencies. However, a noticeable number of EFL learners commit different types of errors during this process. Certainly, the knowledge of spelling standards and its correct usages is fundamental. Any anomalies would be very useful to educators to better understand this aspect of written language, yet improve it. A common approach to handling the spelling problems of students with spelling difficulties is to focus on phonics and rote memorization (verbal components in nature). It is thought that a process such as this based on the part-to-whole model neglects the full potential of learners' thinking. Consequently, points of controversy have arisen concerning how spelling should be taught. The search continues for a more holistic approach to teaching spelling. An approach that supports more than just one half of the brain's processing capacities.

Examining the connection between Mnemonic Training as a Strategy and the Teaching of Spelling to Disabled Sixth, Seventh, and Eighth Grade Students was the main objective of a study by Cynthia .M. Battaglia (1986) for this purpose 31-disabled students from a suburban school class consisting of 6th, 7th, and 8th grade students were chosen as participants. The subjects were divided into a mnemonic group and a non-mnemonic/control group. The mnemonic group consisted of eight boys and four girls, whereas the non-mnemonic/control group consisted of ten boys and nine girls. The TWS (Test of Written Spelling) was administered to each of the 31 subjects as a pretreatment equivalency measure and A t-test was performed to assure that there was

no significant difference in spelling ability of the two groups. After carrying out correlation and regression analyses, the researcher found that mnemonic Training Strategy is indeed effective in spelling teaching Disabled Sixth, Seventh, and Eighth Grade Students.

In another study, Michael C. Porter (2003) addressed the attitudes of a group of high school seniors *(n = 211)* about the importance of spelling, which strategies they use to solve spelling problems, and the adequacy of spelling instruction at the high school level. The researcher assessed the same group of seniors according to Ganske's developmental levels of spelling and gauged the attitudes of high school language arts teachers in the same school (n = 16) about the importance of spelling and the adequacy of spelling instruction at the high school level, and to determine their spelling assessment practices. Most students judged spelling to be important and felt that spelling instruction during high school was insufficient where most of the students were predicted to be in the highest developmental level of spelling, although 10% of the students were assessed as not being in an appropriate developmental stage for their grade level. Teachers also judged spelling to be important and in need of increased attention during high school. Their assessment of student spelling varied, but most teachers usually penalized students for incorrect spelling on papers.

In this respect, Sue Howard, Lisa M. W. DaDeppo and Susan De La Paz (2008) dealt with spelling difficulties in Getting the Bugs out with PESTS: A Mnemonic Approach to Spelling Sight Words for Students with Learning Difficulties. The researchers described a case study with three elementary-aged students with Learning Difficulties using a mnemonic approach to spelling sight words. Their approach was

called PESTS .It included acrostics, pictorial representation, and stories. The instruction was applied to key words in daily instruction and compared to a traditional approach to spelling sight words. As a conclusion, what this study has found is that each of the students improved his or her spelling, as measured by a standardized spelling test, a developmental spelling test, and a researcher-developed instrument.

Furthermore, Mnemonic devices have been considered by some psychologists to represent a form of "unnatural learning" (Jenkins, 1971, 1974; Neisser, 1976, pp. 141-142.as cited in Bellezza F.S,1987). In response to these objections, it has been argued in the study of Mnemonic Devices and Memory Schemas Imagery and Related Mnemonic Processes by Bellezza F.S. (1987) that mnemonic device is fundamental to our understanding of human learning and the operation of human memory. In fact, the notion of mental cues, so pervasive in the implementation of mnemonic techniques, plays an important role in the operation of memory schemas. The value of comparing mnemonic devices and memory schemas has been mentioned before (Battig & Bellezza, 1979; Bellezza, 1983a, 1986. as cited in Bellezza F.S,1987) Mnemonic Devices and Memory Schemas. Imagery and Related Mnemonic Processes but has not been discussed in detail.

As indicated by these works mnemonic devices has mainly been implemented to enhance a variety of crucial aspects in language learning. However, the attempt to examine the potential positive effects of mnemonics on the process of EFL poor spellers learning is not accentuated in this body of research. Due to the cognitive load placed on the processes of poor spellers when composing and research evidence indicating a strong link between mnemonics and spelling accuracy , the use of

mnemonic devices for the purpose of facilitating the retrieval and usage of spelling patterns when writing is suggested.

1.   Statement of the problem

Spelling proficiency is essential in written language competency as it reflects one's level and quality of education. A noticeable number of EFL learners commit Spelling errors because of the lack of adequate awareness of phonology as well as the insufficient knowledge of inflectional morphology. Learners are also faced with the irregularities of the English language spelling system. Because of the inconsistences, it is more difficult to spell correctly, as it requires more efforts to memorize. Furthermore, spelling inaccuracy including consonants and vowels substitutions, inaccurate double consonants, and vowel and consonants omissions can be avoided by a variety of methods and technics. Although there is no clear strategy to teach spelling neither in private schools, middle schools, high schools nor universities where English is a branch of study .

In this respect, working memory processes, along with other cognitive operations, received considerable attention since research into such components has established a strong link between the demands of working memory and performance of second (L2) and foreign language (FL) skills, including that of writing. The latter, being more complex at the level of cognition usually imposes greater demands on working memory processes than do other skills. In line with this idea, studies on spelling accuracy have been carried out to identify, describe, and explain the use of Mnemonics

in enhancing first year students of English at Mohamed Kheider University of Biskra's spelling accuracy.

Mnemonic is a memory enhancing instructional strategy that involves teaching students to link new information (what is taught) to information they already know. It means that researchers try to lead students to link new words to the knowledge that they had learned before. Simply, the term of mnemonic according to Bruning (1995) are rhythms, sayings, and procedures designed to make new materials more memorable. Mnemonic Instructional Strategy had also been defined as any procedures or operation designed to improve one's memory. It is a strategy to make the brain work maximally so that it can make new information as input more meaningful and memorable.

Furthermore, owing to the fact that spelling accuracy requires more cognitive effort and involvement on the part of the inexperienced EFL learner, it would be insufficient, thus, to merely show him her the correct form of a word pattern or a lexical bundle and expect it to be easily retrieved and used. Therefore, we believe that the use of mnemonic devices can be instrumental in facilitating learners' retrieval of word spellings patterns, required when engaging in text composition. This entails that the teaching aspects will be selected in such a manner that helps learners with the retrieval process. This way, they can better focus on textual patterns and higher-order skills, which constitute a central part of their writings. The current study aims to identify the key problem areas as far as English spelling ability of first year EFL learners is concerned. It aimes to also suggest remedial and pedagogical measures to improve the

learners' competence in this crucial, though hitherto, nascent skill area in the education system

2.   Research Questions

This thesis relies on the following questions**:**

1. What are the main causes of spelling errors committed by first year learners of English at Mohamed Kheider University of Biskra (MKUB)?

2. Does EFL learners at Mohamed Kheider University of Biskra have positive attitudes towards the use of Mnemonics in spelling abilities learning?

3. Do EFL learners' at Mohamed khider University of Biskra at the Department of Foreign Languages use mnemonic devices as spelling ability learning tools?

4. How do EFL teachers at Mohamed Kheider University of Biskra perceive the use of mnemonic devices in teaching and learning spelling?

3.   Research Hypothesis

The following alternative hypothesis has been formulated:

1- If EFL learners at Mohamed Kheider University of Biskra apply Mnemonics, their spelling proficiency will be developed.

2- It is hypothesized that if teachers and learners have a positive attitude towards teaching and learning mnemonics or the memory aids, their spelling skills would improve.

4. Aims

This study aims to investigate the use of Mnemonic strategy by EFL learners in spelling accuracy. More specifically, it aims at:

1. How first year EFL students of Mohamed Kheider University of Biskra update themselves to use Mnemonics to assist their spelling learning process.

2. How EFL teachers and EFL students use Mnemonics in their daily learning practices.

3. Raise teachers and learners interest of the benefits of memory aids and its techniques in the learning and teaching process specifically spelling proficiency.

4. Give a clear vision about memory aids by providing a guiding line for future activities and educational practices to enhance spelling abilities.

5. Research methodology

5.1. Research method

The present study is a qualitative in nature because the researcher wants to see to what extent the relationship between Mnemonics and the development of learners spelling accuracy exists.

5.2. Sample and population and research tools

- The population of the current study consists of First year LMD students English Branch at Mohamed Khider University of Biskra, Algeria.

- The sample and research tools will consist of

For teachers**:** The research will interview (n=6) teachers of English language of the English Branch at Mohamed Kheider University of Biskra via a semi-structured interview.

For students: the sample will be (40) learners and they will be asked to answer a semi-structured questionnaire.

6. Significance of the Study

So far little attention paid to learners ' spelling proficiency and its development using mnemonic strategies, previous studies focused more on using pictures, vocabulary spelling, reading aloud strategies to help learners understand the meaning of words but not for memorizing the spelling forms of words. As a result, this research is important not just for EFL learners but also for teachers. It has the potential to enhance teachers and learners' understanding of mnemonic methods that can lead to improved performance in acquiring English language and abilities, particularly spelling accuracy. Not only will learning to apply memory enhancement methods benefit learners with memory problems, but it will also benefit learners who are academically successful. As a result, several experts in the area have encouraged teachers to use the Mnemonic teaching method in all English classrooms in order to make their learners' learning more relevant and pleasant.

7. Structure of the Study

The theoretical and practical parts of this dissertation are split into three main chapters. The theoretical section is divided into two chapters, the first of which includes a definition of spelling, a definition of spelling accuracy, models of spelling and their relevance, and a discussion of the major components of spelling skill. The second chapter

defines mnemonic teachings, discusses the many types, focuses on approaches, and ultimately discusses the causes for forgetting spelling of words, as well as the benefits of mnemonic types in teaching spelling proficiency. The study's practical work is discussed in the last chapter. It was primarily concerned with evaluating the findings of the learners ' questionnaire and teacher ' interview in order to evaluate the hypothesis. Whether Mnemonics can improve spelling accuracy of first year LMD learners of the English Branch at Mohamed Kheider University of Biskra.

Chapter One

Spelling Accuracy

Introduction

Spelling ability is important even though it is considered one of the minor subjects in school. Therefore, learners must develop the ability to spell as well possible because Spelling errors detract from the effectiveness of any written work. Spelling is an intellectual feat that entails many intricate processes and skills. This chapter provides an understanding of spelling and its mechanism as well as the different definitions attributed to spelling according to varying focuses. It also features the attitudes and abilities of spelling and spelling teaching/learning and present the eminent spelling approaches namely the deductive procedure and the inductive approach.

1. Spelling

While the value of spelling is difficult to quantify, its impact can be seen in other aspects of literacy, such as reading acquisition (Adams, 1990) and writing (Berninger et al, 2008)As maintained by Boynton et al, (2003), the reader's view of the overall content of a composition is influenced by spelling errors and other transcription-related factors. Written works with no spelling or grammar errors are considered to be of higher quality than those with errors. Regardless of the disparity in the number of misspelled words or grammar errors. Furthermore, Spelling and grammar are intertwined because spelling deficiencies impair one's ability to spell verbs in both their basic and inflected forms.

Spelling instructions have a positive effect on the ability to write sentences, despite the fact that traditional aids such as the use of spelling checkers and spell check features of word processors frequently do not function as expected because learners are often unable to identify a correctly spelled word from a list of word choices. (Wanzek et al, 2006 as cited in Howard et al, 2008).Explicit instructions, frequent practice opportunities, and immediate input on the accuracy

of students' "spelling attempts" are all examples of these methods. The findings have shown the benefits of teaching familiar spelling patterns and generalizations, as well as providing a clear emphasis on phonemic recognition and phonological processing (Wanzek et al, 2006 as cited in Howard et al, 2008).

In this respect, Synthetic and analytic phonics approaches are two more spelling interventions that have been well described (c.f. Adams, 1990 as cited in Howard et al,2008) , as well as formative (word study) approaches, in which instructors look at learner's invented spellings to decide both the arrange of improvement as well as objectives for instruction (Bear ,et al ,2004).

2. Spelling process

According to Lutz (1986), Spelling as a rule was instructed as a partitioned subject and memorization was thought to be the instrument to its dominance. Even presently, most schools utilize spelling arrangement and treat spelling as a subject isolated from the other language expressions Nevertheless, amid the past decade; language analysts have shed modern light on the spelling process.

Lutz (1986) reported that teachers could help students develop strategies for learning Standard English spelling. An awareness of spelling development can help teachers plan instruction and for pre communicative and semi phonetic spellers, teachers may teach alphabet knowledge, letter-sound correspondences. At the phonetic stage, students could be presented, within the setting of composing, to word families, spelling designs, phonics, and word structures. To Gentry deliberate composing experiences are the key to cognitive development in spelling and instructors can empower intentional composing, such as the composing of messages, records, plans, signs, letters, stories, melodies, and lyrics. (Gentry, 1982 as cited in Lutz ,1986).

Instructors can moreover give opportunities for frequent composing, which, when coordinates with all viewpoints of the educational programs, ought to be a characteristic portion of the daily classroom schedule. Overemphasis on supreme rightness, mechanics, and memorization ought to be avoided as well .Frequent application of spelling information by students whereas composing empowers spelling competency and early accentuation on mechanical perspectives of spelling hinders formative development. When frequent deliberate composing takes priority, adherence to the rules is secondary, The educator in no sense forsakes expectations for correctness. Alternatively, maybe, correctness is supported more successfully through information of the learners' level of advancement. (Lutz ,1986).

3. Spelling attitudes and abilities

Additional instruction in spelling for learners at all levels is required for the advancement of spelling capacity. Indeed students who illustrated capability at the most elevated developmental spelling level communicated a crave to sharpen their spelling abilities. Instructors concurred that more consideration should be centered on spelling, particularly given a seen decrease in spelling ability among students. More consideration ought to be given in language classes not only to lexicon, the conventional means of spelling instruction, but also to an explicit examination of orthographic standards from which all students can advantage. Upgraded instruction in and practice of the utilize of conventional content based language resources ought to too be considered (Porter, 2003).

Some learners demonstrated a need to get concentrated instruction in these essential spelling standards, which are more often mastered at a much lower grade level. Students encountering such troubles ought to be sought out and given the additional attention they need. This can be an

area in which instructors need to be particularly careful, because most learners lack self-awareness about their issues with performance of spelling. One way to find such learners is to evaluate spelling abilities frequently. Recently, Ganske's developmental assessment have embraced and utilized to screen, record, and direct student who are at the formative stage and giving them instruction targeted at helping them to advance (Ganske, 2000 as cited in Lutz ,1986). Furthermore, Lutz (2004) reported that Ganske's assessment can be utilized to find students with spelling challenges and adapt instruction to each student's particular needs. A concerted effort should be actualized so that students with spelling troubles are recognized and assisted throughout their career. In this way, spelling errors may well be eliminated, and at-risk students may have expanded chances of getting the direction and support needed.

The change of learners and teachers attitudes about the significance of spelling will require a move from some of the inclinations of an entire language approach, that move that has been broadly observed. A few basic adjustments are adequate to boosting student spelling execution. Since learners have demonstrated a readiness to commit time and vitality to progressing spelling abilities (Lutz ,1986).

4. Spelling teaching/learning

Teaching spelling can be gathered into two fundamental stages: building and remedial. Within the early levels of learning, knowing how to spell each new learnt word is more overwhelming. Once the leaner progresses, the focus is more on how to prevent any inconsistency, which might since of the collection of comparable words and rules. To achieve that, a number of exercises is implemented. Unlike the larger part of other language abilities, such as: reading comprehension, linguistic rules, and others that were instructed inductively amid the twentieth

century then steadily moved to be deductively instructed .spelling is an exemption. (Temlali, 2016).

4.1. A Deductive Procedure

Rules are better remembered if they're discovered instead of preached." (Kesselman-Turkel and Peterson, 1983, p3 as cited in Temlali, 2016, p 30) One particular method to construct learners 'vocabularies is by exposing them to it, and allowing them to infer the rule themselves this can be fundamentally at a basic level. Learners would then be asked to spell a number of words that they have already been introduced to. New patterns are drilled to supplement the ingrained spelling habits that must be re-learned and the instructor can assist students in deducing the rule. A typical example of this can be drawn as follow (Kesselman-Turkel and Peterson ,1983,p5 as cited in Temlali, 2016, p 30):

EXERCISE
Do the following for each word in the list:
1. Look hard at the word.
2. Look away and slowly say it aloud, listening to it.
3. Write it down as you hear yourself saying it.
4. Proofread to check what you've written.
pot
wig
mud
hen
dab
What pattern does the above list of words follow? Complete this sentence to show the pattern for writing sounds:
Each sound _____

Figure 1. Kesselman-Turkel and Peterson, 1983, p 5 as cited in Temlali, 2016, p 30

4.2. An Inductive Procedure

The inductive method is used to improving learners spelling ability using the "correct/incorrect spelling activity". This inductive activity starts with a demonstration of the rule governing one aspect of English' Spelling. In addition, there are also exceptions to the principle discussed. As a result, a list of terms regulated by the normative framework is proposed. The students are asked to decide which of the words are correct and which are not. This particular method is used by Dinsmore (2008) to teach the spelling of the I and e combination.

PRACTICE LAP

Mark whether each of the following words is spelled correctly or incorrectly.

Word	Correct	Incorrect
1. sliegh		
2. receive		
3. acheive		
4. grief		
5. frieght		

Check your answers at the end of the chapter. How did you do?

Figure 2. An Inductive Procedure to teach the spelling of the I and e combination used by Dinsmore (2008).

5. Spelling Learning Styles

Keefe (1979, p 4) defines learning styles as: "cognitive, affective, and physiological traits that are relatively stable indicators of how learners perceive, interact with, and respond to the learning environment". (Cited in Brown 2007, p 120). There are two major forms to consider in learning spelling: Phoenicians and Chinese. The first group aims to provide a conceptual connection between the letters and the sounds they represent. The other, on the other hand, relies on picturing and storing the expression. These two groups of learners can be divided into two categories: auditory and visual learners. As a result, those significant differences In learning spelling have an extraordinary effect on learners" orthographic competence (Baron and Strawson ,1976).

6. Errors in Spelling

There are other particular problems that arise exclusively of non-accuracy in spelling, in addition to the common causes of mistakes, which mostly occur in writing .Silent letters, double letters, and various spellings for the same sound are just a few of the traps that exist in English spelling.

The complexity of English spelling cannot be overlooked and this can be traced back to the reformation of English, especially its spelling. Double letters, silent letters, intrusive letters, and grammatical category are only a few examples. Furthermore, learners' misunderstanding of spelling habits, i.e. rules, is widely considered a major cause of errors most critically. Hence, the spelling-pronunciation non-correspondence must be tended to (Temlali, 2016).Additionally, English spelling is more difficult to master than Arabic spelling. When compared to the Arabic language, the spelling and pronunciation system is distinct. In Arabic, words are written as they

are spoken, while in English, many words have silent sounds and are multi-syllabic. When teachers do not pronounce words correctly and there are no programs available to cover the rules of spelling and pronunciation, particularly at the beginning levels of study, students are more likely to learn to pronounce words incorrectly.

Because of the inconsistencies between English and Arabic sound systems, such as the number and quality of vowels and diphthongs, consonant clusters in word, initial, medial, and final positions, Arab students spelling problems. These students capitalize the first letters of words at random. Whereas, in the Arabic language system there is no need for capitalization whether for proper nouns or otherwise. Students' experiences revolve around their failure to learn English tones, spellings (due to silent letters in words), and sentence form, which differs from that of Arabic. They still believe that there is a lack of a suitable learning environment for English because teachers do not have access to new teaching materials and IT computers (Temlali, 2016).

7.   A new approach to English spelling

Difficulties of English spelling have been notorious for centuries. They impede literacy for English speakers worldwide and are a particular obstacle to non-native speakers. Over the past 400 years, there have been numerous proposals for resolving the problem. As a result, different approach has been proposed, that has important practical advantages.

7.1.   The Cut Spelling Approach

The Cut Spelling Approach is a modern linguistic trend that began in the 1990s with the Simplified Spelling Society. Its aim is to get rid of needless (redundant) letters. The goal is to make writing faster, take less space, and make teaching and learning easier. The desire for individuals to expend less time on an assignment is attributed by proponents of this solution to their pattern of

economizing vocabulary (writing). Furthermore, Elimination has three major aspects that must be considered. "Letters irrelevant to pronunciation (honest>onest), unstressed vowels (system>systm), and simplifying doubled letters (staff>staf). Substitution, certainly, is concerned, and the focus is on the different resemblance of /f/: laugh>laf and philosophy>filosofy" (Temlali, 2016, p44) .Simply put, the CS project is a natural approach that confirms the complexity of orthography in English.

7.2. The Complex Nature of English Spelling

Even native speakers struggle to avoid errors in their written productions because English spelling is as complex as to that extent. One important reason is the different representations of the same sound, and various realizations of some letters, especially when combined together.

"English is, generally, made of 26 letters of the Roman and Latin alphabet, but when these are put into words, they either form about 44 sounds singly or combined. For example: /i: / can be spelt „ee", „ie"„ei" or ea" as in keen, piece, receive and peace. Similarly, the letter C is considered one of the trickiest letters for many learners. It is pronounced /k/ as in „car', but it is an /s/ as in „race'" (Temlali, 2016)

In the same row, we must mention the effect of word's grammatical class on the learners" orthographic competency. To illustrate, "advice" and "advise" are often confused by learners due to that minute difference. To confirm, minimal homographs are considered to be a solid proof the English" spelling complexity. One well-known set of words that explain this is through, tough, thorough, thought, and though (Temlali, 2016).

7.3 The Spelling-Pronunciation' Non-Correspondence

English consists of many words where –at least- one letter is doubled. For instance: pill, class and staff. This should not be considered as a dilemma unless we realize that there is no clear sign of doubling the final letter when such words are pronounced or dictated

"A number of errors can quite easily be classified in terms of transfer from written to spoken mode and vice versa." (Taylor 1976:192.as cited in Temlali, 2016). Moreover, write, knife and walk are examples of how tricky the silent letters can be to several learners. Moreover, rare cases where some intrusive sound(s) is(are) added, such as: lieutenant /lefˈtenənt/, should be regarded as essential in EFL classes as to the fact that they confuse learners from possessing the orthographic competency. As a conclusion, the mismatch of English" spelling-pronunciation frequently results in spelling errors (Temlali, 2016).

8. Spelling and reading

The relationship between reading and spelling has sparked a lot of discussion and debate. Good spelling and reading ability have a close relationship; in fact, reading ability is the best predictor of spelling skill (Kamhi & Hinton, 2000.as cited in Porter, 2003). According to Masterson & Apel (2000.as cited in Porter,2003) People are exposed to orthographic patterns as they read, which they must repeat in their spelling .As a result, some scholars believe that reading and writing are based on the same corpus of word knowledge (Templeton & Morris, 1999). Other theorists believe that two cognitive processes with distinct lexicons are involved in the conundrum of strong readers who are bad spellers. Following a review of current research into the paradox, however, according to Kamhi and Hinton (2000. as cited in Porter, 2003), strong readers who fulfill spelling requirements are only proficient at one element of reading (decoding or

comprehension). Furthermore, According to Smith (1998.as cited in Porter, 2003), there is a clear link between how well a student read and how well he or she perform in spelling. As a result, identifying learners who are poor spellers may have the added benefit of identifying learners who are struggling in reading as well.

Conclusion

In conclusion, spelling accuracy is an important and necessary skill for learners to develop their language proficiency (writing) so, learners who can perform spelling effectively are able to achieve better in class. However, the majority of learners fail to comprehend and recall the spelling information stored in their memory. The learners is unable to connect what they have as previous knowledge of the spelling form with what the new knowledge and this could prevent them from memorizing and storing the accurate spelling form in their memory. Learners are hence, required and in need to choose the appropriate techniques and strategies that can help them develop their spelling skill. In this chapter, the focus is mainly on spelling in general, definition, processes, models, and then spelling proficiency and its strategies. This study sheds the light on memory issues that could lead learners to no be better spelling performers so. The following chapter will be a description about the role of memory in spelling accuracy.

Chapter Two
Mnemonic devices (memory aid).

Introduction

Mnemonics are teaching or learning techniques that are intended to enhance memory. It refers to the process of altering to-be-learned knowledge so that it can be directly connected to information that the learner already knows. This improve correlation between new information and prior experience, which often uses both visual and auditory cues and typically leads to significantly higher test scores. In this chapter, more significant understanding of mental aid technique and its strategies will be provided. As well, as understand the relationship between working memory and the concept of memory helpers, and get a clear idea about mental aide methods and its viability.

1. Memory

In many fields of philosophy, memory plays an important role. It is critical to our understanding of the world in general and of our own personal history in particular. It underpins our individual personalities as well as our social relations. Memory has thus been a topic of philosophical interest since antiquity, and it has remained so throughout philosophy's history (Aho 2014; Bloch 2014; Burnham 1888; Herrmann & Chaffinn 1988; Nikulin 2015 as cited in Michaelian et al,2017) .With the rise of the theory of memory as a distinct area of study, memory has recently come to be recognized as a subject of great philosophical significance in its own right (Bernecker & Michaelian et al,2017).

The metaphysics of memory, rather than any other field, exemplifies the movement toward interdisciplinary, and study in this field sometimes overlaps with philosophy of psychology (Rowlands 2009 as cited in Michaelian et al,2017) and philosophy of neuroscience (Bickle 2011 as cited in Michaelian et al,2017). In addition, the core goal of mainstream memory science is to

establish a theory of remembering: a broad yet insightful description of what it means to recall something. However, there are several types of memory. It is uncertain if developing a theory of remembering that applies to all of them is possible, and it could end to being important to develop different theories of remembering, one for each kind of memory (Teroni ,2014 as cited in Michaelian et al,2017).

2. Types of Memory

"Memory," in its broadest sense, refers to the various results of the various types of learning that humans and other agents are capable of Any change in an agent's behavioral tendencies because of its experience thereby qualifies as memory and it is a very large category. Despite the category's scope, there is a rough agreement on a taxonomic classification of human memory (Michaelian et al, 2017).

2.1. Short term Memory

Short-term memory (STM) is the second stage of the Atkinson-Shiffrin multi-store memory model. It lasts between 15 and 30 seconds, with a capacity of around 7 objects. Short-term memory has three key aspects (Mcleod, 2009):

1. limited capacity (only about seven items can be stored at a time)

2. Limited duration (storage is very fragile and information can be lost with distraction or passage of time)

3. Encoding (primarily acoustic, even translating visual information into sounds).

The term short-term memory was replaced with working memory (WM).Baddely and Hitch (1974 as cited in Khechai, 2019) proposed a theory of two components: the central executive

and the phonological loop. Another feature was later introduced, the main acoustic store. The central executive is in charge of managing information flow, as well as collection and storing. It is a short-term processor with the ability to perform higher cognitive functions such as problem solving and inference, as well as metacognitive functions (Slame&Baddely, 1982 as cited in Hauptamnn, 2004 and Milton, 2008).

2.2. Long term Memory

Long-term memory is a massive store of information and a record of past events that appears according to all theoretical viewpoints; it is impossible to argue that each normal person has a rich, if not perfect or full, collection of long-term memories at his or her disposal. Language learners need all language knowledge to be translated into long-term memory (LTM). As a result, cognitivists have been curious about how this encoding process could be accomplished, how LTM works, and how information from the text can be obtained from this shop. The key method of switching from WM to LTM, according to Huaptamnn (2004 as cited in Khechai, 2019), is to find some pre-existing information in LTM to apply the latest information to. He also mentioned that in the case of vocabulary, it entails locating certain items already present in the mental lexicon to which the new lexical material can be linked (Schmitt, 2000 as cited in Khechai, 2019).

Long-term memory (LTM) is thought to be difficult to acquire because it necessitates repetitive attempts. According to the consolidation principle, converting labile memory to LTM takes hours. This process necessitates the development of new proteins that sustain long-term synaptic morphology changes. In Drosophila, aversive olfactory conditioning involves spaced repetitive training that causes transcription factor-mediated multi-hour accumulation to form LTM that lasts at least 7 days. Single-trial preparation, on the other hand, produces only short-term, mid-

term, and anesthesia-resistant memory elements, which degrade rapidly within 24 hours (Zhao et al 2019).

3.   Key Concepts to Mnemonic devices

3.1.   Definitions of Mnemonics

Mnemonics are memory-improving techniques that include encoding information in long-term memory with comparisons between new and previously learned data. (Zimbardo et al, 2006 as cited in Marzbana, Amoli, 2012). Mnemonic devices, also known as systematic memory-enhancing techniques, are a powerful and adaptable class of associative-learning techniques. Similar to Bellezza's ideas of pegging, visual imagery, and replacement, associative mnemonic strategies depend on what Levin (1983 as cited in Battaglia,1986) called the three R's: stimulus Recoding, symbolic Relating, and systematic Retrieving.

According to Bruning (1985 as cited Khechai, 2019) Mnemonics are memory aids that assist in the recall of information. It aids students' learning by making it easier to elaborate, piece, or recall information from memory. A mnemonic device is a memory aid that aids students in transforming or organizing knowledge.

Mnemonics is a memory-improving instructional technique in which students are instructed to link new knowledge to information they already know. It indicates that the researchers attempted to get students to associate new words with prior information. Furthermore, the term of mnemonic refers to rhythms, expressions, and processes intended to make new materials more memorable. Mnemonic strategy had also been described as any procedures or activity designed to enhance one's memory. In short, mnemonic is a technique to make the brain function at its best so that new learning is more interesting and unforgettable (Bruning 1995 as cited in Khechai, 2019).

In this respect, Thompson (1987 as cited in Marzbana , Amoli, 2012) explains that mnemonics operate by employing some well-known psychological concepts, such as the creation of a retrieval strategy during encoding and the use of mental imagery, both visual and verbal. They aid the incorporation of new information into existing cognitive units and include retrieval prompts, allowing people to learn faster and remember more.

"Mnemonics rely on specific learning that provides cues for the more extensive or difficult material that is to be remembered. For example, young musicians recall the word 'face' and the sentence 'Every good boy does fine' when naming the notes on a staff" (Negin, 1978 , p. 180 as cited in Battaglia,1986) Mnemonics are based on particular training that offers prompts for remembering more detailed or complicated information. It is a valuable tool for a wide variety of students, as it increases memory and recall by encoding information in ways that make retrieval easier.

Moreover, a mnemonic, the memory aid is pronounced "ne-mo-nik". The term "Mnemonic" is derived from the Greek word "Mnemosyne" (memory "remembrance"), which means "Goddess of Memory." Mnemonic is a tool for remembering knowledge that is difficult to recall back, whether it is short, presupposition with objects, or "linking" (remembering items through association with something else). When using a mnemonic, the imagination association and place are the fundamental concepts to remember. These principles can be used to create a strong mnemonically scheme by incorporating them (Simanjuntak, 2017).

3.2. Types of Mnemonic

A mnemonic device is a technique, which aids the memory. Words are linked in memory by associating the visual images related to these words. Mnemonic devices or systematic memory-enhancing techniques comprise an extremely potent and versatile class of associative-learning

strategies and the basics for many mnemonics is the linking together of pairs of words in memory. Furthermore, three components are involved in the operation of these mnemonic techniques. They are (1) the use of memorized pegs to which new information can be added in memory, (2) visual imagery, and (3) replacement methods to make difficult-to-remember information, such as the spelling of abstract words, easier to remember (Battaglia, 1986).

3.2.1. Peg word Method

The Peg word method (PWM) is better for remembering ordered or numbered details, as it associates numbers from one to ten with easily pictured rhyming words (Milton,2008). Each item to be learned is paired with predetermined images correlated with specific numbers by the instructor or the learner. (PM) is suitable for recalling numerical data or materials that need to be remembered. A peg word method is a method of recalling numbers by transforming them into certain shapes that are identical to the numbers (Warseno and Kumorojati,2011 as cited in Simanjuntak,2017).

A peg word process is a way of connecting unrelated objects into easily memorized items that can be used as pegs or hooks (Thompson, 1987). Additionally, the peg-word scheme is a mnemonic technique that employs previously learned components. Merah-saga, panas-api, langit-bumi, and other components are formatted in pairs. The words are used to recall words with similar meanings, such as blood, lipstick, and hell. It is was the first strategy supported in the research (Mastropieri,et al, 1997,as cited in Kleinheksel,2005).Peg word method is used to memorize words by using simple rhyme such as:

One is a ben	Sixe is a shticks
Two is a shoe	Seven is a heaven
Three is tree	Eight is a gate
Four is a door	Nine is a pine
Five is a hive	Ten is a hen

Figure 3. An example of peg word strategy (Sirgear, 2016, p. 17).

3.2.2. Keyword Method

According to Battaglia (1986), the keyword Method is a two-step method for recalling materials with an associative aspect. An unknown stimulus term is converted into a "keyword," which is a common word that is acoustically close to the stimulus and easily pictured, during the first stage (the acoustical stage), the student or the instructor creates a familiar, acoustically equivalent proxy for the new term. For example, first, the student chooses or is given a concrete word (key word) that is similar to the stimulus word. A visual image is generated during the second

stage (the imagery connection stage) in which the keyword proxy for the original stimulus and the to-be-associated information interact. The student creates or is given an image of the key word interacting with the appropriate definition or answer; they then builds an immersive image in which the main word and its definition are combined. In the third level, students are instructed to think of the key word first, then the image that contains the key word.

Likewise, Sirgear (2016) indicated that the key word approach refers to a multi-step procedure for bridging the void between what one already knows from prior experience and the new information. It is essentially a mnemonic that incorporates verbal and visual imagery. In addition, the key word method, as most mnemonics, is most necessary and effective when the student does not have sufficient background knowledge or a schema to which the new material that can be linked. In such instance, the key word strategy allows the creation of a meaningful proxy that indirectly ties the stimulus (e.g a word) with the response (Scruggs & Mastropieri, 1990 as cited in Milton, 2008).

3.2.3. The method of Loci

According to Siregar (2016) the method of loci derives from Simonides'use of location to recall information. It means that the students can memorize information by associating it with a location. For example, students could use this approach by visualizing some items they need to remember in a location that they are familiar with . Since the loci method organizes knowledge by having a ready-made layout, the mnemonics must have pre-memorized the images of a series of locations. One student tries to memorize United States president; therefore, s\he images one president and one place. As the following example:

Abraham Lincoln – sitting on the sofa.
George Washington–looking out the window.
Jefferson–turning the television.
Theodore Roosevelt–sitting in the armchair.

Figure 4.**An example of Loci approach (Siregar, 2016, p18) .**

3.2.4. The Link Method

The link method connects elements by using visual images. Objects are connected to each other instead of being linked to a well-learned framework. For instance, to remember our shopping list of bread, apples, beans, and bananas, one might imagine the bread communicating in some way with the apples, then another image of apples and beans, and yet another image of beans and bananas brought together (McPherson, 2000). It is also known as the chaining process, and it is useful when objects need to be recalled in sequential order. According to Milton (2008), in the visual variant of chaining, the learner generates a visual image that connects the first and second words in the sequence, then another image to connect the second and third, and so on.

Accordingly, Milton (2008) presented the case of the participant, which were prepared to remember up to 15 words from a list by consolidating each successive thing into a story that the learner makes. The accentuation is on making basic stories with interrelated sentences, and syntactic and semantic mistakes are overlooked. After the story is reviewed, learner usually has no trouble recognizing the jolt words from words utilized to make the story (Bellezza, 1981).

3.2.5. First letter method

The First Letter method is a memory training technique in which you make a word or phrase out of the first letter of each word in a list of words you want to recall .It is probably the most widely used mnemonic. This reflects the popularity of particular mnemonics, rather than its wide use as a strategy. There are two types of first-letter mnemonic: Acrostics, in which the initial letters are used as the initial letters of other words to form a meaningful expression, such as Every Good Boy Deserves Fruit for the notes on the lines of the treble staff , and acronyms, in which the initial letters form a meaningful word, such as FACE for the notes in the spaces of the treble staff (McPherson,2000).

Moreover, Teachers and students are familiar with this process, which includes acrostics and acronyms, uses first-letter cuing, and is useful when it is important to remember previously learned material in the correct form (Wilson, 1987 as cited in Milton, 2008). Students remember the acronym and then recall the items on the list using the letters of the acronym. Acronyms and tale acrostics are two ways to use the first-letter form. Acronym is the first letters in a series of terms are used to shape a word. Story acrostics, on the other hand, use the first letter of each word in a list to create terms that tell a story (Sirgear, 2016).

Milton (2008) provides a very useful framework that will help students understand how to use the First Letter Approach and how it works. The acronym (HOMES) for well-worms can help you remember the names of the Great Lakes. He also claims that if acronyms are not possible to come up with, an acrostic could be possible. The colors of the rainbow, for example, can be recalled using an acrostic.

3.3. Brief History of Mnemonics

Mnemonics have been used in schools for over 250 years, dating back to the days of the ancient Greeks (Milton, 2008). This concept of memory enhancement techniques (mnemonics) in language learning and teaching revived both theoretical and empirical studies over 20 years ago, but there is no general agreement about to what extant teaching mnemonics might increase students' reading comprehension (Fasih,2017 as cited in Khechai, 2019).

The history of mnemonics was subdivided between a number of scholars. Starting by the poet Simonides, in which he had created the first system of memory aides in 477bc.In addition, the rhetorica is the oldest surviving Latin book on rhetoric dating from 90 BC. This book focused on the problem of how the Romans viewed memory aids and discussed how people wished to enhance their memory. After the fall of the Roman Empire, in the 13th century, Thomas valued soul and memory aids began to be applied in classroom of younger students. Ignatius of Loyola wrote the work about the application of all the five senses when developing memory in order to increase longevity of the memory. Simultaneously, the peg method was introduced (where a given set of images are associated with several members, these images serve as pegs). Mnemonics resurfaces as an area in psychology in the late nineteenth century (Khechai, 2019).

3.4. Properties of Effective Mnemonics

Mnemonics are classified into two groups. There are solely verbal mnemonics, purely visual mnemonics, imagery mnemonics, and mnemonics that combine both verbal and visual imagery skills in both schools. According to Hauptmann (2004), powerful mnemonics have many concepts or properties, including:

3.4.1. Free mnemonics

The class of free mnemonics that does not require any prior planning since they are self-contained or unrestricted, and they are often referred to as "naive mnemonics."

3.4.2. Bound mnemonics

The second class of mnemonics is known as bound mnemonics (BM), and it is considered more efficient than the first. The bound M necessitates the user's or practitioner's participation in the memorization phase. The name comes from the fact that they depend on an intermediate code and/or sequencing, and they are often known as "scientific methods."The principles of recoding, relating, and recalling are at the core of modern mnemonic techniques (Mastropieri& Scruggs, 1991 as cited in Khechai, 2019).

a. Recoding: to handle knowledge in a more conceivable manner, a method of concretizing or, in the case of large amounts of data, simplifying it

b. Relating: to combine two or more pieces of information in order to recall one piece of information by recalling the other (association and elaboration).

c. Retrieving: This is a mechanism for remembering things. This may be accomplished by using recoding and relating. As a result, the relationship of the first two concepts, as well as their power, determines the effectiveness of mnemonic learning.

3.4.3. Elaboration

Elaboration or links, the third principle, is the extension of extra significance to the material to be understood. One of the benefits of mnemonics in general, and the keyword form in particular,

according to Mcpherson (2000), is elaboration. Memory's fundamental elaboration technique, according to Seel (2000), is critical to its efficacy. We must elaborate information in order for it to be stored in long-term memory. Elaboration is better understood as a mechanism that establishes relations either between the material to be learned or between the material to be learned and other information we already know. The more connections a piece of information has, the more inclined we are to recall it. An elaborated memory can be compared to a satchel with many handles; the more handles it has, the better it is to grasp.

3.4.4. Interaction

The fourth principle is interaction, which is a core component of keyword strategies. It is the method of connecting a keyword and a target word by some kind of interaction, even though it is not logical or normal (Speter, 1989 as cited in Khechai, 2019). Bower (1972, as cited in Khechai, 2019) had an experimental group associate the image of two terms with touch, while the control group had to shape the image independently, with the experimental group doing 54 percent better than the control group's 46 percent.

3.4.5. Concrete vs Abstract

Abstract terms are disconnected from experience, conceptually, generalized, just thought, and vivid, whereas concreteness is true, sensually, measurable, and empirical (Hauptamnn, 2004). Concrete words like apple, bicycle, book, horse, etc., according to Hibgee (1977), are simpler to imagine than abstract words like nourishment, liberty, peace, and happiness. As a result, concreteness is characterized by the ease with which a conceptual representation of the term can be created.

Conclusion

To summarize, the aim of this chapter is to demonstrate the impact of mnemonics on spelling accuracy. The researcher explains how mnemonic teaching (MI) can help students remember things and how important it is in EFL classes, where it might be distinct from other methods for learning spelling. An appealing method encourages students to use their prior experience to gain a thorough understanding of new spellings in the text. As a result, students will be able to remember the new vocabulary and become more acquainted with them.

Chapter Three
Fieldwork and Data Analysis

Introduction

The present chapter is the practical part of this study, in which the hypothesis that aims to explore the impact of Mnemonics in Enhancing EFL learners' Spelling accuracy is tested. In other words, the focus of this study is to see to what extent mnemonics could help learners overcome their spelling difficulties and enhance it. For the research tools used in this study, a questionnaire was prepared for learners and for teachers an interview has been conducted in order to collect data about their opinions and attitude towards this issue. Thus, through the findings and results obtained, the questions will be tested and answered .This research' main aim is to prove how mnemonics as a teaching and learning method tool can help learners improve their spelling accuracy, As well as investigate the difficulties, which make them commit spelling errors.

1. Sample and Population

The population of the current investigation consists of First year LMD learners at Mohamed Khider University of Biskra, Algeria. This population is specifically chosen for the main reason that first year learners are at the beginning of their learning process. They are considered as novice learners compared to other levels, second and third year LMD, which makes it possible for the researcher to carry out this study.

1.1 Sample

For learners: the sample was one group which consists of (50) learners but because of the limited time and the absence of some learners the researcher limited the number to be just (40) learners who answered the questionnaire in order to have valid data.

For teachers : they were selected from teachers of English language at Mouhamed Kheider University of Biskra .The researcher interviewed (n=6) volunteer teachers who were chosen because some of them are familiar with writing module, and in turn they would be more familiar with learners' spelling difficulties.

2.   Research Methodology

This study is conducted based on the Qualitative method approach which is selected based on the type and nature of research, which is Exploring the impact of Mnemonics in Enhancing EFL learners' Spelling accuracy. This approach helps us to get more detailed and credible responses; also, it gives the chance to know teachers' and learners' attitudes towards using mnemonics to develop learners' performance in spelling.

3.   Description of Research Tools

3.1 Description of Teachers' interview and learners' Questionnaire

This research relies on two data collection tools: A questionnaire and an interview. One semi-structured questionnaire has been designed for a sample of first year LMD learners of English at Biskra University, academic year 2020-2021. On the other hand, a semi- structured interview has been conducted with a sample of six (06) EFL teachers (mostly written expression teachers) at Mohamed Kheider University. The analysis of the collected data would aim at determining the elements that will provide the basis for the development of spelling accuracy through mnemonic devices.

Most learners' questionnaires were handed directly on the 20th of April as well as posted in the First year learners of English language at Mouhamed Kheider University of Biskra online

group. It contains 19 questions and the teachers' interview contain 11 questions .the technique of close- ended questions was mainly used because teachers were restricted with time. In short, there are three types of questions used:

1/ Close -ended Questions: which are widely used in the questionnaire and interview, They are inquiries in which respondents are given a list of options from which to pick. In addition to this, the researcher has utilized clarification questions such as "justify your response." This type of questions helps obtaining clear and complete responses to open questions so that, the number of ambiguous responses is reduced. The questions are divided into three sections: section one about personal information, second section about the spelling skill and the third section is about mnemonics.

2/Open-ended Questions: They are questions that allowed learners and teachers to answer in their own words. The aim of using this type of question is to determine the responders' opinions towards the subject of the study.

3/Factual Questions: This type of questions are used to gain background information of the participants such as the teachers' work experience, the learners 'years of FLL.

4. Evaluation and Interpretation of Results

4.1 Teachers' Interview

The under-investigated study interview was designed for EFL teachers at the University of Biskra. It was used to collect data (feedback) from their opinions and attitudes towards the impact of Mnemonics in Enhancing EFL Students' Spelling accuracy. It was designed as a semi-structured

interview administered to six (n=6) teachers of English division at Biskra University and they were

conducted face-to-face with the concerned participants.

4.2 Data Analysis of Teachers' Interview

Item 1. What degree do you currently hold?

Table 1. **Teachers' degree**

Option	Participants	Percentage
a) PHD (Doctorate)	4	70%
b) MA (Master/Magister)	2	30%
Total	**6**	**100%**

Since they have a PHD and a Magister, the majority of our interviewees (4 instructors) are

highly experienced. This allows us to regard their responses and ideas as extremely reliable to our

study since it allows us to collect data from teachers with varying degrees of expertise.

Item 2. How many years have you been teaching written Expression?

Table 2. Teachers' experience in teaching Written Expression

Option	Participants	Percentage
a) More than 6 years	4	70%
b) Less than 6 years	2	30%
Total	**6**	**100%**

Teachers' comments suggest that they have diverse EFL teaching experiences in the written expression course, and the majority of them are experienced teachers who know how to cope with student spelling' errors. Two teachers (n=2) have fewer than six years of experience teaching, whereas four other teachers (n=4) have more than six years of experience. The researcher benefits from the diversity of teachers' periods of EFL teaching at university since it ensures that the following responses will come from teachers with a range of experiences teaching EFL at university level.

Item 3. How would you evaluate your learners' Spelling proficiency?

Table 3. Teachers' evaluation of their learners' Spelling proficiency

Option	Participants	Percentage
a)Outstanding	0	0%
c) Good	2	30%
d) Average	1	20%
e) Poor	3	50%
Total	**6**	**100%**

Figure 5. Teachers' evaluation of their learners' spelling proficiency

This question examines the teachers' evaluation of their learners' spelling proficiency. It aims at knowing whether learners are able to conduct correct terms in English. According to Table 3. We notice that the majority of teachers (50%) evaluated their learners' level as poor. Teachers have noted that EFL learners make spelling mistakes and errors for a variety of reasons, the most important of which being that they are primarily studying a foreign language and so are not expected to be proficient in all elements of the language. On the other hand, (30%) of them agreed that their learners' spelling proficiency is good and clarified that, despite EFL learners' lack of spelling accuracy, their mistakes and errors are to be expected as novice language learners because even native speakers make mistakes, so EFL learners simply need to improve their spelling skill appropriately.

Item 4. What does "spelling ability," mean to you as a foreign language teacher?

For this question, teachers were asked what are their thoughts and ideas about spelling. Their responses were as follow:

Teacher 1: Spelling is the ability to put letters together in the proper sequence to form words that are widely understood.

Teacher 2: It is a key element in an EFL classroom to ensure the appropriate spelling proficiency learning, the latter, which is one of the ultimate goals of learning a foreign language. It is the correct forming of words by selecting letters together and it is an important aspect of foreign language learning as incorrect spelled words lead to false interpretations.

Teacher 3: Spelling ability is the ability of learners to write correctly without making mistakes.

Teacher 4: In our context, which is the level of university, spelling accuracy is very important. It represents the degree of mastery of language from the part of the learner.

Teacher 5: Spelling ability is the ability to write correctly considering words in isolation as well as in the context of the sentence and the paragraph.

Teacher 6: Spelling ability or Spelling skill is an important skill that learners need to master to read well and to write well without spelling ability learners' progress in EFL will be lacking and unsatisfactory.

Through the answers given, the respondents view spelling ability as a key element, and they explained this by arguing that spelling ability plays a significant role in FLL since it helps learners to be accurately active and involved in the language . They added that spelling proficiency or spelling is the ability to put letters together in the correct order to make commonly recognized

words. In other words, the accurate formation of terms in the language that are widely known and fixed.

Item 5. Do you encourage your learners to learn spelling outside the classroom?

Table 4. Teacher' encouragement your learners to learn spelling outside the classroom?

Option	participants	Percentage
a) Yes	4	70%
b) No	2	30%
Total	**6**	**100%**
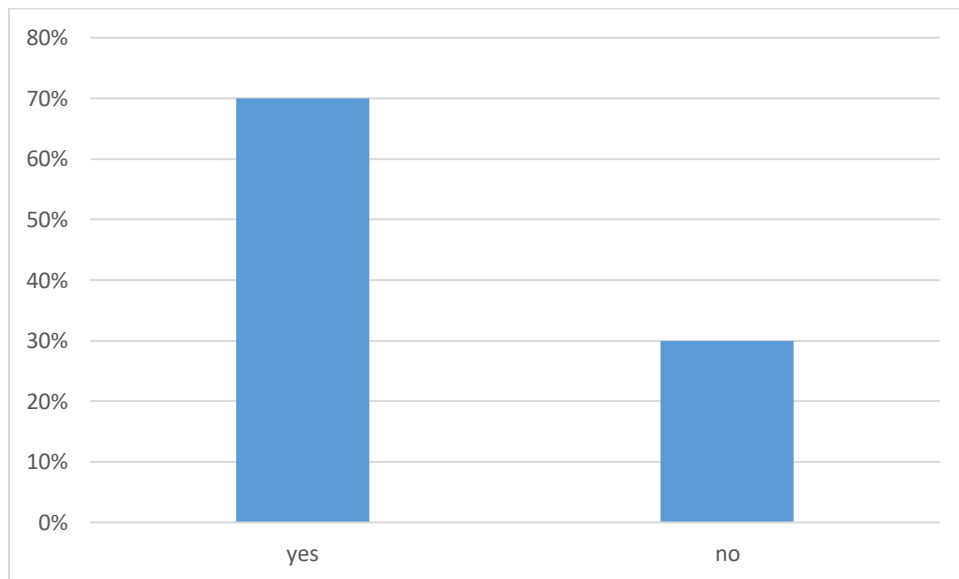
Figure 6. Teacher' encouragement four students to learn spelling outside the classroom.

For this question, teachers were asked whether they provide their learners with ways and methods to learn spelling on their own. (70%) of them stated that they provide them with some

documents about spelling ,advise them to practice extensive spelling , ask them to read because this will influence their overall language quality especially spelling accuracy, teachers sometimes suggest "titles" or even give them pdf versions about learning spelling ; so that they can develop their skill. In the other hand, (30%)of them said that although they have not requested learners to learn spelling directly they have however encourage them to read and write which in turn can improve their spelling accuracy .

   Item 6. What do you think of having good reading skill?
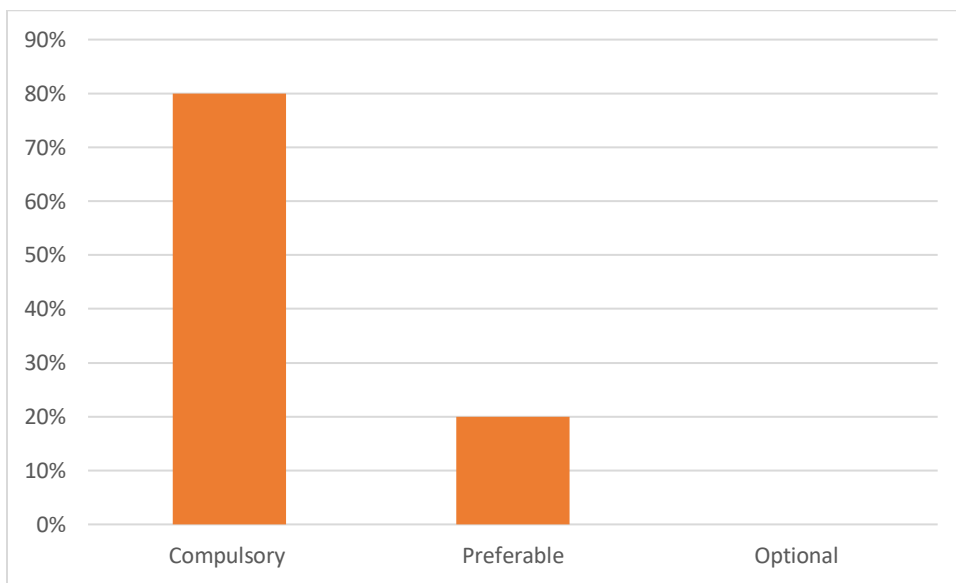
Figure 7. Teachers' thoughts on having good reading skill

Through this question, the aim is to explore teachers 'opinions of having good reading skill. As it is shown in the table the highest percentage, (**80%)** agreed that having good reading skills is compulsory, whereas just (**20%)** agreed that it is preferable and none of them responded to optional. All teachers further explained that having a good reading skill is essential because when learners read they exercise and train their comprehension skills as well as their analytical abilities .Reading Stimulates the memory, which in turn help learners in storing and recalling information.

46

All teachers agreeing on this show that reading skill is very important and essential for learners in their language learning process.

Item 7. From your experience as a teacher of English language, do you think that there is a relationship between reading and EFL learner' spelling proficiency? And what kind of relationship exists between them?
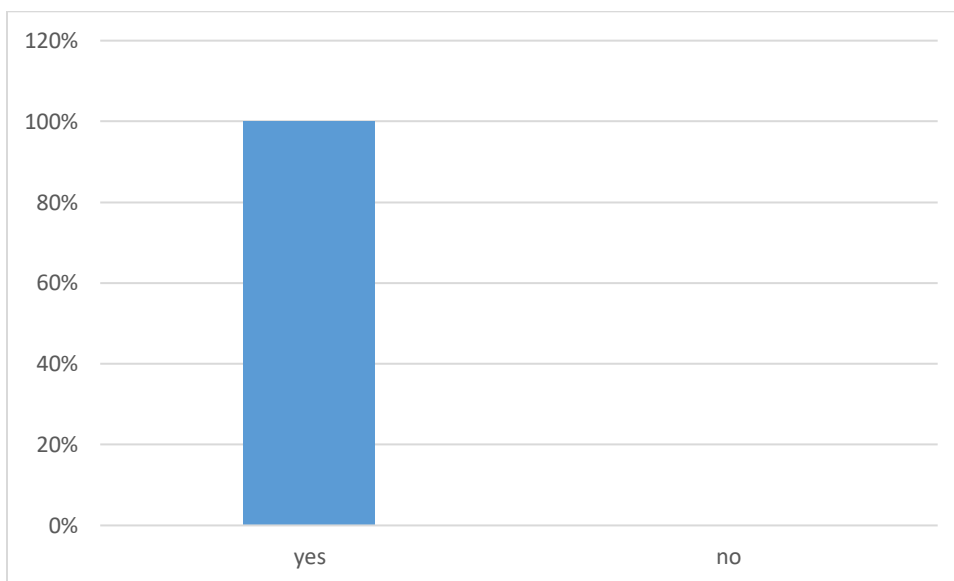
Figure 8. The relationship between reading and learners' spelling proficiency from teachers' perspective.

All teachers 100% agreed that there is a strong relationship between reading and learners 'spelling proficiency. This clearly shows the importance of reading in enhancing learners' level.

Justifications according to teachers:

- There is a strong relationship as reading enables students to develop many aspects of the language including vocabulary, grammar and writing in general as well as spelling ability. This enables him/her to develop even his or her own style leading to proficiency not only in spelling accuracy but in the four skills as well.

- The more learners read, the better their spelling skills get.

- Reading is believed to help develop learners' language proficiency in general and spelling accuracy in no exception. If they read, their English spelling proficiency will be better.

- Learners must master the four skills in order to be able to communicate in a foreign language. As a result, reading is necessary for them to improve their spelling accuracy.

Item 8. Do you teach your learners spelling accuracy strategies?
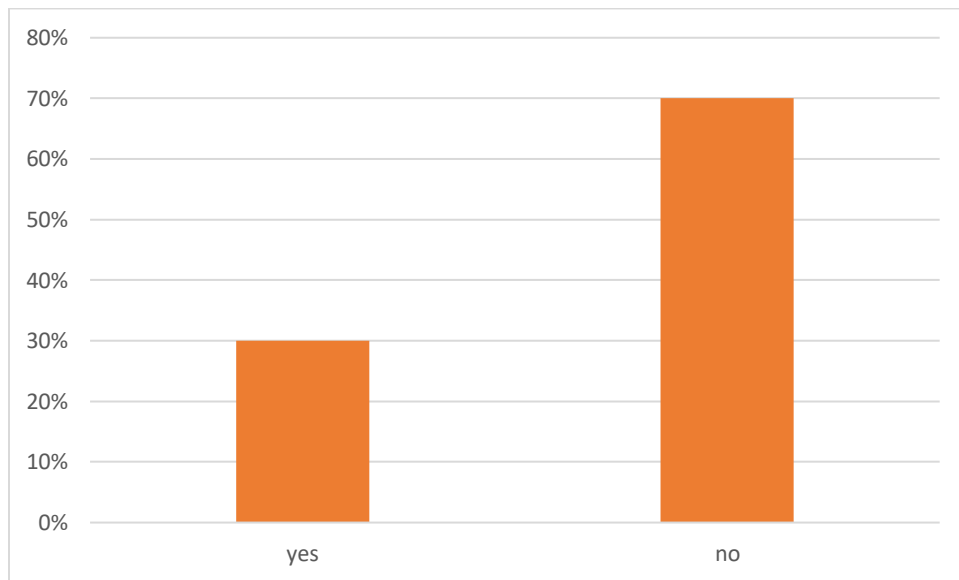
Figure 9. Teachers' teaching of spelling accuracy strategies

Only 30% agreed that they do teach their learners spelling accuracy strategies as seen in the figure; and 70% of teachers stated that they have not taught their learners spelling strategies directly as any other language skill .They were presented however, in other skills lessons as in reading and writing. Which means that spelling ability is not given much focus as the other language skills as it should be.

Item 9. What kind of difficulties do your learners face most in spelling? You may choose more than one option.

Table 5. Kinds of learners' spelling difficulties according to teachers.

Option	Participants	Percentage
1-Not being able to connect background Knowledge of terms with new one.	0	0%
2-Not being able to understand lengthy complex words.	0	0%
3-Not being able to recognize and memorize new terms.	0	0%
4-Not being able to recognize the types of words	0	0%
5-Lack of concentration.	0	0%
All of them	2	30%
1+2	1	20%
3+4+5	2	30%
1+2+4	1	20%
Total	**6**	**100%**
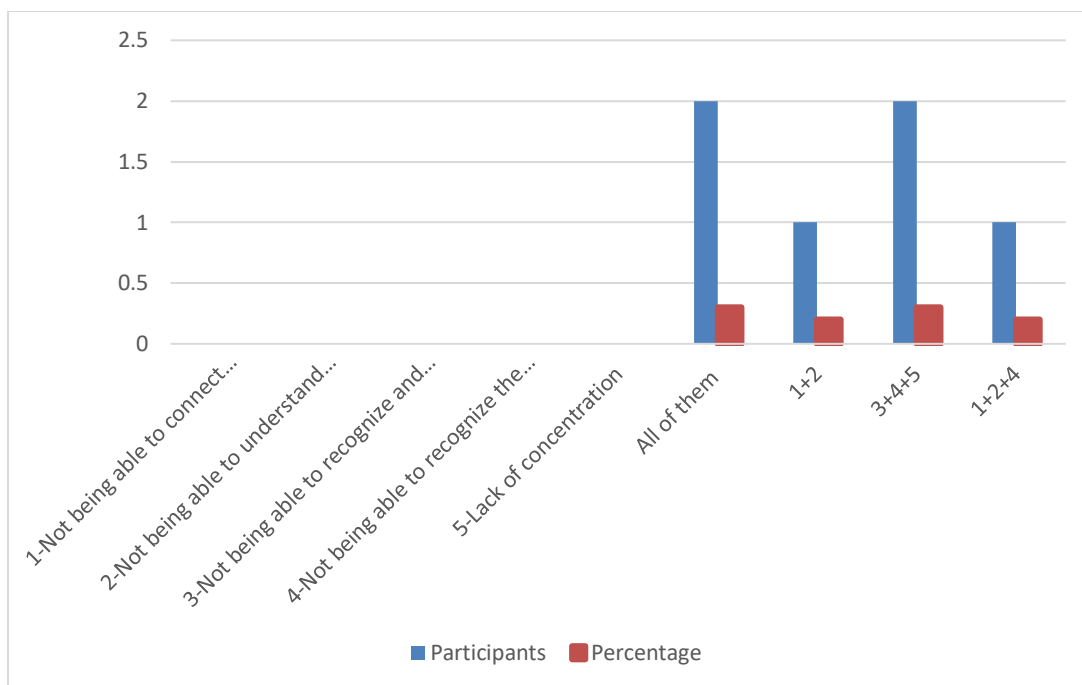
Figure 10. Kinds of learners' spelling difficulties according to teachers

As seen in table 5, we supply teachers with some difficulties that students may face, and we asked them to choose the most occurring problem. The highest percentage was for (All of them) and (3+4+5) (30%). However, the rest of the choices were equal 20% see Figure 6. We can notice that the most occurring problems according to teachers are 1, 2, and 4 (Not being able to connect background Knowledge of terms with new one, Not being able to understand lengthy complex words, and Not being able to recognize the types of words). Others included Lack of concentration (focus more on perfecting other aspects such as vocabulary, grammar, etc).Furthermore, they are not equipped with the pre-requisite spelling strategies and techniques. According to teachers 'responses and explanation, learners have a variety of issues and obstacles they need to overcome in their spelling proficiency learning. All in which have to do with their memory abilities and strategies they use to memorize the accurate form of words. They are either enable to preserve the

stored form of words in their memories or they are unable of reproducing the knowledge they have stored.

Item 10. How do you consider the role of memory strategies in the process of learning spelling accuracy?
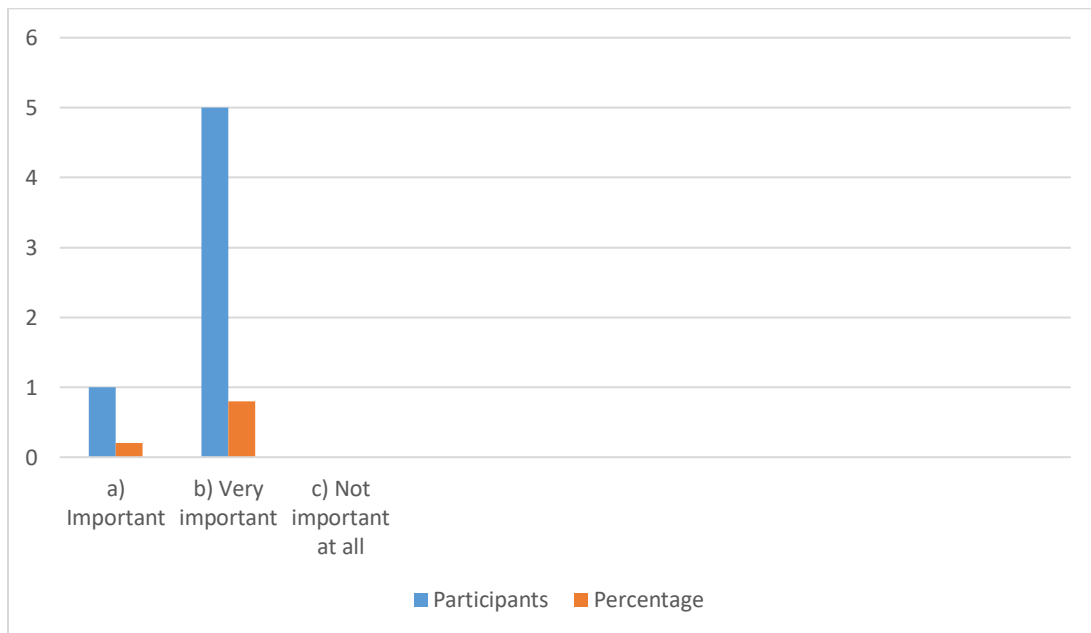
Figure 11. Teachers views about the role of memory strategies in the process of learning spelling accuracy.

This question aims to determine the role of memory strategies in the process of learning spelling accuracy. According to (80%) of the teachers, memory strategies are very important for students to develop their spelling proficiency and (20%) consider them important see Figure 7. Teachers are aware of (Mnemonics) memory strategies' importance in enhancing learners 'spelling accuracy, as a result they should give importance to introducing these strategies to learners as well as the application of them so learners can apply and rely on them in their spelling accuracy learning process.

Item 11. Which memory strategy do you use to help your students overcome their spelling difficulties?
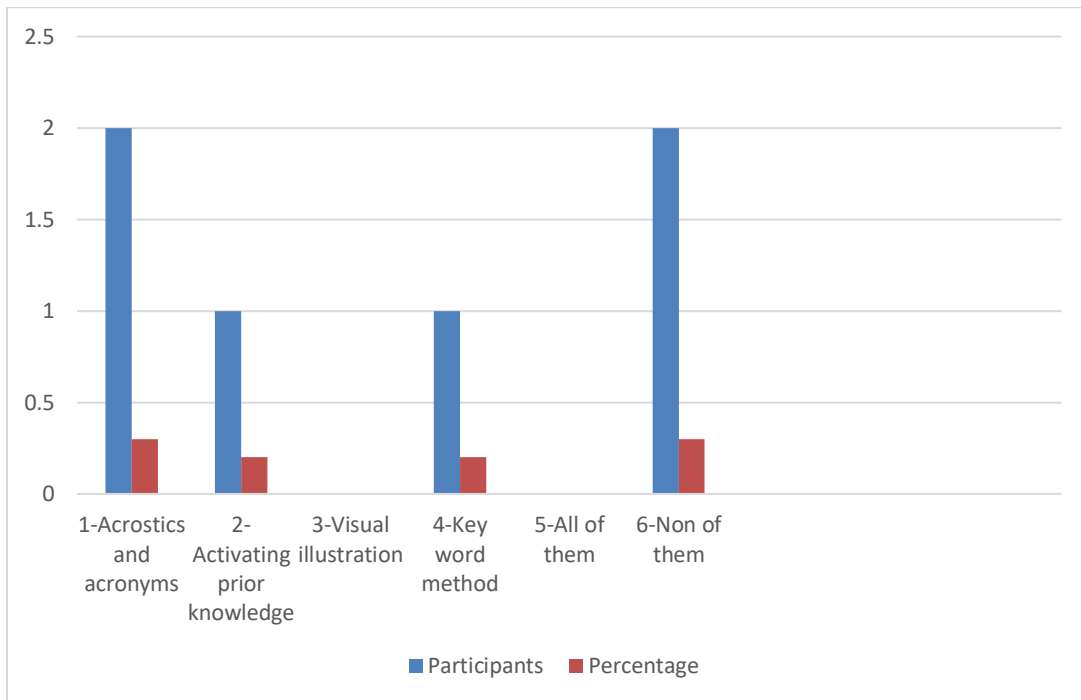
Figure 12. Memory strategies teachers use to help learners overcome their spelling difficulties.

This question aims to discover which of these memory strategies could help students to overcome their spelling difficulties. As table 6 shows, (30%) of the teachers agreed on using acrostics and acronyms, (20%) used activating prior knowledge, (20%) used the key word method, and (30%) use non. The common strategy that teachers agreed to use is acrostics and acronyms. As a result, we consider that this agreement as confirmation of the importance of this strategy although spelling accuracy strategies are not applied as much.

Discussion of results

The obtained results from the teachers' interview revealed that teachers at Biskra University consider mnemonics or the memory aids as an appropriate way for developing EFL students' spelling accuracy since it gives more attention to their practice of spelling skills. Results have shown that teachers have different perceptions of their students' spelling proficiency. The majority of teachers (50%) evaluated their students' level as poor. This leads us to say that a great amount of learners are not yet able to understand the language spelling system and they need more practice in order to improve their spelling proficiency.

Furthermore, (30%) of teachers affirmed to give opportunities to their students to learn spelling in order to make them more proficient. They rely on different mnemonic activities and teaching strategies to motivate their learners. This indicates that teachers want their learners to be involved in the teaching learning process including spelling accuracy since it affects their wiring ability. Teachers' awareness about the importance of spelling proficiency and their responsibilities to promote it was clearly detected. (80%) of interviewees mainly related their learners' spelling difficulties to their inability to connect background Knowledge of terms with new one , the inability to recognize and memorize new terms, and Lack of concentration. This indicates that learners are not aware on how to overcome their spelling difficulties.

(50%) of teachers stated that they present their students with spelling learning strategies. Here again, this shows that the awareness about the importance of spelling proficiency is still insufficient to overcome learners 'spelling difficulties. However, Students will improve their spelling accuracy and lessen their spelling mistakes if they are asked to study more about spelling. To sum up, the analysis of the teachers' interview revealed much information about teachers'

perspectives towards the role of mnemonics and its importance in enhancing students' spelling accuracy level .Teachers have deemed mnemonics, or memory methods, to be extremely valuable and necessary in learning and enhancing students' spelling skills.

4.3. Analysis of learners' Questionnaire

Section One: General Information

Item.1. How long have you been learning English?

Table 6. Learners' period of learning English.

Option	Participants	Percentage
2-5 years	4	10%
6-8 years	27	67.5%
10 - or more years	9	22.5%
Total	**40**	**100%**
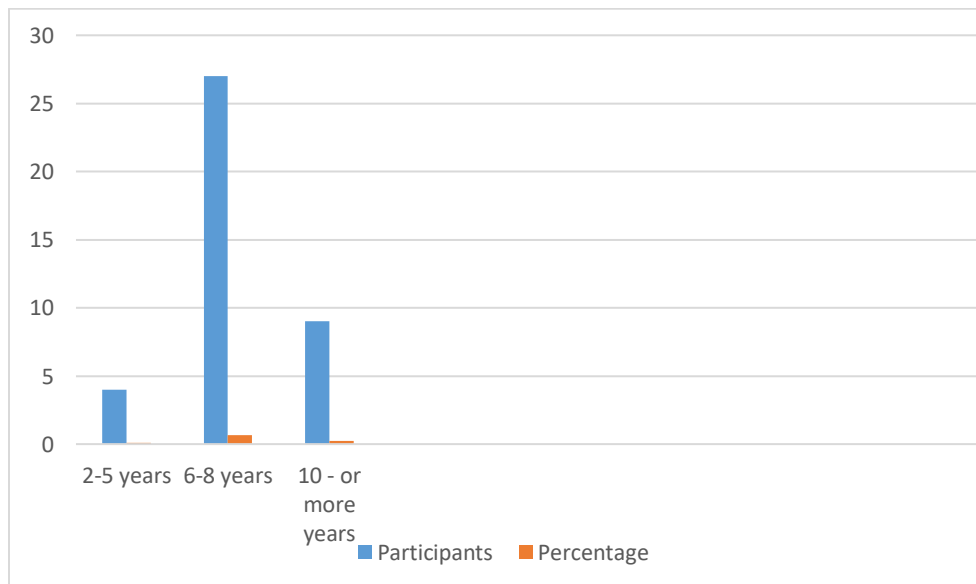
Figure 13. Learners' period of learning English.

The table shows that the majority 67.5% of the students have been studying the English language from 6 to 8 years. Yet, four students studied English language from 2 to 5 years 10%.and the rest which are nine 22.5% learners studied English for 10 - or more years. As a result, the majority of the learners have had enough experience in learning English language as described in figure 9.

Item.2. How did you find learning at university?
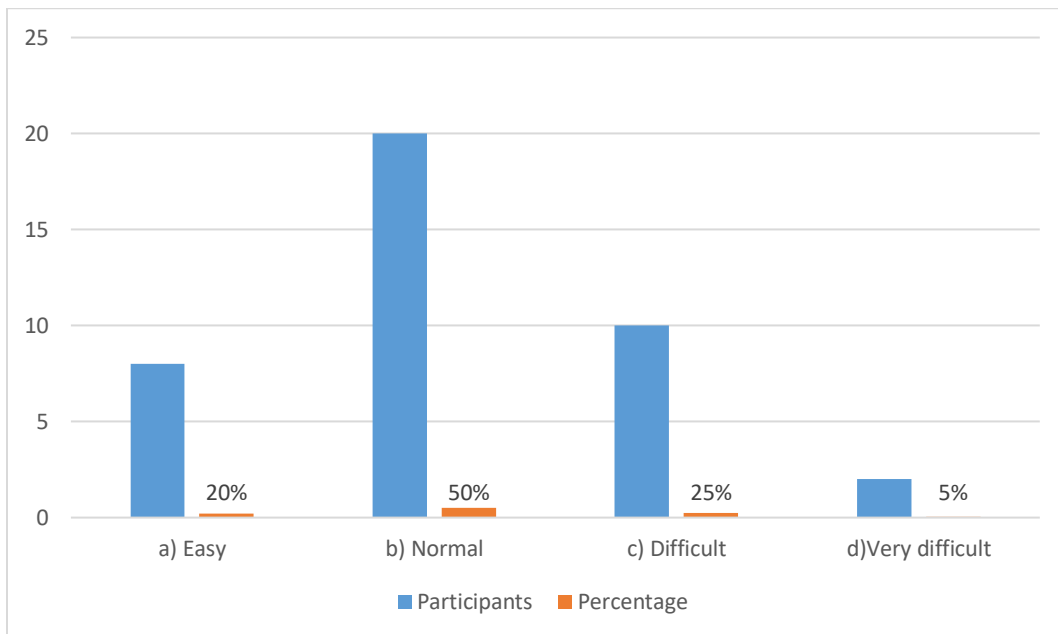
Figure 14. Students' evaluation of learning at University.

The purpose of this question is to assess students' attitudes regarding university study. Figure 10 shows that the majority of students (50%) believe university studying to be normal. However, 25% of students regarded studying at university to be difficult, while 20% found it to be easy. We can see that students in general find university studying challenging since various issues hinder them from taking pleasure in learning English at University.

Item.3. Did you find difficulties when learning at university. If yes, what kind of difficulties?

<p align="center">**Table 7. Learners' difficulties when learning at University.**</p>

Option	Participants	Percentage
a) Yes	29	72.5%
b) No	11	27.5%
Total	**40**	**100%**
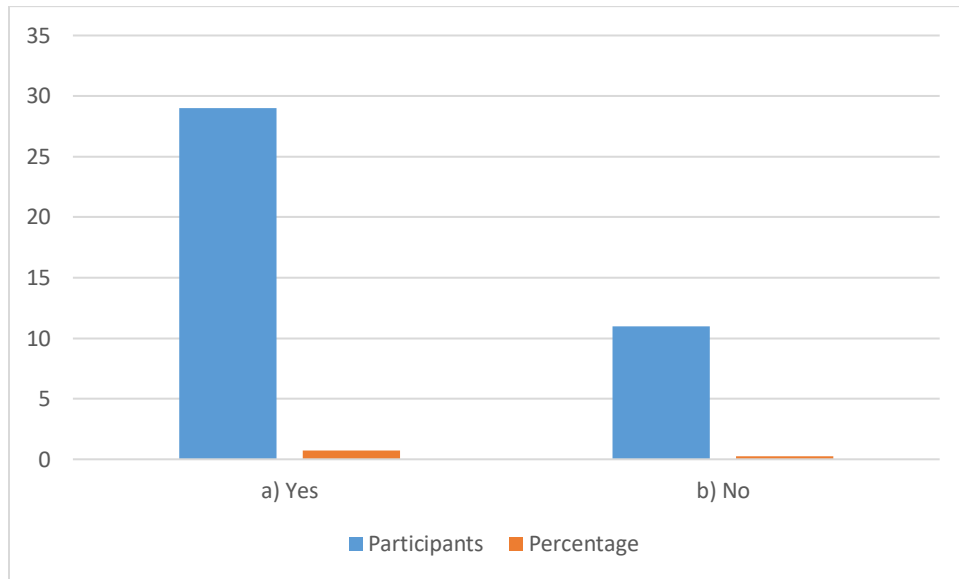
<p align="center">**Figure 15. Learners' difficulties when learning at University**.</p>

This question was provided to see if students had difficulty studying at university and the majority of the students' responses were positive (72.5%), with students agreeing that they had numerous challenges, as shown in figure11. However, just 27.5 percent disagreed, believing that university studying is not difficult. Learners continued to state the difficulties they face which are:

- Lack of vocabulary.

- Writing in general especially pronunciation and spelling mistakes.

- Difficult modules like civilization and linguistics.

- Oral presentations fear because of anxiety, shyness, and lack of motivation.

- Teachers 'treatment towards learners and their teaching methods.

Section Two: Spelling Difficulties.

Item.1. How do you find writing in English?

Table 8. Learners' thoughts towards writing in English.

Option	Participants	Percentage
a)Easy	11	27.5%
b)Difficult	20	50%
c)Very difficult	9	22.5%
Total	**40**	**100%**
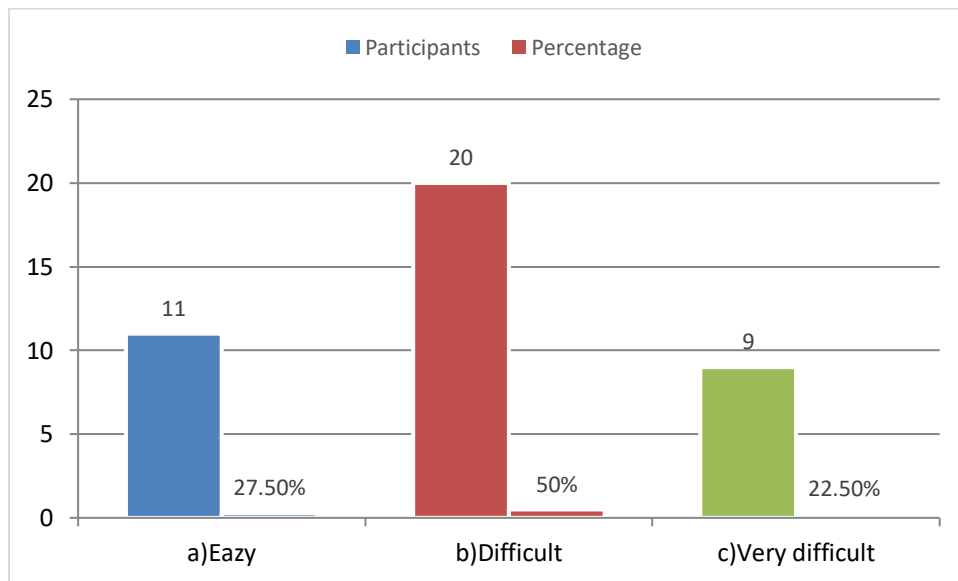
Figure 16. Learners' thoughts towards writing in English.

According to the findings, (27.5%) of respondents believe writing English to be a simple

endeavor, whereas (50%) perceive it to be difficult. These learners appear to lack sufficient grasp

of the nature and structure of the language, and as a result, they are more self-conscious about their abilities. Consequently, it would have a negative impact on their work. For the remaining of the sample (22.5%), it is too difficult to write the language. This reveals that these learners have difficulties in producing the language or they lack self-confidence.

Item.2. How well do you think you do as a speller?

Table 9. Learners' evaluation of their spelling level.

Option	Participants	Percentage
a)Very well	1	3%
b)Well	9	22.5%
c)Average	19	47.5%
d)Poorly	8	20%
e)Very poorly	3	7.5%
Total	**40**	**100%**
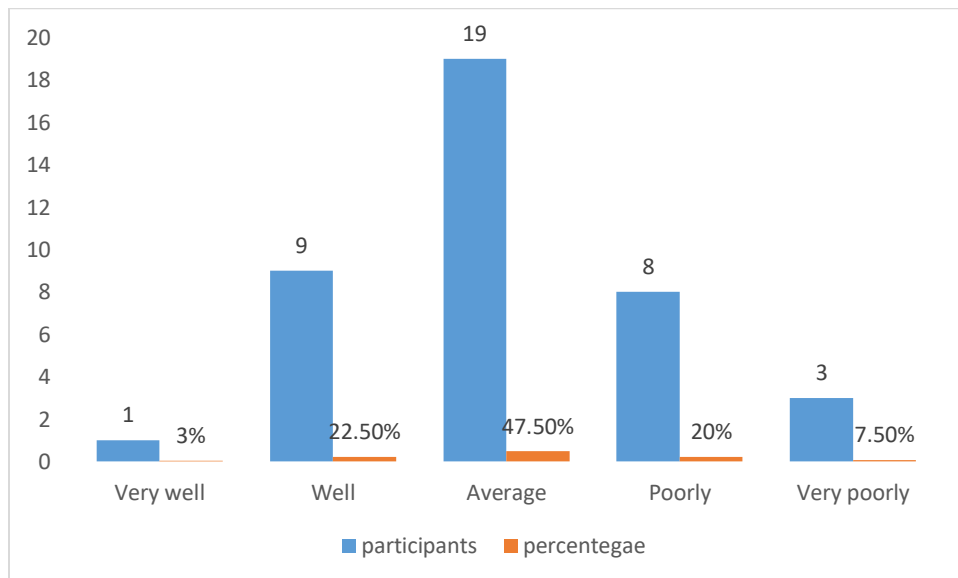
Figure 17. Learners' evaluation of their spelling level.

Learners are requested to evaluate their level in spelling .As it is shown in figure13. Nineteen learners (47.50%) stated their level in spelling is average. Nine of the participants said they do well in spelling. In the other hand eight participants reported, they do poorly in spelling. We can deduce that most learners either are aware of their spelling deficiencies because they know they have difficulties in producing the language or they are satisfied with their level in spelling skill.

Item.3. Do you have any Spelling difficulties? If yes what kind of difficulty?

Table 10. Learners' spelling difficulties.

Option	Participants	Percentage
a)Yes	28	70%
b)No	12	12%
Total	**40**	**100**%
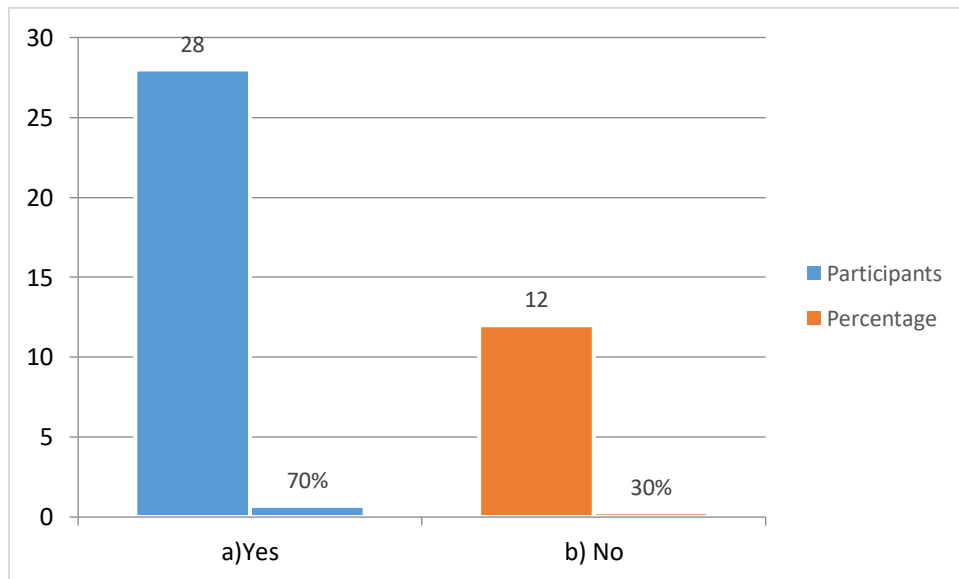
Figure 18. Learners' spelling difficulties.

The goal here is to determine whether learners have spelling difficulties or they do not, and as indicated in Figure 14, the majority of students (70%) do. Learners have also reported that the following are the primary challenges they experience when it comes to spelling:

- Spelling words as they are pronounced.

- Misspelling new, lengthy, simple, technical, and difficult words.

- Forgetting the spelling of verbs and pronouns.

- Lack of practice in writing which leads to constant spelling mistakes.

Item.4. To overcome your spelling difficulties, you:

Table 11. Learners' ways to overcoming spelling difficulties.

Option	Participants	Percentage
a) Read the word again.	2	5%
b) Ask for clarifications.	0	0%
c) Use your previous knowledge.	0	0
d) Use the dictionary.	0	0%
e) You do not have any difficulty.	8	20%
f) Others.	0	0%
a+d	5	12.5%
a+b+c	18	45%
c+d	7	17.5%
Total	**40**	**100%**
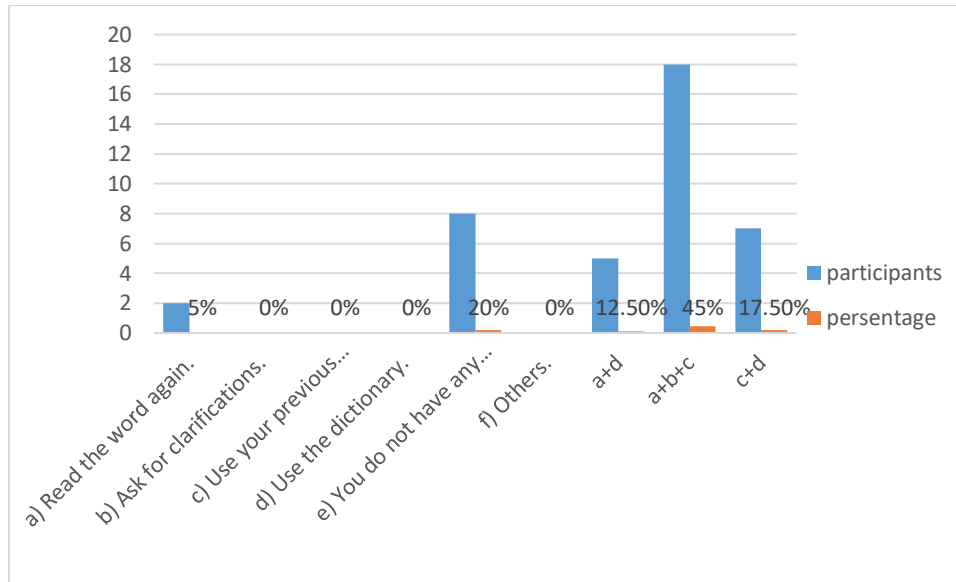
Figure 19. Learners' ways to overcoming spelling difficulties.

The purpose behind asking this question is to know what learners think is more helpful to improve their spelling accuracy. According to learners' answers, 18 (45%) prefer reading the world again, ask for clarification ,and rely on their previous knowledge of the term thinking that it is the most helpful way to improve their spelling mistakes; because it gives them the chance to gather their thoughts freely, learn from the mistakes they might make and had made before. In addition, it helps them interact because it pushes them to ask for assistance with either teachers, classmates, or dictionaries. (17.5%) prefer using their previous knowledge as well, and rely on the dictionary to determine the right spelling. In the other hand, eight participants stated that they do not have any spelling difficulties.

Item.5. Which of the following factors can be the main reason behind learners' spelling difficulties? You may choose more than one option.

Table 12. Factors behind learners' spelling difficulties.

Option	Participants	Percentage
a) Having poor reading and reading comprehension strategies.	0	0%
b) Having poor vocabulary	0	0%
c) Having poor background knowledge and false analogy	2	5%
d) Facing a difficulty in recalling previous knowledge of spellings.	1	2.5%
e) Learning in disorganized and noisy environments.	0	0%
f) Mother tongue interference	3	7.5%
g) Ignorance and Carelessness	2	5%
h) All of them	2	5%
i) Others	0	0%
a+b+d+g	16	40%
c+d+f	10	25%
e+f+g	4	10%
Total	**40**	**100%**

As table 9.show, the majority of participants (40%) believe that the major factors behind learners' spelling difficulties are having poor reading and reading comprehension strategies, having poor vocabulary, facing difficulties in recalling previous knowledge of spellings, and lastly ignorance and carelessness. Furthermore, (25%) stated that having poor background knowledge and false analogy ,facing a difficulty in recalling previous knowledge of spellings as well as mother tongue interference are the main causes for learners' spelling problems. 2 (5%) participants said that learners ' ignorance and carelessness leads them to spelling difficulties. While, 2(5%) other participants clarified that spelling difficulties arise not only from a couple of factors but all of the factors mentioned.

Item.6. To what extent do you think that spelling accuracy is important in EFL learning? Please specify

Table 13. Learners 'attitudes towards spelling accuracy.

Option	Participants	Percentage
a)Very important	25	62.5%
b)Important	14	35%
c)Neutral	1	2.5%
Total	**40**	**100%**
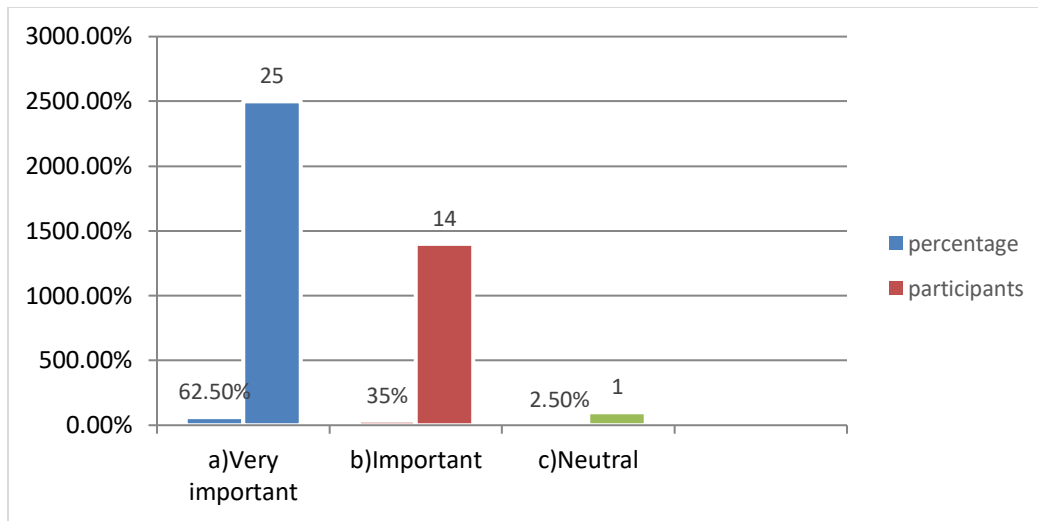
Figure 20. Learners 'attitudes towards spelling accuracy.

Figure 16 reveals that 62% of respondents regard spelling accuracy to be a very important quality, while 35% regard it to be significant. These students appear to be well versed in the nature and structure of the English language. They are more aware of their abilities and limitations. As a result, this would have a good impact on their learning process: they would know what to expect. Participants continued to justify their choices, here are some:

- Misspelled words are a sign to incomplete, lacking language learning.

- Accurate spelling is a main aspect of English language.

- It is important because spelling mistakes may lead to misunderstandings to what the speaker intends to say.

- Because learning how to avoid spelling mistakes or errors when writing paragraph, essay or any writing piece will provide full comprehension of learners 'written work.

- Because it helps to improve the writing skill.

Item.7. What tools/ sources do you use when learning spelling?

Table 14. Tools/sources learners use to learn spelling

Option	Participants	Percentage
a)Spell checker	8	20%
b)Dictionaries	10	25%
c)Web/Internet	15	37.5%
d)Books	7	17.5%
e)Others	0	0%
Total	**40**	**100**%
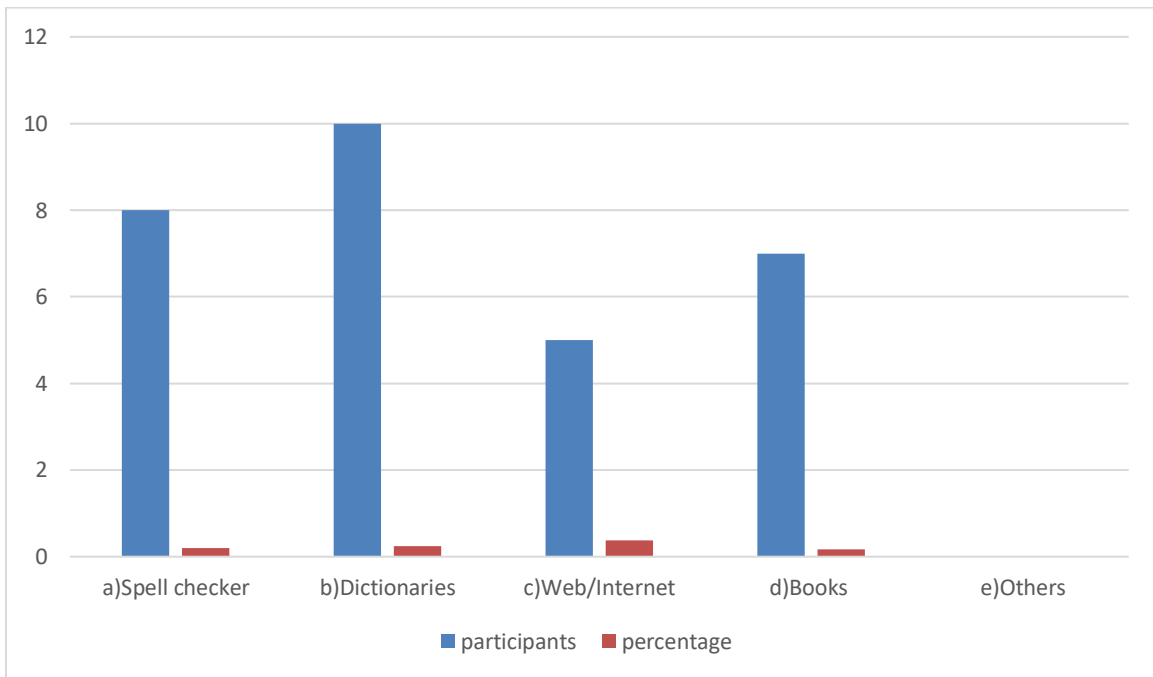
Figure 21. Tools/sources learners use to learn spelling.

This question is to discover what kind of materials and tools learners prefer to use to learn spelling. As shown by figure16. The majority of learners (37.5%) rely on the internet to develop their spelling accuracy. (15%) use dictionaries and (20%) use spell checker, while only (17.5%)

rely on books. This shows that learners can be resourceful in their learning process. They can have access to different materials and tools and apply them however they are capable of understanding

Section three: Mnemonics (memory strategies) usage:

Item.1. Did you use a mnemonic strategy before to learn English?

Table 15. Learners' use of mnemonic strategies.

Option	Participants	Percentage
a)Yes	9	22.5%
b)No	14	35%
c)Maybe	17	42.5%
Total	**40**	**100**%
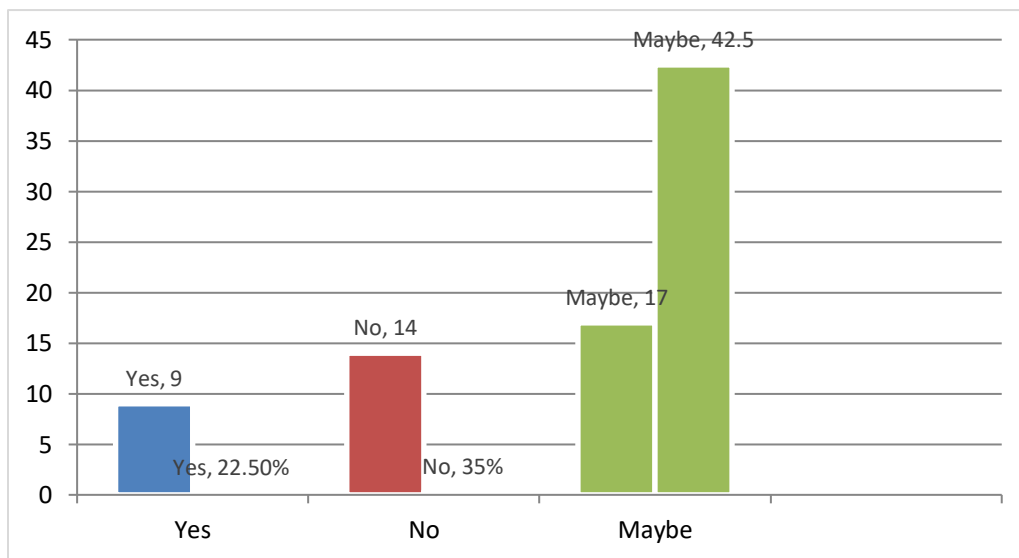
Figure 22. Learners' use of mnemonic strategies.

As presented in figure 17. The majority of participants (42.5%) stated that they are not sure whether they use mnemonic strategies or not, which ultimately show that participants are not aware of the tools and methods they use to learn spelling. (35%) answered with no, which means that

66

these participants have never used a mnemonic strategy and had never been introduced to It .For

the rest of participants (22.5%) the answer was yes, so they have been introduced to mnemonics

or the memory strategies and have used them in their learning process.

Item.2. How often do you use a mnemonic strategy to learn spelling? Please justify.

Table 16. The frequency of learners 'usage of a mnemonic strategy to learn spelling.

Option	Participants	Percentage
a)Always	2	5%
b)Often	16	40%
c)Rarely	13	32.5%
b)Never	9	22.5%
Total	**40**	**100%**
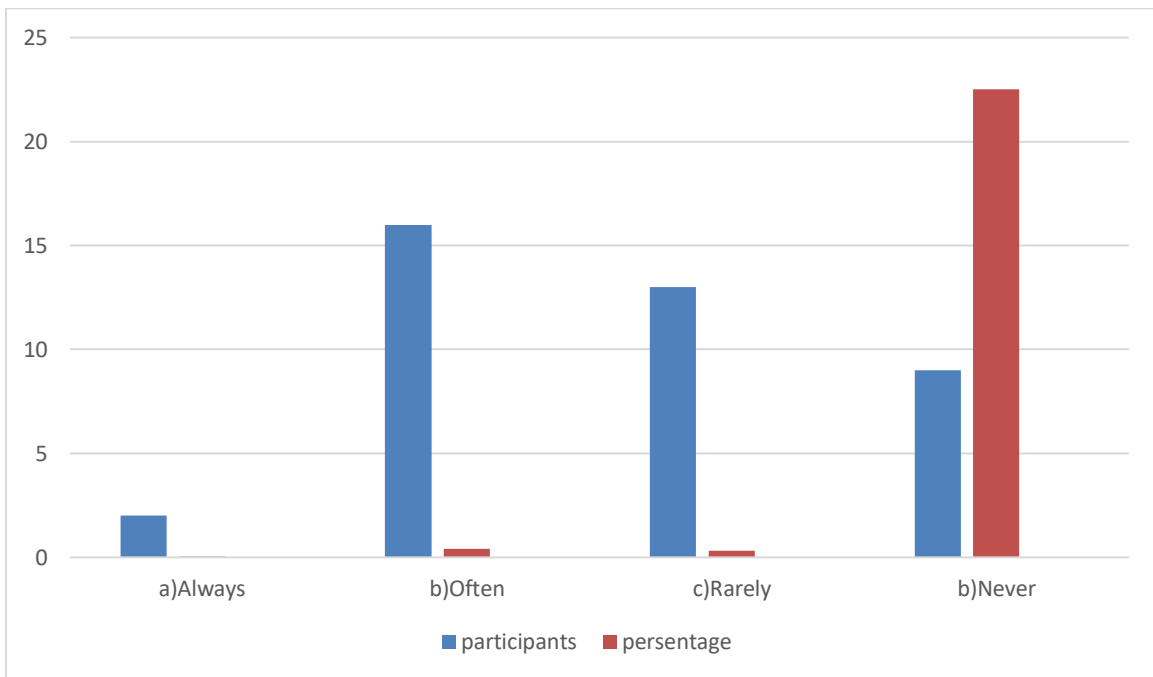
Figure 23. The frequency of using a mnemonic strategy to learn spelling.

This question is used to know if participants use mnemonics to learn and develop their spelling accuracy. As shown in figure 18. (40%) stated they use them often. Meanwhile,(32.5%) of the participants answered with rarely.(22.5%)stated they never used mnemonics and only one participant stated they always use memory strategies to learn spelling proficiency. Learners were asked to further explain their choices. Here are some of the justifications they mentioned:

- I am not familiar with mnemonic strategies.

- I use them to remember the spelling of words and their meaning.

- I use it rarely because of lack of time.

- It helps me memorize and facilitate some of my work especially during exams.

- Using mnemonic strategy supports me to memorize the spellings of words in short time, stimulate the cognitive abilities, and helps me to write with less mistakes and errors.

- I always link the new words I learn with songs or Rhythmic parts it make it easy to remember.

- Because i do not know much about them.

Item.3. Which memory strategy did you find helpful with your spelling difficulties?

Table 17. Memory strategies that learners find useful in dealing with their spelling challenges.

Option	Participants	Percentage
a)Key word method	0	0%
b)Visual illustration	6	15%
c)Activating prior knowledge	2	5%
d)Note taking	1	2.5%
e)All of them	7	17.5%

a+c	4	10%
b+c+d	11	27.5%
b+c	9	22.5%
Total	**40**	**100**%
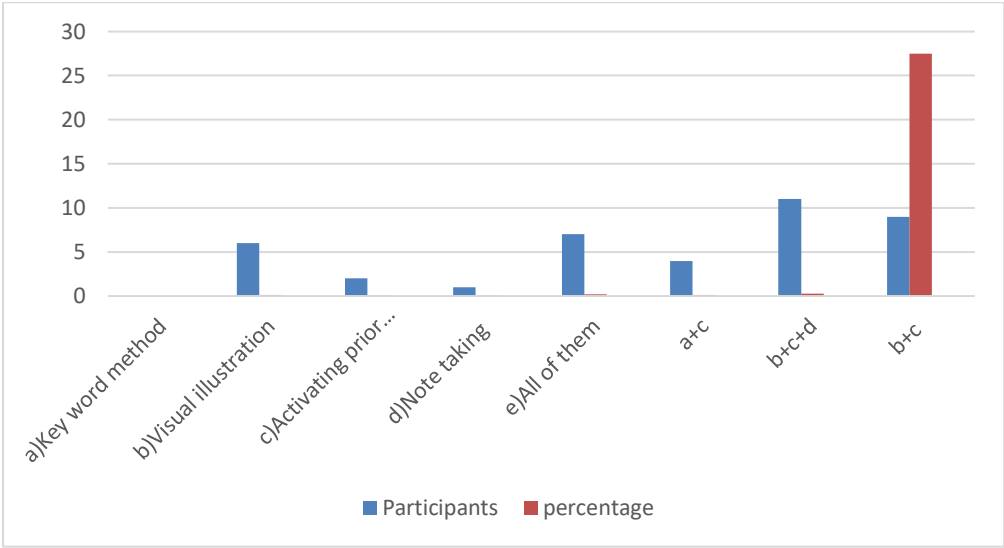
Figure 24. Memory strategies that learners find useful in dealing with their spelling challenges.

This question aims to know what type of mnemonics facilitate the process of learning spelling for the learners. (27.5%) of participants choose b+c+d which is Visual illustration, Activating prior knowledge, and Note taking (9%) rely on visual illustration and activating prior knowledge. (10 %) of learners stated that they use both the key word method and activating prior knowledge. Meanwhile, seven (17.5%) participants use all of the mnemonic strategies mentioned above. The main concern of learners with regard to spelling proficiency is how to improve their ability to avoid making errors and blunders that might disrupt their learning processes. As seen by

this question, learners have stated that they either used or are familiar with one of the memory techniques but are unsure how to use it.

Item.4. How do you consider the role of memory strategies in the process of spelling accuracy?

Please specify

Table 18. Learners' thoughts on the role of memory strategies in the process of learning spelling.

Option	Participants	Percentage
a)Important	24	60%
b)Very important	14	35%
c)Not important	2	5%
Total	**40**	**100%**
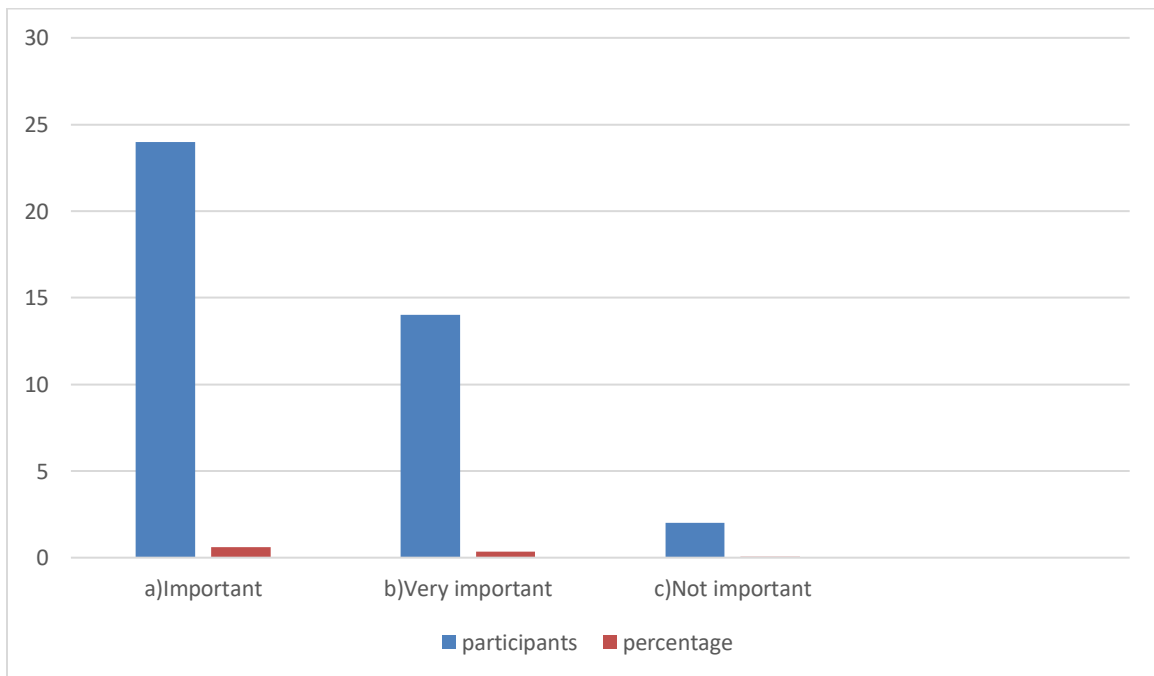
Figure 25. Learners' thoughts on the role of memory strategies in the process of learning spelling.

The purpose of item.4 is to verify if learners understand the value of mnemonics (memory strategies). Figure 20 shows that the majority of participants (60%) (35%) believe that mnemonics are extremely essential. This demonstrates that they understand the importance of memory strategies in learning and improving spelling accuracy. Learners then justified their answers:

- It is via the memory we learn spelling by memorizing the correct form of words and terms.

- Memory is the central part where learning occurs that is why it is important because spelling is mainly about memorizing forms and spellings of terms.

- It is important because the process of spelling accuracy requires a good memory (using memory strategies).

- Some strategies help learners memorize the words 'spelling easily, so it's important to use them.

Item.5. Does your teachers use memory strategies in the classroom?

Table 19. Teachers' use of memory strategies in the classroom.

Option	Participants	Percentage
a)Yes	12	30%
b)No	22	55%
c)Sometimes	6	15%
Total	**40**	**100**%
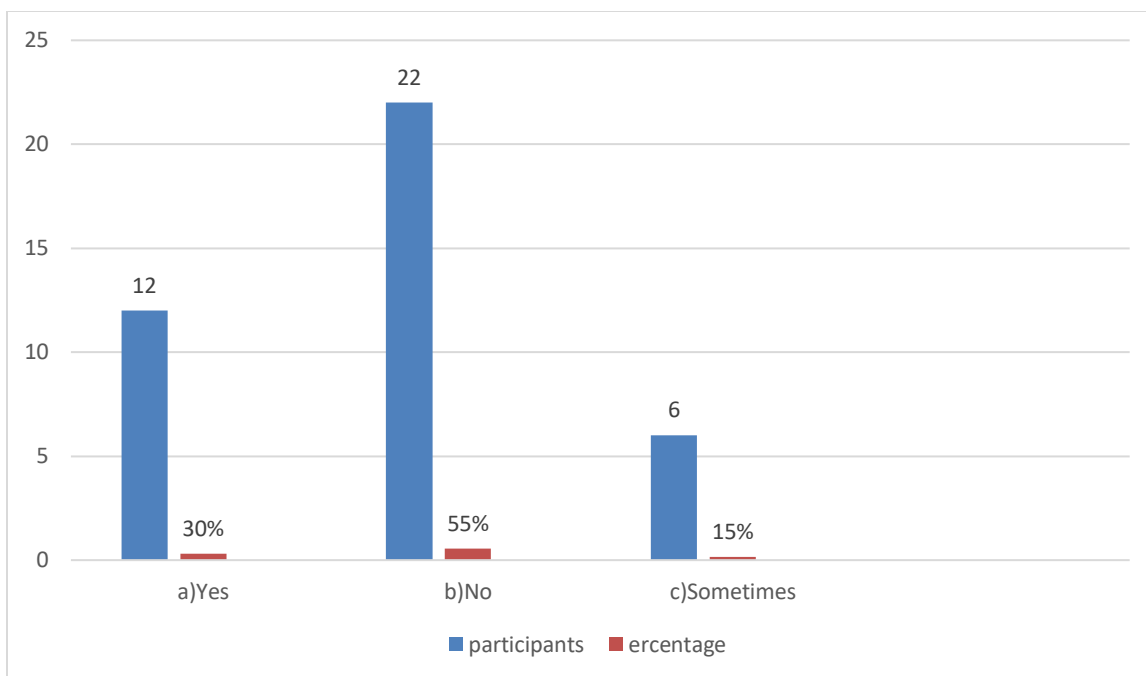
Figure 26. Teachers 'use of memory strategies in the classroom.

This question seeks to gather the learners' opinions about teachers' use of memory strategies as a technique to teaching spelling. From figure21.we can assume that the majority of learners (55 %) agreed that teachers do not use these techniques to teach spelling and they confirm that teachers sometimes rely on mnemonic strategies (15%). However, (30 %) of learners stated that their teachers use memory strategies.

Item.6. Do think that the use of mnemonic strategies to teach spelling should be given more importance in the classroom?

Table 20. Learners' thoughts on whether mnemonic strategies should be given more importance in the classroom or not.

Option	Participants	Percentage
a)Yes	27	67.5%
b)No	0	0%
c)Maybe	13	32.5%
Total	**40**	**100%**
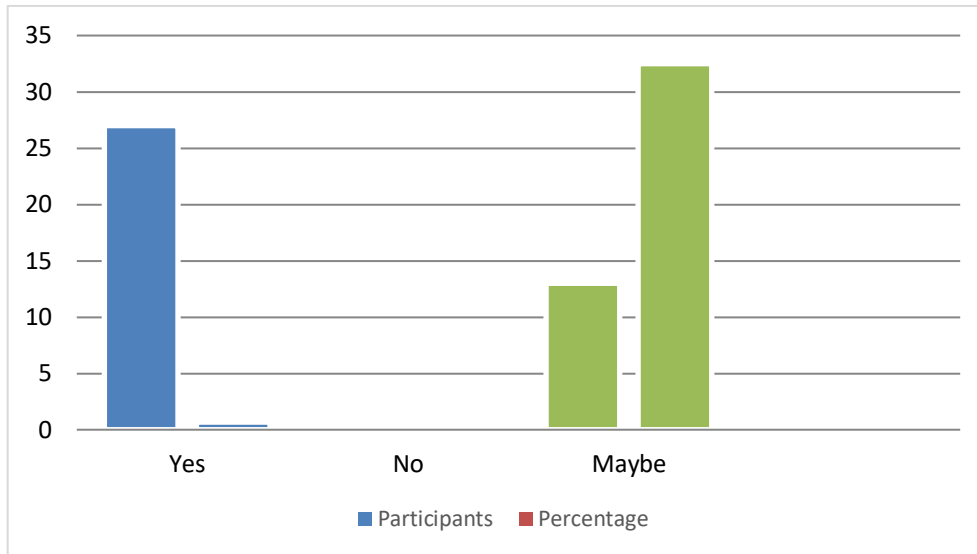
Figure 27..Learners' thoughts on whether mnemonic strategies should be given more importance in the classroom or not.

As stated in figure 21.The majority of participants (67%) responded with yes. While, the remaining learners (33%) were not sure. This shows that learners are somehow aware of memory strategies' importance in learning and developing spelling proficiency but they need to be more aware of memory strategies effect on their learning process especially spelling proficiency learning.

Item.7. Do you think that activating prior knowledge is crucial for spelling accuracy?

Table 21. Learners' attitudes towards activating prior knowledge for spelling accuracy.

Option	Participants	Percentage
a)Yes	25	62.5%
b)No	10	25%
c)Not sure	5	12.5%
Total	**40**	**100%**
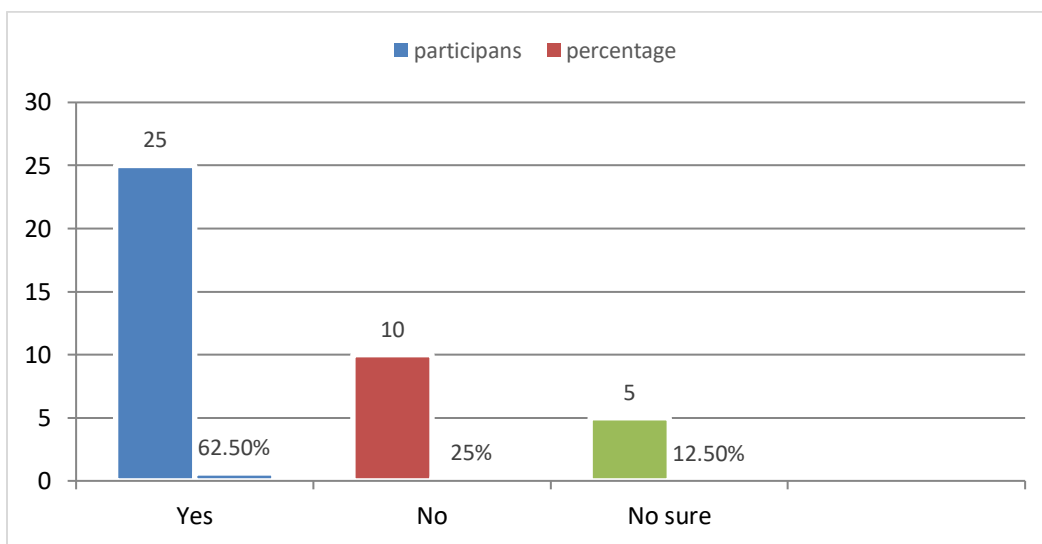
Figure 28. Learners' attitudes towards activating prior knowledge for spelling accuracy.

The results obtained from figure 22. Reveal that activating prior knowledge to achieve spelling accuracy according to the majority of participants (62%) is necessary. (25%) think is unnecessary and (13%) are not sure. The (62%) of learners are aware of the processes of memory. These learners rely on their previously stored information technic to determine the correct spelling form of words.

Item.8. Does your teacher allow you to use dictionaries to check the right spelling and meaning of words when writing?

Table 22. Teachers allowing learners to use dictionaries to check the right spelling and meaning of words when writing.

Option	Participants	Percentage
a)Yes	23	57.5%
b)No	8	20%
c)Sometimes	9	22.5%
Total	**40**	**100%**
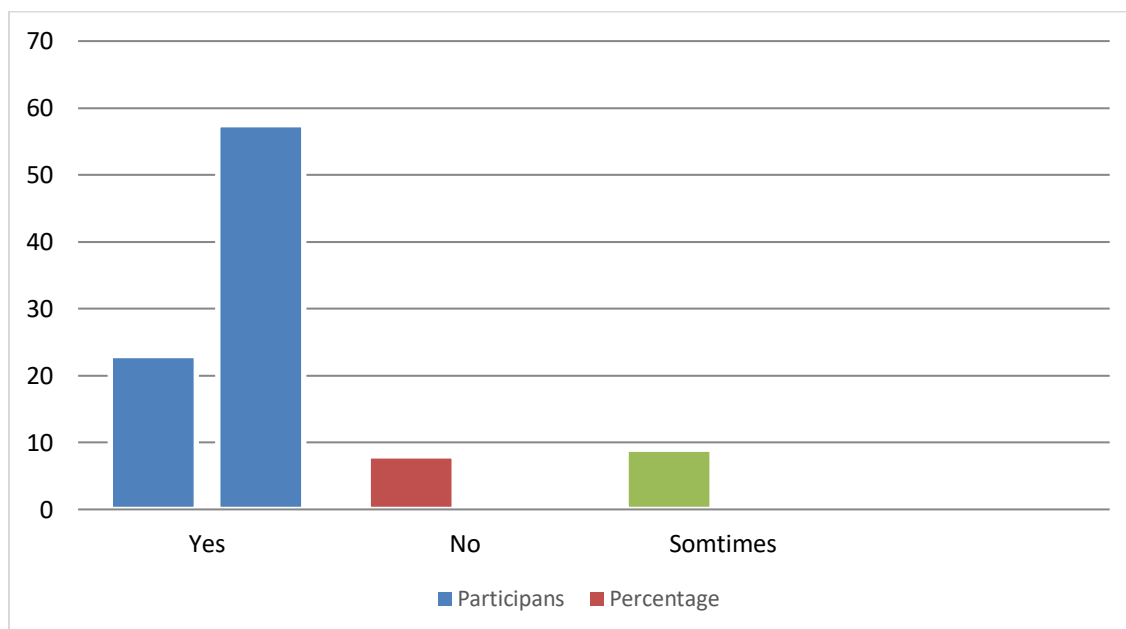
Figure 29. Teachers allowing learners to use dictionaries to check the right spelling and meaning of words when writing.

The obtained findings reveal that (57%) of participants answered that their teachers allow them to use dictionaries to look for the right spelling.(20%) responded with "No", and the remaining participants stated that some teachers allow them to use dictionaries while others do not. These proportions reveal to a great extent that learners have an opportunity to learn spelling

accuracy inside the classroom as teachers provide them with opportunities to enrich their spelling knowledge. However, these opportunities are not enough for learners to overcome their spelling issues.

Item.9. Please mention whether you agree or disagree with the following statements.

Table 23. Achievement of spelling accuracy.

	Agree		Disagree	
Statement	Participants	Percentage	Participants	Percentage
1. It is always necessary to reread the word to memorize its spelling.	25	62.5%	15	37.5%
2. It is a good idea to say the words aloud when you read them.	11	27.5%	29	72.5%
3. As you read or write, you should always look up the spelling of words you do not know.	31	77.5%	9	22.5%
4. Learning vocabulary is the only way to improve spelling accuracy.	23	57.5%	17	42.5%
5. Learning phonetics is the only way to improve spelling ability.	34	85%	6	15%

6. Visualizing (using images) can be helpful in remembering difficult words spellings.	28	70%	12	30%

This question aim to know whether learners agree or not to the different statements concerning spelling accuracy development. The highest percentage was for the option 5(85%) in which learners agree that learning as well as developing spelling skill can be achieved via learning phonetics. Thus, we can notice how important it is for learners to discover as much learning tools and methods as possible to rely on them in their learning process.

Discussion of the results

The major goal of this research is to see how Mnemonics can help EFL students improve their spelling accuracy. It aimed to reduce a problem in which most EFL students forget the correct spelling form of words and are unable to generate language or express themselves because they are unable to recollect the correct spelling form from the memory. As a result, mnemonic methods were introduced as a learning and teaching approach in the current study to help students improve their spelling skills.

After the data gathered and analyzed through the interview and the questionnaire for learners and teachers, the research questions answered and the hypothesis verified. Thus, the first question which is what are the main causes of spelling errors committed by first year learners of English at Mohamed Kheider University of Biskra (MKUB) was answered by teachers and learners with a common answer which is having poor background knowledge and false analogy .

In addition, they agreed that learners are unable to understand as well as memorize complex words and new vocabulary. In the questionnaire, the researcher noticed that 60% of learners are facing difficulties, and were unable to use their background knowledge to determine the right spelling to be used. However, after they relied on Mnemonics or the memory strategies to learn spelling accuracy, which allowed them to use some of their previous knowledge as a tool to select the right form of words. Learners ' performance in spelling improved.

The second and third question is about whether first year EFL learners' at Mohamed khider University of Biskra at the Department of Foreign Languages have positive attitudes towards the use of Mnemonics in spelling abilities learning or not. How they update themselves to use Mnemonics to assist their spelling learning process. Learners and teachers answered this question by describing the role of memory strategies in the process of spelling proficiency. According to them memory strategies are very important for the development of their spelling skill. The fourth question is about how EFL teachers at Mohamed Kheider University of Biskra perceive the use of mnemonic devices in teaching and learning spelling .Describing the nature and definitions of mnemonics, this question is answered in the previous chapter.where the reader can find different definitions according to variety of sources. Thus, learners and teachers can understand these strategies and apply it. As well as give, them a clear vision about memory aids by providing a guiding line for future activities and educational practices to enhance spelling abilities.

Finally, the study's findings and conclusions verified the hypothesis that "if EFL learners at Mohamed Kheider University of Biskra use mnemonics, their spelling ability will improve." The learners' ability to spell has increased. The study's findings suggest that using mnemonic strategies could help students improve their spelling skill.Other studies, such as Howard,et al (2008), supported the findings of this study, suggesting the use of a mnemonic technique to spelling sight

words (PESTS). A standardized spelling exam, a developmental spelling exam, and a researcher-developed instrument all revealed that each of the learners improved their spelling in this study.

Conclusion

This chapter is about data analysis and interpretation. In addition, a discussion of the theoretical background for the study methodology was offered. A survey and an interview instruments were used to gather the information needed for the research. Furthermore, tables and graphs were used to examine and present the interview results. The questionnaire, on the other hand, was descriptively evaluated. The study's results revealed that the hypothesizes are accepted because the researcher deduced that teaching and learning spelling accuracy through the use of mnemonic strategies is a helpful way learners and teachers to rely on.

General Conclusion

The purpose of this study is to shed light on the importance of enhancing EFL learners' spelling accuracy. Its goal was to find out how Mnemonics may help first-year EFL learners develop their spelling accuracy. It has also enabled the research to explore the nature of the interaction between spelling and mnemonic "Memory techniques."

The study is divided into three chapters, with the first two focusing on the theoretical aspects of the research and the third on the research framework. To begin, the first chapter was devoted to highlighting all of the fundamentals of spelling accuracy skill, or, to be more accurate, a general of spelling competence (its meaning, and history). Furthermore, it emphasizes its significance in education and in research education. The second chapter was divided into two parts. The first part was mostly about mnemonics (history, definition, types and principles). The second section covered memory aspects and types in general. The last chapter was about the methodology selected for this study, which has Qualitative method approach through two instruments: teachers' interview and learners' questionnaire. So these tools were selected to gather data and test the hypothesis. The findings of the learners' questionnaire indicated that they are aware of their spelling deficiencies and understand the significance of spelling proficiency in language acquisition. Despite this, learners do not perceive spelling to be a priority since they are more focused with acquiring the other major language abilities. Teachers have attributed learners' lack of attention on the learning of to being either novice or uninterested.

Finally, EFL learners should improve their spelling proficiency skill in order to master the language. They also should be able to recall spellings of words, and not only to be able to recognize them. For that reason, it is necessary to choose effective strategies that can develop EFL learners and improve their spelling. Thus, Mnemonic strategies were introduced as learning and teaching strategies for improving learners 'spelling. Moreover, the significant results and findings of this study showed that learners found memory strategies helpful in learning and developing their language skills especially spelling accuracy.

Suggestions and Recommendations

The purpose of this study was to highlight the relevance of memory techniques in enhancing EFL learners' spelling abilities. The findings of this study, as well as those of other well-known studies, clearly suggest that learners' spelling competence can be enhanced by the use of mnemonics, which is why it's so essential. This, in turn, validates the hypothesis of the current study. Based on these findings, it would be preferable if the research were supplemented by some advice for both teachers and learners on how mnemonics may help learners improve their spelling skills and how instructors may help these learners with their spelling issues. Further investigating and testing studies on spelling problems as well as the effectiveness of teaching and learning mnemonic strategies for spelling proficiency are recommended in order to measure their effect on improving learners' spelling ability.

Learners should know the significance of memory strategies in order to apply them effectively in their learning processes, which means constructing their own language competence. They should also do their best to acquire a high spelling competence through memory strategies; in order to be good spellers in the future. Finally, Learners should involve themselves in spelling learning tasks and activities in order to enhance their proficiency as well as develop a habit of looking up the spelling of words in the dictionary for correct spelling and avoid assuming the forms of terms. For teachers, they should consider their learners' difficulties and adopt effective strategies and techniques to overcome them like the use of key word method as well as give feedbacks to learners. Finally, teachers and the language-learning curriculum should place a greater emphasis on spelling skill and teachers should remind learners of the importance of spelling

accuracy since it is taught as a small element of language. English language syllabus could include more effective spelling learning and teaching strategies for learners and teachers to employ.

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Appendices

Appendices One : Students ' questionnaire.

A Questionnaire for First Year EFL Students

of Mohamed khider University of Biskra

Title:

Exploring the impact of Mnemonics in Enhancing EFL Students' Spelling accuracy.

<u>Dear student,</u>

 You are kindly requested to contribute in this study by answering the following questions. The study

aims to explore your attitudes towards the use of mnemonics (memory strategies) including: Visual

illustration, key word method, activating prior knowledge, acrostics and acronyms for developing EFL

students "spelling accuracy". Therefore, we would be so grateful if you provide us with precise, clear,

and complete responses. Be sure that your answers will be anonymous and will be used for research

purposes only.

Prepared by Rania Harezlli

Supervised by Dr.Triki Manel

Academic Year: 2020-2021

Section One: General Information

Q1. How long have you been learning English?

☐ Years

Q2. How did you find learning at university?

a) Easy ☐

b) Normal ☐

c) Difficult ☐

d) So difficult ☐

Q3. Did you find some difficulties when learning at university?

a) Yes ☐   b) No ☐

If yes, what kind of difficulties?

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Section Two: Spelling difficulties.

Q1. How do you find writing in English?

a) Easy ☐

b) Difficult ☐

c) Very difficult ☐

Q2. How well do you think you do as a speller?

a) Very Well ☐

b) Well ☐

c) Average ☐

d) Poorly ☐

e) Very poorly ☐

Q3. Do you have any Spelling difficulties?

a) Yes ☐   b) No ☐

If yes what kind of difficulty

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Q4. To overcome your spelling difficulties, you

a) Read the word again. ☐

b) Ask for clarifications. ☐

c) Use your previous knowledge. ☐

d) Use the dictionary. ☐

e) You do not have any difficulty. ☐

f) Others. ☐

If others, please specify

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Q5. Which of the following factors can be the main reason behind learners 'spelling difficulties?
You may choose more than one option.

a) Having poor reading and reading comprehension strategies. ☐

b) Having poor vocabulary. ☐

c) Having poor background knowledge and false analogy ☐

d) Facing a difficulty in recalling previous knowledge of spellings. ☐

e) Learning in disorganized and noisy environments. ☐

f) Mother tongue interference ☐

g) All of them ☐

h)) Ignorance and Carelessness ☐

i) Others ☐

If others, please specify

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Q6.To what extent do you think that spelling accuracy course is important in EFL learning?

a) Very important ☐

b) Important ☐

c) Neutral ☐

Please specify

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Q7. What tools/ sources do you use when learning spelling?

a) Spell checker ☐

b) Dictionaries ☐

c) Web /Internet ☐

d) Books ☐

e) Others ☐

Section three: Mnemonics (memory strategies) usage.

Q1.Did you use a mnemonic strategy before to learn English?

a) Yes ☐   b) No ☐   c) Maybe ☐

Q2-How often do you use a mnemonic strategy to learn spelling?

a) Always ☐   b)Often ☐   c)Rarely ☐   d)Never ☐

Please justify

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Q3. Which memory strategy did you find helpful with spelling difficulties?

a) Key word method ☐

b) Visual illustration ☐

c) Activating prior knowledge ☐

d) Acrostics and acronyms ☐

e) All of them ☐

If others, mention them please

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Q4.How do you consider the role of memory strategies in the process of spelling accuracy ?

    a) Important ☐

    b) Very important ☐

    c) Not important at all ☐

Please specify

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Q5.Does your teacher use memory strategy in the classroom?

    a)Yes ☐

    b) No ☐

    c) Sometimes ☐

Q6. Do think that the use of mnemonic strategies to teach spelling should be given more importance in the classroom?

    a)Yes ☐

    b)No ☐

    c) Maybe ☐

Q7. Do you think that activating prior knowledge is crucial for spelling accuracy?

a) Yes

b) No.

b) Not sure

Q8. Does your teacher allow you to use dictionaries to check the right spelling and meaning of words when writing?

a) Yes   b)No   c)Sometimes

Q9.Does your teachers try to check your background knowledge of the word spelling before tasks?

a)Yes   b) No

Q10. Please mention whether you agree or disagree with the following statements.

Statement	Agree	Disagree
1. It is always necessary to reread the word to memorize its spelling.		
2. It is a good idea to say the words aloud when you read them.		
3. As you read or write, you should always look up the spelling of words you do not know.		
4. Learning vocabulary is the only way to improve spelling accuracy.		

5. Learning phonetics is the only way to improve spelling ability.		
6. Visualizing (using images) can be helpful in remembering difficult words spellings.		

We would really appreciate any suggestions or comments from your part. Please feel free
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Thank you

Appendices Two :

Teachers' Interview

Spelling ability is important even though spelling is considered to be one of the minor subjects in school. Spelling errors detract from the effectiveness of any written work; therefore, students must develop the ability to spell as well BS possible. The main purpose of this study is to investigate the effect of using Mnemonics to help EFL students overcome their spelling problems. It seeks to decrease a phenomenon which is most of EFL students forget the spellings of words and cannot produce the language, or express their ideas because they cannot recall words from their memories. Hence, mnemonic strategies were applied as learning strategy in the current study in order to improve student's ability to spell words correctly .

1. What degree do you currently hold?

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2. How many years have you been teaching written Expression?

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3. How do you evaluate your students' spelling proficiency? (Outstanding, average, good, poor)

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4. What does "spelling ability," mean to you as a foreign language teacher?

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5. Do you encourage your learners to learn spelling outside the classroom?

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6. What do you think of having good reading skill?(Compulsory, Preferable, Optional)

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7. From your experience as a teacher of English language, do you think that there is a relationship

between reading and EFL learner' spelling proficiency? And what kind of relationship exists

between them?

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8. Do you teach your learners spelling accuracy strategies?

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9. What kind of difficulties do your students face most in spelling? You may choose more than one

option.

a- Not being able to recognize the types of words

b- Not being able to connect background Knowledge of terms with new one,

c- Not being able to understand lengthy complex words

d- Not being able to recognize and memorize new terms

e- Lack of concentration

10. How do you consider the role of memory strategies in the process of learning spelling

accuracy?

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11. Which memory strategy do you use to help your students overcome their spelling difficulties?

a- Acrostics and acronyms

b- Activating prior knowledge

c- Visual illustration

d- Key word method

We would really appreciate any suggestions or comments from your part. Please feel free

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الملخص

الغرض من هذه الدراسة هو معرفة كيف يمكن أن يساعد فن الاستذكار (نيمونيك) متعلمي اللغة الإنجليزية كلغة أجنبية وبالضبط طلاب السنة الأولى LMD بجامعة محمد خيضر بولاية بسكرة على تطوير دقة التهجئة لديهم. كما يبحث في إمكانيات استخدام استراتيجيات الذاكرة مثل الصور، ومقاربات الكلمات الرئيسية، التساؤل، التنبؤ، الألفاظ، والمختصرات لتحسين دقة الإملاء لدى المتعلمين. الدراسة الحالية مدفوعة بحقيقة أن الهجاء يزداد صعوبة في المجال التعليمي، مما يستلزم تدريب المتعلمين من أجل تحقيق كفاءة إملائية ممتازة. لأن المعلومات تتراكم بسرعة وتتلازم مع الذاكرة. تعد القدرة على فهم التهجئة من أهم المهارات التي يجب تحسينها. في الحقيقة، يعاني غالبية المتعلمين وطلاب السنة الأولى في جامعة محمد خيضر من مشاكل كتهجئة الكلمات بشكل صحيح. قد يواجه المتعلمون صعوبة في تذكر الإملاء بسبب نفس المشكلات التي تمنعهم من حفظ الكلمات الجديدة في النص. بهاذ الصدد استخدم الباحث المنهج النوعي لاختبار فرضيات الدراسة الحالية باستخدام أداتين: استبانة تم إعطاؤها لمجموعة مكونة من 40 طالباً من طلاب السنة الأولى في جامعة محمد خيضر، وكذلك مقابلة مع 6 اساتذة. أظهرت نتائج هذه الدراسة، التي تم فحصها نوعياً، أن فن الاستذكار يمكن أن يساعد المتعلمين في التغلب على تحدياتهم بدقة إملائية وتحسينها. بالإضافة الا تحصيل نضرة شاملة حول الاسباب التي توقع الطلاب في الاخطاء الاملائية وكيف يستطيع الاساتذة والطلاب التغلب علا هذه المشاكل. نتيجة لذلك، تم التحقق من فرضية الدراسة.