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Title

**Assessing the Implementation of Phonological Awareness in Reading
Authentic Material**

The case of second grade of Anesthesia in the Paramedical High Institute of BISKRA

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Dedication

I dedicate this precious work to myself; a great effort was put on it, for the hard work, perseverance. Taking challenge, challenging time with work and two studies in the same period. To myself.

To my mother who sacrificed her joy, her time, her prayers, her advice, for me.
To my father too.

To my siblings, who shared a lot with me this work is for them also.

I dedicate this worth working dissertation to my friends, Mohammed, Laid and Smail.

I dedicate this work to my friend and roommate Mostafa Hatham, the one who helped me a lot in finalizing this work.

To all my relatives.

This work is dedicated to my beloved whom I am hoping to spend the rest of my life with.

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ABSTRACT

EFL tertiary learners often complain of the difficulty in reading materials written by native speakers for native speakers. Anesthetic students are not exception when reading an authentic material written in English. They seem to stumble over lexical, orthographic, cultural, grammatical, discoursal, and pragmatic challenges. They prove to be poor readers on account of the discrepancy between what is written and how it is uttered or read. Some research studies suggest that 65% of discrepancy between English orthography and phonology exists, which telescopes the difficulty of both native and non-native readers of English. Phonological awareness, which is the ability to understand and recognize the words and phrases that are made up of sound units. Although reading is a receptive skill as it ends with certain knowledge obtained through a piece of writing, it is an active process wherein learners work hard to decipher and reconstruct meaning. Additionally, authentic materials are material that written by natives for purposes other than pedagogical, and targeted to other natives. This Master's thesis undertakes to assess the implementation of phonological awareness in reading authentic materials with an aspiration to assist EFL tertiary learners to overcome this challenge. The population of this study was second grade of Anesthesia at the Paramedical High Institute of Biskra. The total population is about 42 students. And, the sample was 20 participants who did the experiment and observation was on them during the tests and the treatment. Also, for the questionnaire 32 responses were received. The current research made use of mixed method between quantitative and qualitative approach. Triangle of instruments opted for data collection, and results and interpretation are presented in appropriate way. And conclusion that contains findings, solutions and suggestions will close the paper.

Keywords: phonological awareness, reading, reading authentic material.

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General Introduction

General Introduction

Anesthetic learners (of English) often complain of the difficulty in reading materials written by native speakers for native speakers. They seem to stumble over lexical, orthographic, cultural, grammatical, discursal, and pragmatic challenges. They prove to be poor readers on account of the discrepancy between what is written and how it is uttered or read. Some research studies suggest that 65% of discrepancy between English orthography and phonology exists, which telescopes the difficulty of both native and non-native readers of English. This Master's thesis undertakes to assess the implementation of phonological awareness in reading authentic materials with an aspiration to assist EFL tertiary learners to overcome this challenge.

Phonological awareness, which is the ability to understand and recognize the words and phrases that are made up of sound units, is the strategy that is investigated in teaching reading. Although reading is a receptive skill as it ends with certain knowledge obtained through a piece of writing, it is an active process wherein learners work hard to decipher and reconstruct meaning. In fact, reading is an active process that encompasses several stages that act simultaneously to assert the comprehension.

1.1 Background of the study

Although French is still used in Algeria to teach the medical practitioners, there is a noticeable shift towards English usage. The English language sources of medical sciences have earned soundness among the practitioners of medicine in Algeria due to its richness and innovative information and findings.

1.2 Statement of the problem

Several studies have tackled phonological awareness and reading as main subject. Some studies focused on phonological awareness, its levels, definitions and types. Others made reading as a receptive skill, themes for their papers.

A study that aims to evaluate students' reading proficiency through authentic material, conducted by Sailaja.T and Jaya.T in 2014 found that authentic texts cultivate the development of their reading and help them gain self confidence, thus they became proficient in different life situations. In the same vein, another work conducted by Sacha Anthony Bernaro in 2006 on university students of engineering revealed that using texts that are not safe and controlled motivate and help students get acquainted with how the world is. Furthermore, " levels of phonological awareness" is the title of a research established by Trieman and Zukowski suggested a new phonological awareness which is built upon onsets and rimes rather than syllabus and phoneme levels of awareness. However, it is hard to talk about reading without phonological awareness. Because if a foreign language learner is not fully aware of the phonology of the English language, h/she will not be able to read appropriately. Implementing phonological awareness is still ambiguous in various dimensions. Reading authentic material is a great challenge to Algerian medical students. As they pursue their study with French language.

Consequently, this work will focus on assessing the implementation of phonological awareness while reading authentic materials in the case of students of Anesthesia in the High Institute of Paramedical-Biskra.

1.3 Research Questions

The current Master's II will attempt to address the following research questions:

Q1: To what extent can phonological awareness contribute to enhancing anesthetic learners of English skills of reading authentic materials, i.e., medical materials?

Q2: How can phonological awareness technique be implemented? Does it need a special training for both teachers and (anesthetists) learners?

Q3: What means are needed to assess the implementation of phonological awareness to enhance anesthetists' skills in reading authentic materials, i.e., medical materials?

1.4 Research Hypothesis

The research hypotheses are as follows

H₀: It is hypothesized that there is no significant relation between reading authentic materials and phonological awareness.

H₁: It is hypothesized that there is a strong relation between reading authentic materials and phonological awareness.

1.5 Research Objectives

The research aims at:

1. Determining the relationship between phonological awareness and reading authentic material.
2. Developing strategies that help learners adopt phonological awareness while reading.
3. Assessing the implementation of phonological awareness.
4. Helping Algerian practitioners of health care in reading English authentic material.

1.6 Significance of the study

Through this work, the light sheds on reading authentic material, hence, showing the importance of mastering the reading skill through phonological awareness techniques and

assignments. Also, this study probes the obstacles that Algerian medical practitioners encounter while reading English passages of medical materials.

Delimitation of the study

1. Time delimitation: March 2023 to April 2023

2. Space delimitation: This work was at the High Institute of Paramedical and University of Biskra.

3. Topic delimitation: This dissertation explores two variables, phonological awareness and reading authentic materials. Explanations and details under these two topics are the limits of the study theme.

1.7 Research design and Methodology

This study used both quantitative and qualitative design. Mixed-methods is adopted and used. A triangle of data collecting tool opted for the current study. Pre-test and post-test and questionnaire are envisaged to collect data and gather information. A structured observation also is required to collect data about the participants.

Chapter One: Phonological Awareness

Introduction

Phonological awareness encompasses a range of skills, from the ability to distinguish between different sounds in spoken language to the ability to blend sounds together to form words and to segment words into their individual sounds. Developing phonological awareness begins in early childhood and continues through the early elementary school years. Research has shown that children who have strong phonological awareness skills are more likely to become successful readers and writers. Therefore, educators and parents should focus on developing these skills in children as a part of their literacy instruction. This chapter sheds the light on phonological awareness and its effects on reading authentic material. In so doing, it starts with definitions of concepts, types of phonological awareness. Then, it is crucial to do comparison between phonological and phonemic awareness. As well as, it shows the correlation between reading and phonological processing skills and its implication on reading ability. Also, it tackles the levels of phonological awareness. Finally, presenting what to assess in phonological awareness and providing types of test and examples of the use the purpose of it.

1.8 Definitions

1.8.1 Phonological Awareness:

Phonological awareness is the conscious process of detecting and manipulating sounds of a language (Liberman and Shankweiler, 1985; Wagner and Torgesen, 1987)

It is the ability to identify and manipulate the individual sounds (phonemes) in spoken words.

It is a crucial skill for learning to read and write, as it helps children understand the sound structure of words and how they can be broken down into smaller units.

A definition proposed by Massachusetts Department of Elementary and Secondary Education in 2017:

Phonological awareness, or the awareness of and ability to work with sounds in spoken language, sets the stage for decoding, blending, and ultimately, word reading. Phonological awareness begins developing before the beginning of formal schooling and continues through third grade and beyond.

1.8.2 Phoneme:

Is the smallest language sound whose insertion, removal, or replacement changes the meaning of the word.

1.8.3 Onset:

Is the consonant or consonants blending in the beginning of the word that comes before the first vowel, it can be one phoneme (letter) or more. An onset is the part of a single syllable word before the vowel. A word can be grammatical without onset.

1.8.4 Rime:

A rime starts with a vowel reaching the end of the syllable. It is a part of word that begins from vowel and includes the letters that follows. A word must have a rime.

1.8.5 Syllable:

Is a word part that contains a single vowel sound and that is pronounced as a unit.

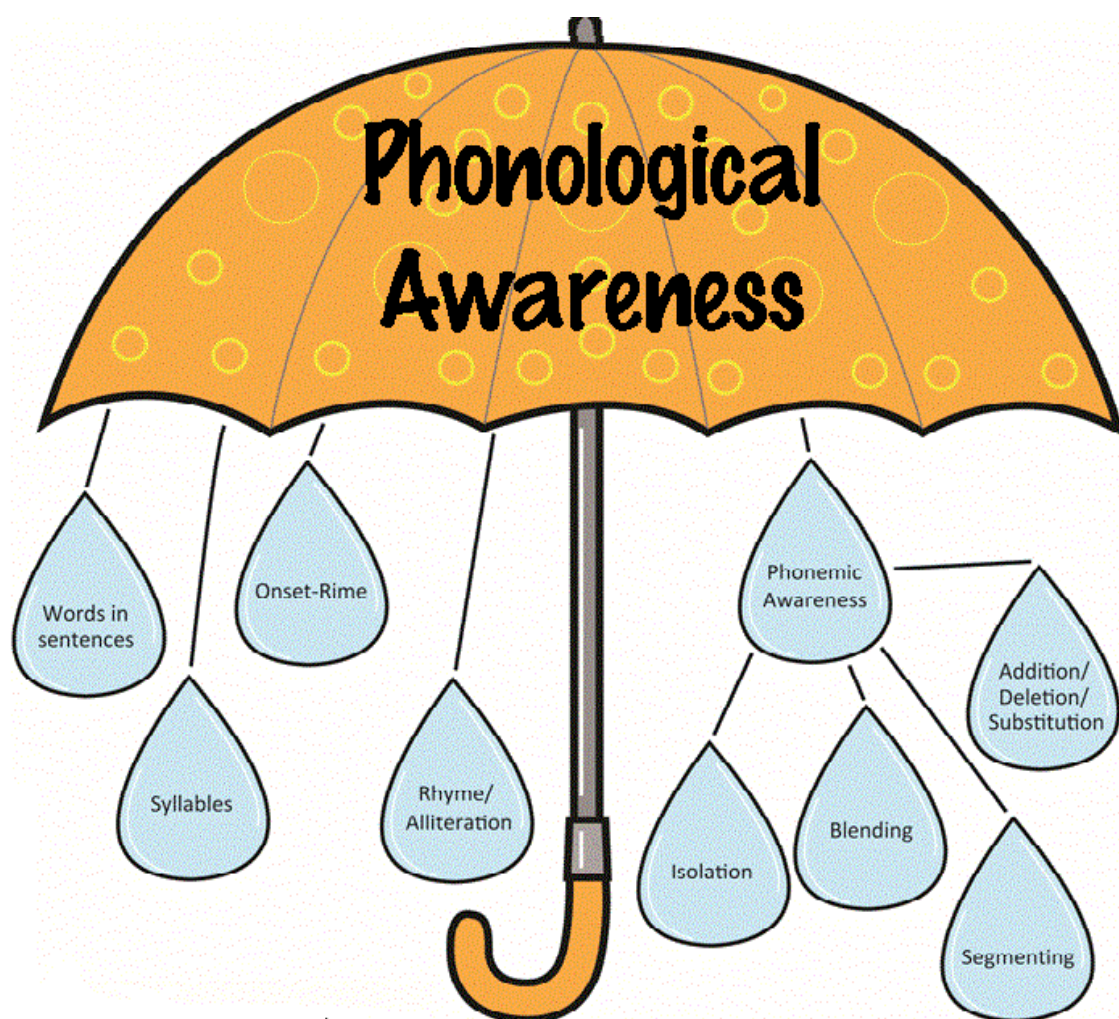


Figure 1: Figure that describes the scope of phonological awareness through umbrella

1.9 Types of phonological awareness

According to Liberman there are several different types of phonological awareness skills that children develop as they learn to read and write:

1.9.1 Rhyming:

The ability to recognize and produce words, such as "cat" and "hat"

1.9.2 Syllables:

The ability to recognize and produce syllables in words, such as "ba-na-na" having three syllables.

1.9.3 Onset and rime:

the ability to recognize and manipulate the initial consonant sound (onset) and the vowel and any final consonant (rime) in a word, such as recognizing that "bat" and "mat" have the same rime.

1.9.4 Phoneme Isolation:

the ability to identify individual sounds in words, such as recognizing that the word "sun" has three sounds: /s/, /u/, and/n/.

1.9.5 Phoneme Blending:

the ability to break words down into their individual sounds to form words, such as blending /c/ /a/ /t/ to form "cat"

1.9.6 Phoneme Segmentation:

is to be able to break words down into their individual sounds, such as segmenting "cat" into /k/ /a/ /t/.

1.9.7 Phoneme Deletion:

it is to be able to detect the word that remains when a phoneme is removed from a word, such as recognizing that "cat" becomes "at" when the /k/ sound is deleted.

1.9.8 Phoneme substitution:

the ability to replace one phoneme in a word with another to create a new word, like changing "cat" to "bat" by substituting /b/for /k/.

These skills are build upon one another and important for developing strong reading and writing skills. Teachers and parents can help children develop these skills through a variety of activities and games that focus on phonological awareness.

1.10 Phonemic Awareness:

It is the ability to notice, think about, and work with the individual sounds in spoken language (words); it is auditory skill. Also, phonemic awareness is a subcategory of phonological awareness. (Wagner, 1987)

Another definition suggested by the National Reading Panel Report, p.2-1: phonemic awareness includes the ability to manipulate and focus on phonemes in spoken utterances.

1.11 Difference Between Phonological Awareness And Phonemic Awareness:

Basically, phonological awareness develops from birth throughout kindergarten and it is typically mastered by the end of the first grade (Kilpatrick, 2015). However, phonemic awareness is a subset of phonological awareness. It simply means noticing and manipulating phonemes (individual sounds) in spoken discourse.

Furthermore, phonological awareness includes identifying words that rhyme, sentence segmentation, in addition to recognizing syllables in words, onsets and rimes. On the other hand, phonemic awareness deals with sound blending, segmentation of sounds and manipulating phonemes to form new utterances.

1.12 Levels Of Phonological Awareness

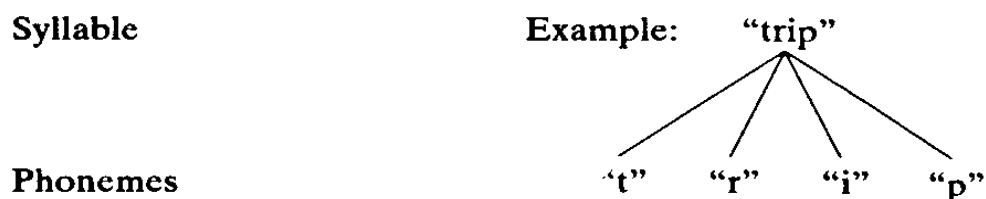
The term "level" has more than one interpretation. It may refer to the degree of explicitness; some activities of phonological awareness require deeper focus than others. As such, learners of a foreign language give much time in manipulating phonemes in "bat" than in recognizing that "bat" have "b", "a", and "t"(Yopp,1988). Another possible way to identify levels is the linguistic level. Cognitive development of the learner determines his/her performance in certain tasks. So it depends heavily on linguistic level of the task. For

instance, segmenting speech tasks at words' level is easier than segmenting phonemes on a word (Fox and Routh, 1975).

Golinkoff 1978; Read, 1978 stated that “performance on phonological awareness tasks varies with cognitive demands of the task and the linguistic level that it taps” it means that phonological awareness is continuous phenomenon not all or none phenomenon.

The levels of phonological awareness in a word can be viewed in terms of syllables and phonemes. Syllables are chains of phonemes, it is suggested by the implicit assumption that syllables and phonemes are structures of the same level as shown in the figure below:

Linear view of the syllable:



Hierarchical view of the syllable:

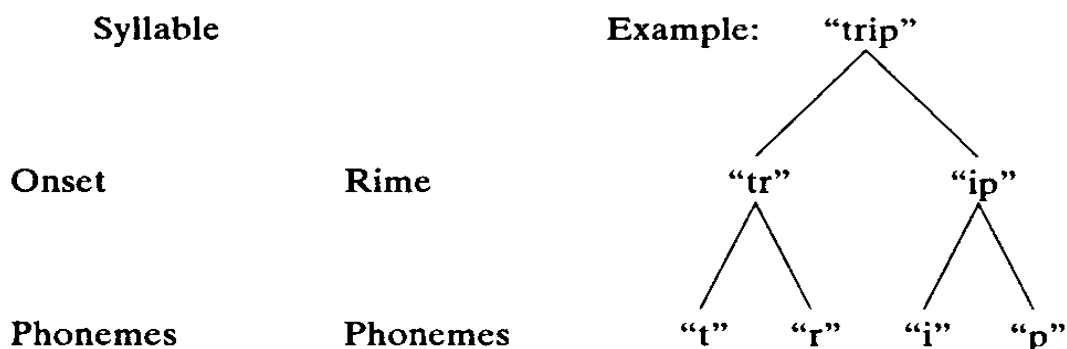


Figure 2: Map of linear and hierarchical view of the syllable

Linear view of the syllable which is depicted in the upper part of the above figure, suggests that "trip" as a syllable is a string of /t/,/r/,/i/, and/p/. Alternatively, the hierarchical view considers the syllable as composed of subunits that can be smaller than syllables and larger than a single phoneme. The hierarchical distribution is shown in the bottom of the above figure. In this view syllable contains subunits that have two phonemes "tr","ip". The "tr" is the *onset*, and "ip" is the *rime*.

In sum, three levels of phonological awareness are distinguished under this title. Syllable, onset/rime, and phoneme are the levels that tasks of phonological awareness should fulfill.

1.13 The relationship of phonological awareness to Reading Ability:

The relation between reading and phonological awareness strongly appears on reading difficulties caused by phonological processing deficits. Phonological awareness ability is a strong predictor of reading acquisition (Blachman, 1984; Bradley and Bryant, 1985; Byrne and Fielding-Barnsley, 1991, 1993; Calfee *et al.*, 1973; Hatcher *et al.*, 1994; Scarborough, 1998). Thus, phonological awareness (level of accuracy and fluency) deficits are related to word identification difficulties which, in turn, frequently result in word- and text-reading comprehension problems.

A study illustrating the relationship between phonological processing abilities and reading acquisition by Wagner et al 1997, suggests that:

- ✓ First, phonological abilities are not only correlated with word-reading difficulties, but may cause children's word-reading difficulties.
- ✓ Second, phonological skill assessment, after reading instruction begins, is helpful in identifying children who may continue to have difficulty in reading.

- ✓ And third, because phonological processing abilities appear stable from kindergarten to fourth grade (Torgesen *et al.*, 1994; Wagner *et al.*, 1997), children's word-reading difficulties may be hard to remediate.

1.14 How Phonological Awareness Contributes to Reading Development:

Phonological awareness is important for reading because written words correspond to spoken ones. Moats, 2010 believed that readers should have awareness of speech sounds that letters and letter combinations represent in order to shift from written word to spoken word (reading) or from spoken to written word (spelling). So, sound awareness is crucial in spoken word to grasp letter-sound correspondences; to blend sounds to decode a word, and to map words into long-term sight vocabulary (Kilpatrick, 2015)

"Students with good phonological awareness are in a great position to become good readers, while students with poor phonological awareness almost always struggle in reading" (Kilpatrick, 2016). This quote shows the importance of having phonological awareness and its criticality to becoming good readers.

1.15 What to Assess in Phonological Awareness:

Phonological processing skills are assessed by several nonreading tasks that assess phonological awareness, phonological memory, and rapid naming. Each of these skills is assessed in different ways. First, phonological awareness, a child's awareness of the phonological structure of words in oral language, is assessed by determining whether the child can hear and manipulate language sound units, units could be words, nonwords, syllables, onset-rimes, and individual phonemes. Second, phonological memory, a child's ability to represent phonological information in short-term memory, typically is assessed by having the child repeat numbers or nonwords in the same order they hear them presented. Last, rapid naming, or a child's rate of access to phonological information in long-term memory,

typically is assessed by tasks that ask the child to rapidly name letters, numbers, colors, or pictures of common items (Bowers and Swanson, 1991; Denckla and Rudel, 1976; Wolf, 1991; Wolf *et al.*, 2000; Wolf and Bowers, 1999)

1.16 Phonological awareness tests:

Phonological awareness is an important part of identifying language learners who may be at risk for reading difficulties. Those are some of the most important tests used by language teachers in testing phonological awareness :(Bowers and Denckla)

Phonological Awareness Skills (PAST):

The PAST is standardized test that assesses phonological awareness skills in children aged between 04 and 09. The test measures skills such as rhyming, phoneme blending and, sound manipulation.

1.16.1 Comprehensive Test of Phonological Processing (CTOPP):

Represents another standardized test that assesses phonological processing skills in learners aged between 04 and 24 years. This test assesses skills such as blending, segmenting, phoneme manipulation, and rapid naming.

1.16.2 The Dynamic Indicators of Basic Early Literacy Skills (DIBELS):

The DIBELS is a set of standardized assessments that includes measures phonological awareness, as well as other early literacy skills such as letter naming fluency. Its measures are typically used with children in kindergarten through 3rd grade.

1.16.3 The Test of Phonological Awareness (TOPA):

It is a standardized test that assesses phonological awareness skills in children aged from 05 to 09 years. The TOPA measures blending, segmenting, and phoneme manipulation skills.

The above-mentioned tests are normally applied by speech language pathologists and reading specialists or trained professionals in general. The results obtained by these assessments help diagnosing learners who are at risk for reading difficulties and therefore take the appropriate actions or interventions.

The table below shows examples of phonological assessments tests (purpose and use):

Table 1 Table that shows types, purpose, and use of phonological awareness tests

What is the purpose of phonological awareness skills?	Type of test recommended	Who would use the information?
To determine which children are significantly behind same-aged peers in phonological assessment	A norm-referenced test compares one child to a sample of similar children. These tests	Individuals involved in the process of identifying students who may need increased instruction in
To determine qualification for special services	may test one phonological awareness	phonological awareness, such as school psychologists, special
• To determine appropriate participants for a research intervention	skill (Test of Awareness of Language Segments [TALS; Sawyer, 1987]) or they may	education teachers, or reading specialists
• To use as a dependent measure for intervention studies related to phonological awareness	test a range of phonological awareness skills (Comprehensive Test of Phonological Processes [CTOPP;Wagner <i>et al.</i> , 1998])	• Individuals researching phonological skill development and effects of phonological awareness training programs, such as researchers or program developers
To determine how well a child knows specific	A criterion-referenced test measures whether or not a child	Individuals involved in deciding exactly which

<p>phonological skills</p> <ul style="list-style-type: none"> • To determine what specific phonological skills need to be taught • To monitor progress on specific phonological skills 	<p>has specific phonological skills. These tests may be commercially available (Phonological Awareness Profile [Robertson and Salter, 1995]), part of a curriculum (e.g., Adams <i>et al.</i>, 1998), or made by teachers or researchers for specific purposes</p>	<p>phonological skills a child does and does not know, such as kindergarten or Grade 1 teachers, reading specialists, and special education teachers</p> <ul style="list-style-type: none"> • Individuals who want to assess the impact of an instructional intervention on specific phonological awareness skills, such as teachers or researchers
<p>To determine a student’s rate of progress in acquiring specific phonological awareness skills</p> <ul style="list-style-type: none"> • To determine fluency in phonological skills 	<p>A curriculum-based measurement (CBM) approach, like Dynamic Indicators of Early Literacy Skills (DIBELSs), documents progress over time on key phonological awareness skills, such as blending, segmenting, and onset–rimes. A CBM approach also provides information about response fluency and accuracy</p>	<p>Individuals who teach students with phonological awareness deficits and who frequently monitor students’ progress to determine if instructional methods are working, such as reading specialists or special education teachers</p> <ul style="list-style-type: none"> • Individuals assessing the effectiveness of phonological awareness curriculum for classroom instruction, such as

	kindergarten and Grade 1 teachers <ul style="list-style-type: none">• Individuals assessing the effectiveness of an intervention for students with specific learning or behavioral characteristics, such as researchers or program specialists
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Conclusion:

Phonological awareness is how to deal with sounds of a language. It is an umbrella that encompasses phonemic awareness, phonics, syllables, word segmentation/ deletion/ substitution, and onset-rime. Additionally, the levels of phonological awareness are detected in two ways. The first sees the syllable as a string of sounds. The second considers the syllable made of subunits of onsets and rime, which is the accurate one. Also, testing phonological awareness is essential to diagnose the students' obstacles and helping revealing it. Eventually, phonological awareness must be brought to the classroom in response to "a student with good phonological skills is able to read and comprehend perfectly."

Chapter Two: Reading Authentic Material

Introduction

Reading is one important skill when it comes to language learning. It is a receptive skill which leads to grasp information. . Also, there are multiple reasons and purposes of reading that differ according to the setting. Reading means recognizing written words and symbols for some. Others see reading as an opportunity to practice speaking and pronunciation. Either way, reading authentic material has a remarkable impact on foreign language learners in improving their reading abilities. Therefore this section contains a precise depiction of authentic material of reading. It initiates of the concepts of authentic material, artificial

material, and reading. Furthermore, it gives diverse definitions of reading authentic material and highlights the factors to be included when choosing an authentic reading material. Moreover, this chapter dealt with types of authenticity, the distinction between genuine and authentic material, and why it is impossible to be authentic. Last, it gives some examples of authentic material and previews the advantages and challenges of using it.

2.1 What is authentic material?

Authentic material is defined as “materials that have been produced to fulfill some social purpose in the language community” (Peacock cited in Bernardo 2006). The term authentic gives the sense of untouched; hence, any authentic material must be taken as it is.

According to Nuan, authentic material is “any material which has not been specially produced for the purpose of language teaching and this easily differentiates it from coursebook materials” (p.54, 1989)

Authentic materials refer to materials that are created for real-life communication purposes, instead of language learning. These materials can include newspapers, magazines, TV shows, as well as social media posts, emails and text messages.

2.2 Authentic vs. artificial material:

Both authentic and artificial materials are used in teaching. Also, both of them can help promoting a language skill, such as reading, writing, listening and speaking. However, authentic materials are created for a special life context or event. In the same vein, authentic material provide student with unmodified and made for natives examples which expose the learners to real-life language and culture, and therefore develop their skills in a natural way. On the other hand, artificial materials are designed precisely for language teaching. Moreover, it is updated, manipulated and simplified in a way to be best fit the students’ needs. Artificial

and adapted material has correct grammar and structure that targets the special objective of teaching language. (Kilpatrick, 2008)

The table below presents other differences of authentic and tailored materials:

Table 2 *Table shows the difference between authentic and adapted material*

Authentic Material	Adapted/tailored/genuine Material
✓ Helps focus on a skill: e.g., reading, listening	✓ Focuses on the language
✓ Usually more interesting	✓ Sometimes boring
✓ Increase the of progress	✓ Promote sense of achievement
✓ High stress, anxiety and frustrating	✓ Low anxiety level
✓ Prepares for real life.	✓ Include many examples of the target language

2.3 Reading:

2.3.1 Definition:

Alderson defines reading as “...an enjoyable, intense, private activity, from which much pleasure can be derived, and in which one can become totally absorbed” (28, 2000). That is reading skill is a process that depends on person’s mind and how he perceives the world. Others define reading as the procedure of observing a series of written symbols and deducing its meanings.

2.3.2 Types of reading:

According to Patel and Praveen (2008), there are some types of reading such as Intensive reading, Extensive Reading, Aloud Reading and Silent Reading.

Intensive reading: is type of reading that focuses on idiom and vocabulary that taught by the teacher in the classroom and that idiom and vocabulary exist in poem, poetry, novel or other

source. For example: The students focus on linguistic or semantic details of a reading and focus on structure details such as grammar .

Extensive Reading: is a type of reading that involves learners reading texts for enjoyment and to develop general reading skills. For example : The students read as many different kinds of books such as journals, newspapers and magazine as they can, especially for pleasure, and only needing a general understanding of the contents.

Aloud reading:is reading by using loud voice and clearly. For example: Reading poetry, dialogue, and other type of text.

Silent reading: activity is meant to train the students to read without voice in order to help them concentrate and focus attention or thought to comprehend the texts. For example: The students reading a text by heart.

2.3.3 Linguist views of reading:

Reading definition can opt for different meanings; however, it always serves a purpose. Moreover, the reason of reading is controlled by its purpose. Reading can have three purposes; first, reading for survival, street signs, advertising, schedules and all everyday tasks. Secondly, classroom reading which is goal oriented called reading for learning. In contrast, reading for pleasure has no goal and it is merely enjoyable.

Nuttall suggests that the main focus of reading is the idea of meaning, transferring meaning from one mind to another, and from the author to audiences. Thus, the reader, writer, and the text contribute to the same process (1996).

The process of reading has two directions, bottom-up and top-down. The former is when the reader is detecting the meaning of a piece of writing word for word or letter for letter. It is usually associated with beginners who have poor and slow reading skill. While the latter(top-down),is

when readers grasp the overall meaning through clues in the text. This type is associated with good readers who do not read slowly and word for word.

2.3.4 The Use of Schema Theory in Reading:

Schema theory views reading as the process of interaction between the reader's background and the text. The full and efficient comprehensions necessitate the ability to relate the textual information to one's prior knowledge. The goal of schema theory is to interpret the text by using prior knowledge. Coming are examples of types of schema: (Roger and Abelson)

Formal schema:

In simple terms, the formal schema is to infer or attempt to understand the text by analyzing its structure. We know that different types of formal text have distinct structures. It necessitates some familiarity with academic and non-academic writing.

Content schema:

It is helpful to read the title or header of any text before reading the text from any articles or books. After reading the heading, we should spend some to think about the topic. How much do we know about the topic? Once we become familiar with the topic and can relate it to our background knowledge, we can easily grasp the topic.

Cultural schema:

Cultural Schema is the background knowledge about culture. You may face a similar kind of situation in your life such as when you read an article about any events related to your culture, you understand easily but when you read something not related to your culture, you find it very difficult to understand. It is very common when you are learning a new language.

Therefore, to be a good reader we must acquire a good variety of knowledge of different cultures.

Linguistic schema:

This is the most critical and fundamental ability that we must learn to be effective readers. What do you understand by linguistic schema? It is all about vocabulary, collocation of words, and grammar. In short, you have to be good at language skills. Strong readers can comprehend what they read by connecting it to what they already know. Reading any text necessitates an understanding of schema theory.

2.3.5 The purpose of reading:

This title concerns the different purposes of reading and how to with of them according to Nuttall:

Reading for main ideas:

It is not necessary to read every sentence in a text in order to understand. Only understanding the essential points of writing is required. A researcher for example must study a large number of research papers, essays, journals, reports, and articles for research. The problem is that he does not have time to read entire reports, essays, or other types of literature. Perhaps he does not require all of the information offered in those. In that situation, skimming the text and focus on the major concepts rather than everything.

Reading for specific information (scanning):

In both student and corporate life, it is frequently needed to extract a little bit of information from massive amounts of text. For example, in the IELTS exam, it is often required to find specific items such as numbers and names. To do the best, scanning the entire paragraph with

eyes and move quickly. Text will be read and information will be found related to other information.

Reading for exams:

This subsection concerns the students. It is known that studying 20-30% of the exam material is enough to get an 80 percent on any exam. As a result, reading must be more specific when studying for tests. Before beginning reading, attempt to understand the extent of the subject. Doing a little research on previous exam questions is advised. The exam is entirely about students' performance, not their knowledge. Study what is essential for the forthcoming exam.

2.3.6 Reading Comprehension Model:

Different studies classified the reading comprehension as the most difficult area which has not been understood and elaborated in terms of getting meaning of the text. However Urquhart & Weir defined reading comprehension as "the whole parcel of cognitive activities" (1998, p.17) that readers initiate in order to comprehend the text for the correct meaning. Another study, Taverner (1990, p. 4) as cited by Channa(2016) defined reading comprehension for "a means of extending experience" based on the reading material which they read and perceive the actual meaning according to the text.

Consequently, there are three major reading models; bottom-up, top-down and interactive that are used when reading a printed content. The bottom-up theory creates the fundamental aptitudes which are identified with syllables, letters, and words in content structure for starting readers. Gough (1972) as cited by Channa (2016) has showed this theory of reading as a focused process on every letter premise. This implies that translation of such messages can be gotten from translating the words included in the article to get the meaning out of it.

Accordingly, there is conceivable delicate to effortlessly overlook what the reader has comprehended from the content (Nuttall, 2000). Therefore, perception is attained by the student's understanding of each one expression used in the content. The more natural the reader with a certain expression, the more precisely the entire meaning of the content is getting along to him/her. This advances familiarity with reading. Besides, comprehension is gained once the reader has unlocked the meaning out of each one expression through its definition. However top-down theory of reading is used for controlling cognitive perspective of reading by developing the important foundation learning that is available in the printed content.

Next is Top-down reading theory underscores “from mind to content” (Eskey, 2005, p. 564) of readers who survey their reading methodology focusing around the content of the text. The establishment of this model puts on prior information of the readers which one true substance related to the composed content (Smith, 2004) as cited by Channa (2016). Chinwonno (2001) further specifies that a reader's current information would focus his/her perception of the content. This model turns into a powerful perspective for readers, particularly when removing the forecast, setting hints, and the principle thoughts of the content by the students. This model stresses the imperatives of having different reading materials and distinctive levels of dialect trouble that are significant to the need of the students.

The third model the interactive model (metacognitive perspective) is used to join both bottoms up and top-down strategies for accomplished readers who have a firm understanding of reading techniques. Thus, the interactive view of reading focuses on the active constructive nature of reading and takes it as the major instructional concern of the teachers. The reader is viewed as using both reader based (top down) processing to form a model of meaning. Although he is active, his guesses are formed on the basis of what the text says and what he

already knows about this information; that is reading is viewed as constructing meaning. This is viewed as an interactive process where the reader strategically shifts between the text and what he already knows to construct his response.

2.3.7 Techniques for teaching reading:

Techniques are the ways and means adopted by the teacher to direct the learners` activities toward an objective. According to Gerlac, Ely, and Melnick in teaching and learning process, a teacher should use various techniques to make the students more understand about the material. The techniques used by the teacher are one factor that may determine the success of the instruction.

According to Walker (in Ranardo), there are some common applied techniques in teaching reading. The techniques are:

2.3.7.1 Close Instruction

The instructional cloze is a technique that develops comprehension by deleting target words from a text. This encourages the students to think about what word would make sense in the sentence and in the context of the entire story. For example: Mrs. Lee lives in the city. She does not live in the ____1____. Every day she goes to the ____2____.She buys milk and fresh bread ____3____ for the children. She does not go ____4____ the but she drives a car.

2.3.7.2 Directed Reading Activity (DRA)

A direct reading activity (DRA) is an instructional format for teaching reading where the teacher assumes the major instructional role. He develops background knowledge, introduces new words, and gives the students a purpose for reading. Then he directs the discussion with questions to develop reading comprehension. Finally, he reinforces and extends the skills and knowledge develops in the story. For example: The teacher introduces the words "industry"

and "economy" to students. For each word, the teacher writes a sentence from the text that includes the word. The teacher includes enough surrounding sentences so that students have sufficient context to figure out what the word might mean.

2.3.7.3 Question- Answer Relationship (QAR)

A question-answer relationship (QAR) is a technique used to identify the type of response necessary to answer the question. Questions are the most prevalent means of evaluating reading comprehension; therefore, knowledge about source of information required to answer the questions facilitates comprehension and increases a student's ability to participate in teacher- directed discussion. In this example, the teacher provides a question for students to practice answering individually.

2.3.7.4 Directed Reading- Thinking Activity (DRTA)

Direct reading thinking activity is an instructional format for teaching reading that includes three stages: readiness for reading, activate reading, and reacting to the story.

2.3.7.5 Readers Theatre

Readers Theater is a dramatic interpretation of a play script through oral interpretive reading. The story, theme and character development are conveyed through intonation, inflection, and fluency of oral reading. For example: the students play drama.

2.3.7.6 Repeated Reading

Repeated reading is the oral rereading of a self-selected passage until accuracy and speed are fluent and represent the natural flow of language. For example: the students read the text several times for understand the reading.

2.3.7.7 Summarization

Summarization teaches the student how to write summaries of what he reads. He is shown how to delete unimportant information, group similar ideas decide on or invent topic sentences, and list supporting details. Th. For example: The students write in a short paragraph the most important information.

2.3.7.8 Word Cards

The word cards technique is technique that can be used to develop the imagination and creativity of students in order to students are able to think critically. Because in this technique the students are required to be more creative and develop their thinking. These words are placed on individual cards so that they may be used to review and reinforce a recognition vocabulary.

The teacher might evaluate himself by asking the students about his techniques. Besides, the teacher is always trying to improve his techniques become more creative and fun, it can make the student easy to understand about the material

2.4 Reading authentic material

“Authentic materials are texts produced by native speakers for a non-pedagogical purpose.” Bacon & Finnemann (1990). This definition guides to the fact that these materials are not intended to be used in the classroom from the first place.

Authentic texts have been defined as “...real-life texts, not written for pedagogic purposes”(Wallace.1992, 14). As opposed to artificial texts, authentic texts are written for natives and use a real life language.

Tomlinson (1984) argues that an authentic text is a text which is not written or uttered for language teaching purposes. Newspapers, novels, songs, interviews, and traditional fairy stories are illustration of authentic texts.

Another alternative definition suggested by Nuan: authentic texts are spoken or written language data produced in the genuine communication happens, and specifically made for educational purposes (2001).

The most suitable definition of authentic texts is the one suggested by Morrow: authentic materials are stretch of real language, produced by native speaker or writer for native audience to convey a real message of some sort (1977, p.13)

2.4.1 Examples of reading authentic material:

scripts, conversations, written interviews, articles, magazines, scientific books, songs, social media posts, novels and short stories.

2.5 Important factors in choosing authentic materials:

In order to decide authenticity of a material, teachers and course designers should meet a number of criteria. For instance, Nuttall recommends three main criteria when choosing texts to be used pedagogically *suitability of content, exploitability and readability*. Starting with suitability of content can be considered to be the most important of the three, in that the reading material should interest the students as well as be relevant to their needs. The texts should motivate the students as well as. Exploitability is another crucial criterion; it refers to how the text can be used to develop the students' competence as readers. A text that can not be exploited for teaching purposes has no use in the classroom. Just because it is in English does not mean that it can be useful. Reaching readability that is used to describe the combination of structural and lexical difficulty of a text, as well as referring to the amount of

new vocabulary and any new grammatical forms present. It is important to assess the right level for the right students.

Variety and presentation also influence the choice of authentic materials. The varied texts of a reading course are often more interesting, because learners get easily bored when reading about one subject area as ESP.

There are some questions that should be asked when choosing an authentic text:

Table 3 Table explains how to select authentic texts

Selecting Factor	Questions to be asked
Suitability of Content	<ul style="list-style-type: none"> • Does the text interest the student? • Is it relevant to the student's needs? • Does it represent the type of material that the student will use outside of the classroom?
Exploitability	<ul style="list-style-type: none"> • Can the text be exploited for teaching purposes? • For what purpose should the text be exploited? • What skills/strategies can be developed by exploiting the text?
Readability	<ul style="list-style-type: none"> • Is the text too easy/difficult for the student? • Is it structurally too demanding/complex? • How much new vocabulary does it

	contain? Is it relevant?
Presentation	<ul style="list-style-type: none"> • Does it “look” authentic? • Is it “attractive”? • Does it grab the student’s attention? • Does it make him want to read more?

2.6 Types of authenticity

When encountering authenticity, it comes to the mind something natural, true and real. As such, Breen distinguished four types of authenticity. To start with, text authenticity is used to teach in classrooms, followed by learner’s interaction authenticity with the chosen text. Authenticity of tasks that convey the language learning is also a type of authenticity. Finally, classroom environment and social situation of the language ought to be authentic. (1985, p.61)

2.7 Authentic and genuine material

Although authentic and genuine materials both refer to real or true material, there are some subtle differences when using these terms. From a process-orientated view of authenticity, Widdowson made a distinction between “authentic” and “genuine”. Genuine is an example of native speaker language, while authentic is a native speaker response (it can also include the response the writer intended upon when writing the text.):

“The language presented to them may be a genuine record of native speaker behaviour, genuine, that is to say, as textual data, but to the extent that it does not engage native speaker response it cannot be realized as authentic discourse.” (Widdowson 1990, p.45)

Authenticity can therefore be considered to be the interaction between the reader and the text and not just the text in itself. As a result, what teachers call authentic lacks native response and it is genuine rather than authentic.

2.8 Impossibility of authenticity:

The language of texts cannot be authentic because the classroom does not give contextual condition to the text to be authentic. Educationist asserts that the moment a text is taken from its real context is no longer authentic and became therefore a genuine text. This claim is supported by Wallace in the following quote: “as soon as texts, whatever their original purpose, are brought into classrooms for pedagogic purposes they have, arguably, lost authenticity.” (Wallace 1992, p. 79)

2.9 Authentic reading material in the classroom

Despite the fact that authentic material in the classroom loses its authenticity, they still can be beneficial. Because the learner is exposed to real discourse and not the artificial language of course textbooks, which tend not to contain any incidental or improper examples. They also tend to reflect the current teaching trend. Authentic materials also give the reader the opportunity to gain real information and know what is going on in the world around them. More times than not, they have something to say, be it giving information, a review. They also produce a sense of achievement. Extracting real information from a real text in a new/different language can be extremely motivating, therefore increasing students' motivation for learning by exposing them to *'real'* language (Guariento & Morley 2001). They also reflect the changes in language use, (again something that does not occur in textbooks, which become very dated, very quickly) as well as giving the learner the proof that the language is real and not only studied in the classroom: “Authentic texts can be motivating because they are proof that the language is used for real-life purposes by real people.” (Nuttall, 1996, p.172)

Using authentic materials in classrooms has considerable benefits:

- ✓ Increases the level of motivation of students;
- ✓ Bound the language used with its culture;
- ✓ Exposure of students to real life language;
- ✓ Meeting the student's needs precisely ;
- ✓ Represent an innovative and creative trend of teaching

2.10 Advantages and disadvantages of authentic material

Authentic materials are not always helpful; sometimes they could be difficult dealing with: they tend to be culturally biased and hard to grasp the full meaning outside its original context. Besides, some of its vocabulary does not meet the students' present needs. Moreover, it does not support the student with low level because it used a mixed variety of structures. Also, it can be time consuming when it needs special training for both teachers and learners. Last, some material can be outdated like stories, newspapers, and articles.

Contrarily, authentic texts have a variety of styles and types that cannot be found in traditional teaching material. Also, one piece of material can be used in multi-tasking. Using authentic material help students gain information of what happening in the world. Furthermore, it encourages the students to read for pleasure due to its interesting topics.

Conclusion:

Authentic material is all the literature that was not prepared initially for pedagogical purposes. Reading authentic material can be motivating and entertaining as equal as challenging. Many researchers have proved the crucial role of authentic material in foreign language classroom. Establishing cultural bound and exposing the students to real life language are the main exploitation of reading authentic material. However, authenticity of

text is not always achieved due to the difficulty of some authentic texts which requires modifications. Finally, a strong claim asserts that the moment a text is brought into the classroom, its authenticity is lost.

Chapter Three: Field Work and Research Methodology

Introduction:

This master thesis aims at assessing the implementation of phonological awareness while reading authentic material. In this account, this chapter includes the research approach and paradigm to be used in collecting and exploring data required to accomplish the study. And in order to answer the research questions, three data collection methods were adopted; questionnaire, observation, and pretest posttest experiment. Accordingly, the above-mentioned instruments are to confirm or reject the null and/or H1 hypotheses. Thus, this practical chapter is developed to analyze the results reaped from the used data gathering tools (students' questionnaire and pretest posttest experiment, and from observation) and coded in form of tables and graphics then analyze it in written content. This chapter is closed with discussion of collected data from the participants and a conclusion.

2.11 Research methodology:

The researcher in this study aims to assess the implementation of phonological awareness in reading authentic material. In order to do so, both quantitative (descriptive) and qualitative methods are needed to gather information and answer the research questions. The mixture of quantitative and qualitative approaches allows describing the participants' situation towards applying phonological awareness in reading authentic material. As well as checking their attitudes and their level in reading authentic material in English as they study Anesthesia in French language. A triangle of instruments was used to fulfill the research gap. An experiment was run on one group with pretest, treatment, and post test. In the mean time, observation during the two tests and treatment, which is the most reliable tool to collect live and accurate description of reading abilities. Also, a questionnaire, that aims to collect further data and to test attitudes of Anesthetists students towards phonological awareness and authentic material.

2.11.1 Research Paradigm and Approach:

This research requires the adoption of pragmatic paradigm as Hoadjli ascertain "instead of focusing on methods, researchers emphasize on the research problem, and use all the approaches available to understand the problem"(2020). Therefore, quantitative and qualitative approaches are primordial to pursue data collection and analysis. The former approach was originated in natural sciences, which deals with numbers, descriptions, statistics and experiments. Then after 1970, linguists borrowed the scientific approach with the emergence of applied linguistics. The later (qualitative), is the approach of social sciences and applied linguistics is part of it. This approach deals with attitudes, believes, opinions and all qualitative data.

2.11.2 Research design:

In this dissertation three designs are chosen. First, the pre-experimental design one group pretest, treatment and post test. Secondly, a structured observation must be conducted while testing and in the treatment of the group. Lastly, the third design is the semi structured questionnaire which collects both quantitative and qualitative information about the sample of the study. All of the designs were piloted and verified by the supervisor, peers and other university teachers.

2.11.3 Population and Sample:

Non-probability sampling also known as non-representative sampling is the way to conduct the practical part of this dissertation. Vasja Vehovar and Vera Toepoel and Stephanie Steinmetz define this type of sampling "we initially defined non-probability sampling as a deviation from probability sampling principles. This usually means that units that are included with unknown probabilities, or, that some of these probabilities are known to be zero". And out of non representative sampling the study opted for the availability or convenience

sampling, because I study Anesthetist and the sample are my colleagues. Convenience sampling is a method of collecting data from participants who are not very far from the researcher. The population is 42, the sample of the questionnaire $n= 32$, and the experiment and observation sample was $n= 20$.

2.11.4 Description of the used tools:

2.11.4.1 Quasi-experimental (pre-experimental, one group pretest, treatment and post test):

2.11.4.1.1 Pretest posttest description:

Each test has two sections; one to test reading and another to assess phonological skills of the sample. The test is out of 20, and participants were given one hour dealing with it. The number of the sample is 20; they study Anesthetist in French language. The tests are designed to provide accurate description of strengths and weaknesses of the participants in reading authentic medical material and medical terms in general.

2.11.4.1.2 Treatment description:

The treatment is designed after the results of pretest, were it focuses on syllables division and phoneme blending and segmentations mainly. Also, the treatment included lists of some technical vocabulary and semi technical vocabulary which the students were given chance to read it with guidance of the researcher. And it ended with reading of some authentic texts and mistakes were highlighted and feedback is given.

2.11.4.2 Structured observation:

The key feature of the observation is that it supports the research process with "live" information about the studied situation. This instrument is fundamental for the current study; hence reading is a skill that should be observed if decisions are to be made. Moreover, the

observation was on the two variables in a very organized and structured way. And it was applied on the same sample (n=20) of the experiment and in the same timing (pretest, treatment, and posttest)

2.11.4.3 The questionnaire:

The questionnaire was administered to Anesthesia students in the High Institute of Nursing of Biskra. It was posted in Face book page of the group and 32 answers were received in three days. The questionnaire was posted on 14th May, 2023. In addition, the questionnaire contains 16 question shared in three sections; profile information, reading authentic material, and phonological awareness. The questions were mixture of close ended and multiple choices, and three open ended questions. Thus, this questionnaire intended to assess the implementation of phonological awareness while reading authentic material and collects data necessary to answer research questions, as well as checking the two hypotheses.

2.12 Field Work:

2.12.1 Analysis of the experiment:

2.12.1.1 Descriptive statistics:

Descriptive statistics is a tool of describing features of a data set by measures of frequency, central tendency, and measures of spread. The purpose of descriptive statistics is to summarize data and make statements about the described data; it does not go beyond.

The table represents the distribution of pretest and posttest marks of the experimented group. Also, it appears from the table that the mode (most frequent score obtained) of pretest is 11. The mean of pretest is 10.55, and the median is 10.25 $(10+10.5/2)$. Pretest standard deviation is 3.55. On the other hand, measures of posttest was as follows; the mode 10 and 12,

median is 11 because $(12+10)/2$). Additionally, the mean of the posttest is 11.58, whereas SD is 3.31.

Table 4 Table that summarizes the scores of the group and descriptive statistics (pre and posttest)

N	Student	Pretest Marks	Posttest Marks	Mean
01	Student 01	18	17	17.5
02	Student 02	17.5	17	17.25
03	Student 03	16	17	16.5
04	Student 04	12	13	12.5
05	Student 05	11	12	11.5
06	Student 06	11	12	11.5
07	Student 07	11	12	11.5
08	Student 08	11	10	10.5
09	Student 09	10.5	10	10.25
10	Student 10	10.5	10	10.25
11	Student 11	10	10	10
12	Student 12	10	9	9.5
13	Student 13	9.75	8	8.88
14	Student 14	9.5	16	12.75
15	Student 15	9.25	15	12.13
16	Student 16	9	12	10.5
17	Student 17	9	8	8.5
18	Student 18	8	7	7.5
19	Student 19	5	9	7
20	Student 20	3	7.5	5.25
Sum of scores (Σx)		211	231.5	221.25
Mean of scores (X)		10.55	11.58	11.06
Standard deviation SD		3.55	3.31	3.22

The mode, median and mean of each pretest and posttest are almost the same (11, 10 and 12; 10.25, 11; 10.55, 11.58). This indicates that the data distribution is normal.

The mean before the treatment was 10.55, and after the students receive treatment it changed from 10.55 to 11.58. Also, the standard deviation of pretest scores was 3.55, and then it shifted to 3.31 in the posttest. This modification of mean and standard deviation values of pretest and posttest is normally attributed to the treatment.

A histogram that demonstrates the difference between pretest and posttest marks of the participants.

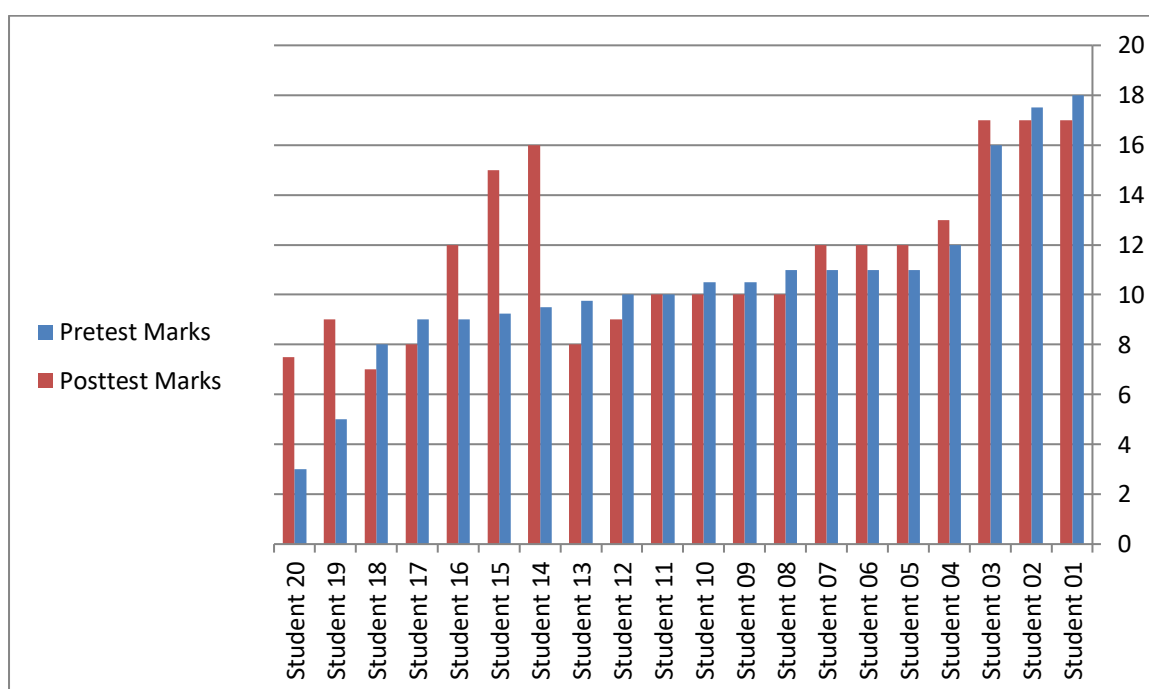


Figure 3. Figure of bar chart that highlights the difference between pre and posttest scores

2.12.1.2 Inferential statistics:

Inferential statistics is a field of statistics that draw inferences about from the data of sample studied through various analytical tools. It helps to create a good understanding of the population and make generalizations. Phakiti ascertain that "inferential statistics are used to help us look beyond raw data and descriptive statistics. They help us make inferences about population parameters"(2010, p.44). Thus, inferential statistics is the next step after the

descriptive statistics, which enables the researcher to decide about the population, sampling, and draw conclusions.

2.12.1.2.1 Assumption for test category:

For the first assumption, the type of data determines the appropriate statistical test to be used. So, in this context the data are numerical.

Second assumption is sampling approach or method. As a main purpose, inferential statistics seeks generalization. To do so, sampling has to be probability sampling otherwise no generalization of results. In the present situation sampling is not random; convenience sampling is recruited because who performs the study is Anesthetic student and his colleagues are available to him. And this leads to use non-parametric tests without going any further for the rest assumptions. Wilcoxon test is the optimal statistical test in this context.

Wilcoxon test: The wilcoxon test is a non-parametric test statistical hypothesis test used either to verify the location of a population based on a sample of data, or to compare the locations of two populations using two matched samples.

The table below represents the statistics of Wilcoxon test and decision about it.

Table 5. Table of inferential statistics

Null Hypothesis	Test	Sig.	Decision
The median of differences between Pretest and Post-test equals 0	Related-Samples Wilcoxon Signed Rank Test	0.183	Accept the null hypothesis

P value is 0.183, so the null hypothesis is accepted "there is no significant relation between phonological awareness and reading".

2.12.2 Structured observation:

Although observation is used basically in qualitative studies, it is also crucial in quantitative research. For example, observation helps in counting the occurrence of a particular

behavior and determines its frequency. Thus, a systematic and high structured observation enables the researcher to generate data that can be numerical and counted. The observation used encompasses two sections, pronunciation and articulation (testing phonological awareness) and a section for reading. Each section has criteria, some criteria indicates negative behavior or error and others are positive.

Table 6 Table that describes the data of the structured observation

Variable Criteria Student	Phonological awareness (pronunciation and articulation)					Reading		
	Correct syllable	Correct Phonemes	Combination of onset-Rime	phoneme deletion	Sound substitution	Fleuency	Rapid naming	Word recognition/comprehension
Student 01	√	√	√			√	√	√
Student 02		√		√	√	√	√	√
Student 03		√	√	√	√		√	√
Student 04	√	√					√	√
Student 05	√				√			
Student 06	√	√		√	√		√	√
Student 07	√			√	√			
Student 08	√							
Student 09	√							√
Student 10	√			√	√		√	
Student 11				√				
Student 12	√	√	√			√	√	
Student 13	√			√	√		√	√
Student 14	√	√			√		√	
Student 15	√			√	√		√	√
Student 16								
Student	√	√		√				

17								
Student 18	√			√				
Student 19	√	√			√			
Student 20		√		√			√	
TOTAL	15	10	03	11	10	03	11	08

2.12.2.1 Analysis of the data obtained through observation:

2.12.2.1.1 Phonological awareness section:

Criterion	Correct syllable	Correct phoneme	Onset-rime combination	Phoneme deletion	Sound substitution
Frequency	15	10	03	11	10
Percentage	75%	50%	15%	55%	50%

Table 7: Table that shows the frequency and percentage of phonological awareness criteria (observed)

- ✓ It appears from the table that 75% of the observed group produces a correct syllable when reading.
- ✓ As for the phonemes, half of the participants utter right phonemes which the other half is not able to do.
- ✓ Only 03 participants were able to combine the onset-rime in the words that they tried to read.
- ✓ Reaching phoneme deletion and phoneme substitution, results indicate around half of the participants are opting for deletion and substitution of sound especially when they found difficulties producing some sounds.
- ✓ It is noticed that a participant who deletes phonemes, he is likely to do sound substitution (almost the same participants did both)

- ✓ Also, it is worth mentioning that this section has 49 observed behaviors out a total of 71, which indicates that much work was given to phonological awareness in contrast to reading.

2.12.2.1.2 Reading authentic material:

Table 8 *The table shows reading authentic material criteria frequency and criteria*

Criterion	Fluency	Rapid naming	Word recognition/comprehension
Frequency	03	11	08
Percentage	15%	55%	40%

- ✓ 15% of the total participants have fluency when reading authentic material
- ✓ More than half of the participant can name the words when reading
- ✓ However, not all of the participants recognized the words they have read, and just 40% of participants comprehend the full meaning of authentic texts.
- ✓ Two participants does not meet any of the criteria that have been made in both sections, phonological awareness and reading.

Coming to the attitude and behaviors observed when taking the tests and during treatment, acceptability seems on the faces of participants. Some students are nervous when taking the tests. Others are ignorant and do want to be a part of the experiment.

2.12.3 The questionnaire:

Questionnaire is a widely used tool in both qualitative and quantitative researches, because it gives the opportunity to address qualitative and quantitative information. Also, the data obtained from the questionnaire are either described statistically or according to themes and content. This dissertations' questionnaire was intended to collect numerical as well as qualitative data to best answer the research questions and hypotheses. The questionnaire assesses the implementation of phonological awareness through reading authentic materials.

And it ranges from general profile information to detailed and narrowed questions. Analysis and results of the questionnaire are in the subsequent title.

2.12.3.1 Analysis of the questionnaire:

2.12.3.1.1 Profile information:

Gender: specify your gender.

Table 9 Table that specifies the gender of the participants

Item	Participants	Percentage%
Male	12	37.5%
Female	20	62.5%
Total	32	100%

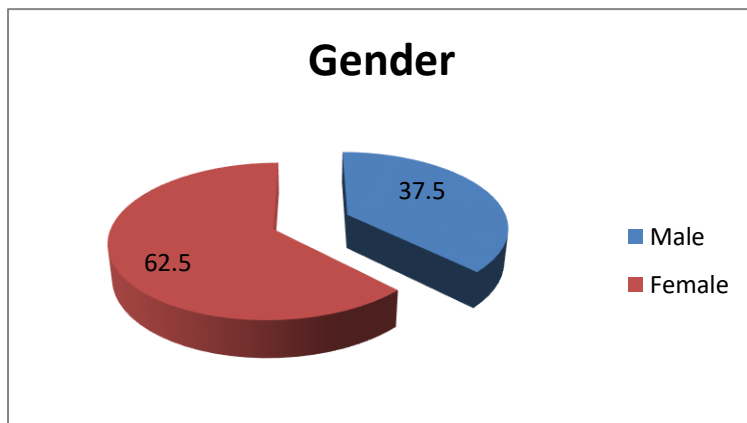


Figure 4. Figure of pie chart that visualize gender among the sample

From the graph and the table one can deduce that in medical and nursing sciences females are dominant gender. As for the results, 62,5% of participants are female, when only 37,5% are males.

Age: Indicate your age?

Table 10 Table that describes the age of the participants (percentage frequency,)

Item	Participants	Percentage%
Less than 26 years	06	18.75%
26 years to 30 ans	16	50%
From 31 to 40 years	10	31.25%
Total	32	100

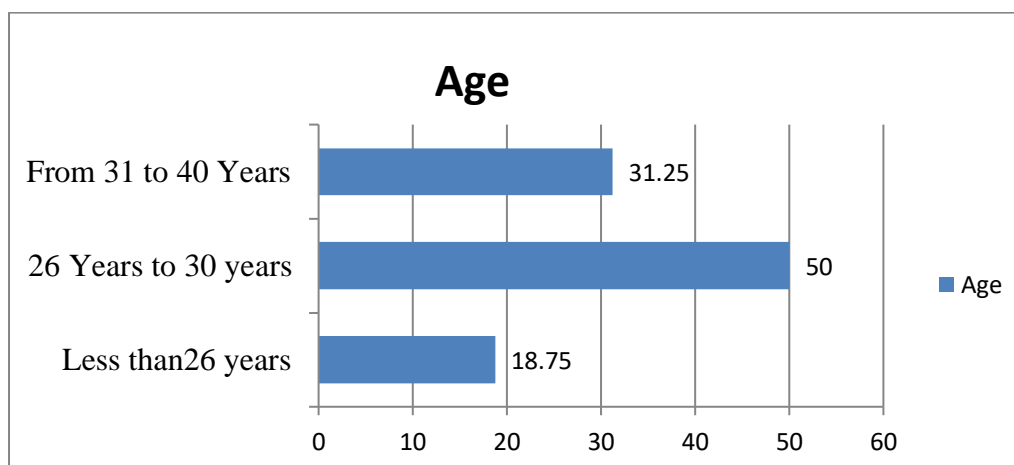


Figure 5. Bar chart summarizes the age of participants

- ✓ It appears that half of the participant aged from 26 to 30 years old, whereas only 10 participants out of 32 are aged between 31 to 40 years. And then 06 colleagues are less than 26 years old.

This ensures that all the participants in the sample are of certain age where they can learn by themselves and they have control of learning process.

Work experience:

Precise the length of your work experience?

Table 11 Table of frequency and percentage of work experience

Item	Participants	Percentage%
05years to 10years	26	81.25%
More than 10years	6	18.75%
Total	20	100%

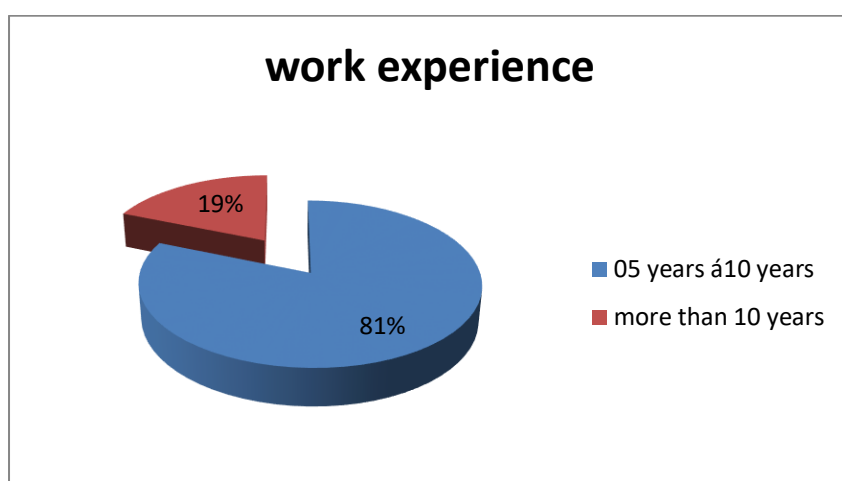


Figure 6. Pie chart that visualize the work experience of the Anesthetic students

- ✓ The majority (81%) of participants have a work experience from 05 to 10 years in Algerian hospitals.
- ✓ However, 19% of the respondents (06) who answered the questionnaire have been working for more than ten years.

This leads to deduce that most of participants are still young and can be motivated to read medical sources written in English.

Section two: Reading authentic material.

Have you ever

Table 12 Table that represents answers of the first question of second section **attended**

the/an English language course?

Item	Participants	Percentage%
Yes	10	31.25%
No	22	68.75%
Total	20	100%

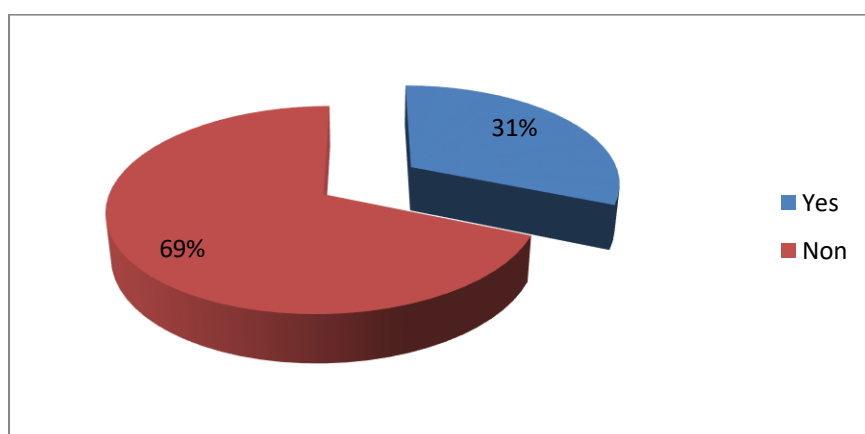


Figure 7. Figure of pie chart that describes the participants attended English course or not

- ✓ The figure and the table portray that 69%; 22 out of 32 of the participants have not attended an English language course.
- ✓ 31% of the participants i.e. 10 participant chosen "Yes" as answer which means that they received an English language course.

The described results indicate that most of the sample does not receive a specific education of English as a language.

If yes, explain why?

Table 13 Table that summarizes the participants' answers of reasons for attending English course

Response	Participants	Percentage%
Self development	02	20%

There is good teacher	01	10%
In order to learn	02	20%
I have a Master's degree in English literature and civilization	01	10%
To learn English	04	40%
Total	10	100%

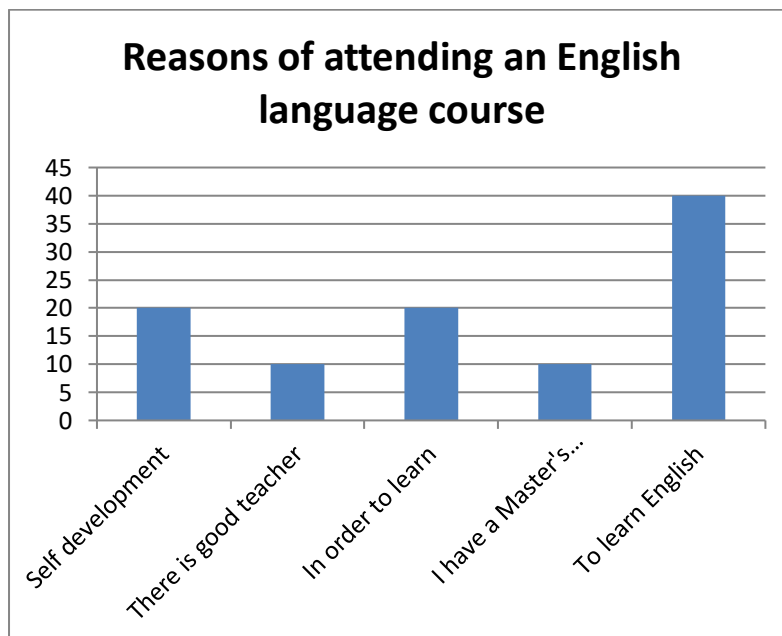


Figure 8. Bar chart of answers of the participants (reasons to attend English course)

It is obvious from the table and bar chart:

- ✓ Four student of Anesthetic attended an English language course because they wanted to learn English; they represent 40% of Anesthetists who answered "yes" to the previous question.
- ✓ Then, 20% of the whole percentage subscribed in an English language course for the reason of self development. Similar number (02 out of 10), say in order to learn.

- ✓ One participant has a Master degree in English language and civilization
- ✓ The last participant chose to learn English because h/she found a good teacher.

According to the analysis, Anesthetists who participated in English course differ in reasons of the participations. However, most of them wanted to learn English.

Table 14 *Table that describes and summarizes the survey about reading English authentic material*

Do you read any medical sources in the English language?

Item	Participants	Percentage%
Yes	15	47%
No	17	53%
Total	20	100%

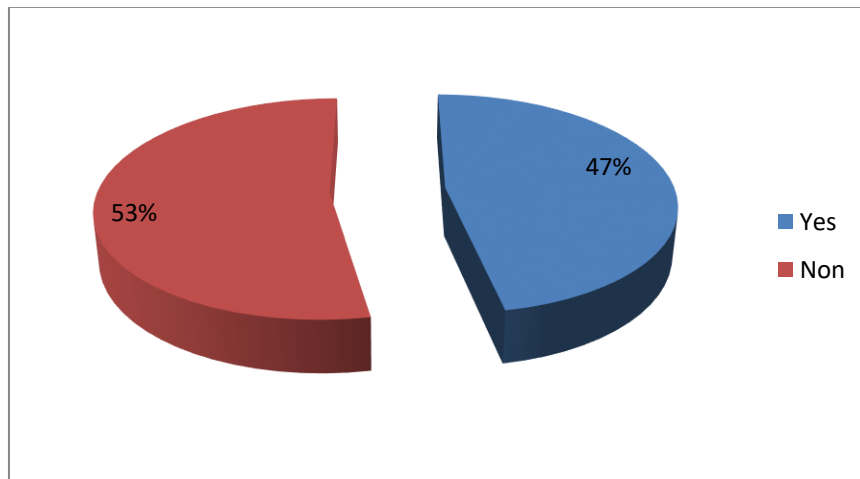


Figure 9. Figure that describes and summarizes the survey about reading English authentic material

The results of reading medical sources were approximately the same:

- ✓ 53% which is 17 of 32 participants does not read medical sources written in English.
- ✓ On the other hand a number of 15 which represents 47% of the total participants refers that they read medical sources written in English.

This wide spread of reading medical sources written in English is attributed to its richness of information and spread all over the world, even in Algeria(a country that teaches medical sciences in French)

**If yes or no
explain why?**

Table 15 Table that summarizes the reasons for reading authentic material

Response	Participants	Percentage%
Innovative information	07	22%
The only available	08	25%
I do not read	10	31%
I can not understand	07	22%
Total	32	100%

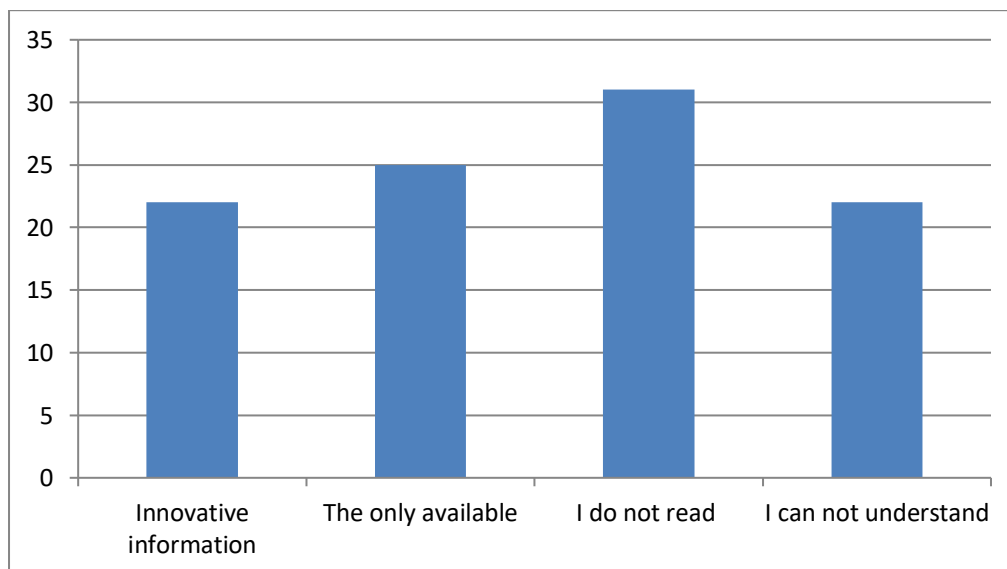


Figure 10. Figure that summarizes the reasons for reading authentic material

The analyses of the data obtained through this question are the following:

- ✓ 31% of answers revealed that 10 participants do not read at all.

- ✓ Quarter of the sample attributed their reading of English sources of medicine to the fact that they are the only available.
- ✓ 22% of participants said they read sources written in English because it contains new information.
- ✓ Equally, 22% of Anesthetic students said that they do not understand.

Commentary of the data analysis reveals that more than half of Anesthetists does not read (22% and 31%) and this could be due to the French language teaching.

Table 16 A table that describes the frequency of reading authentic material

How often do you use sources written in English?

Item	Participants	Percentage%
Never	12	37.5%
Rarely	04	12.5%
Sametimes	08	25%
Frequently	06	19%
Always	02	6%
Total	32	100%

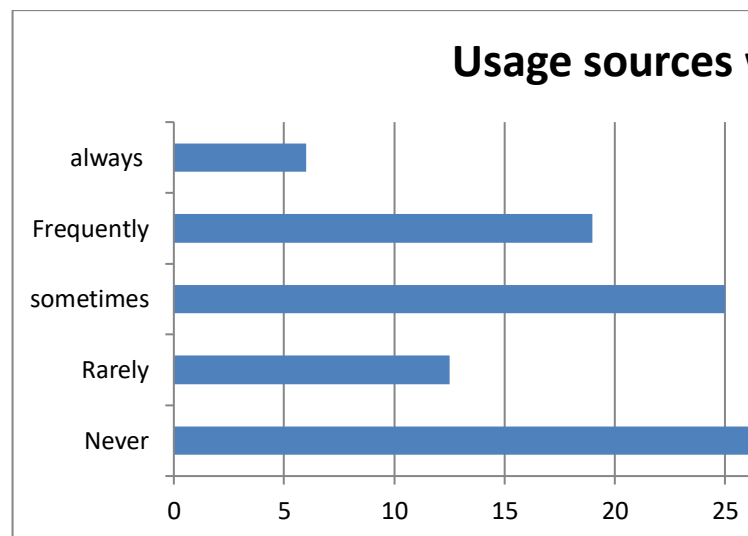


Figure 11. Bar chart that describes the frequency of reading authentic material

Some remarks to be made from the figure and the table:

- ✓ Almost (37,5%) of the participants have never read any authentic medical material written in English language.
- ✓ Then, a quarter of the participants (25%) use authentic medical material written in English sometimes.
- ✓ Followed by 06 participants who rated their reading of authentic material as frequently (19%)
- ✓ Moreover, a percentage of (12%) of respondents said they rarely use authentic material written in English
- ✓ And only two participants which represents (06%) of total participants read medical authentic reading material written in English.

All of the previous analysis reflexes the French background of the sample, because they learn medical sciences in French. Also, it indicates that English is not as dominant as French in the case of Algerian anesthetic practitioners.

If happens you read sources written in English, what examples of authentic reading material do

Table 17 A table that describes the type of authentic material that anesthetists read you prefer?

Items	Participants	Percentage%
Articles	6	19%
Books	10	31%
Medical reports	16	50%
Total	32	100

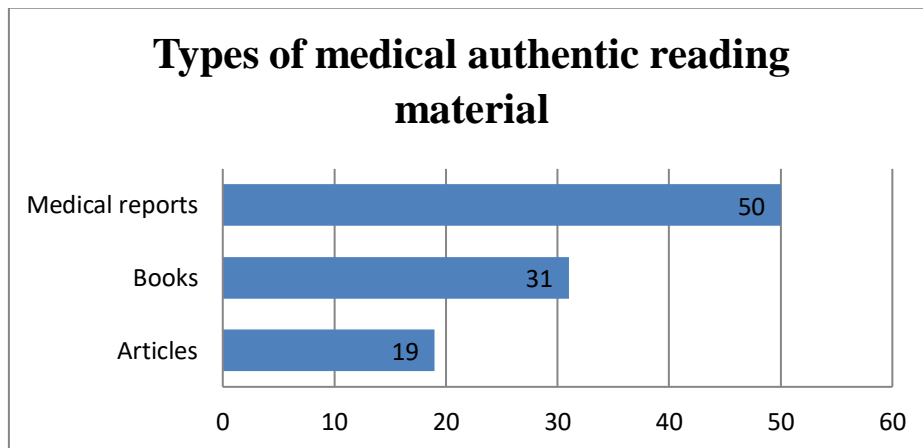


Figure 12. Figure that describes the type of authentic material that anesthetist read

The figure and the table demonstrate the following:

- ✓ Anesthetic students of Biskra prefer to read medical reports with a percentage of 50%.
- ✓ Then, 10 participants chose reading books which is 31% of the total respondents.
- ✓ The least chosen material for reading is articles with a 06 respondents and a percentage of 19%.

It appears that the majority of Anesthetic students read medical reports written in English

In your opinion, is reading an authentic medical source in English beneficial?

Table 18 Table of rates of participants of reading authentic materials

Item	Participants	Percentage%
Useful	12	37.5%
Helpful	09	28%
Neutral	00	00%
Not helpful	11	34.5%
Total	32	100%

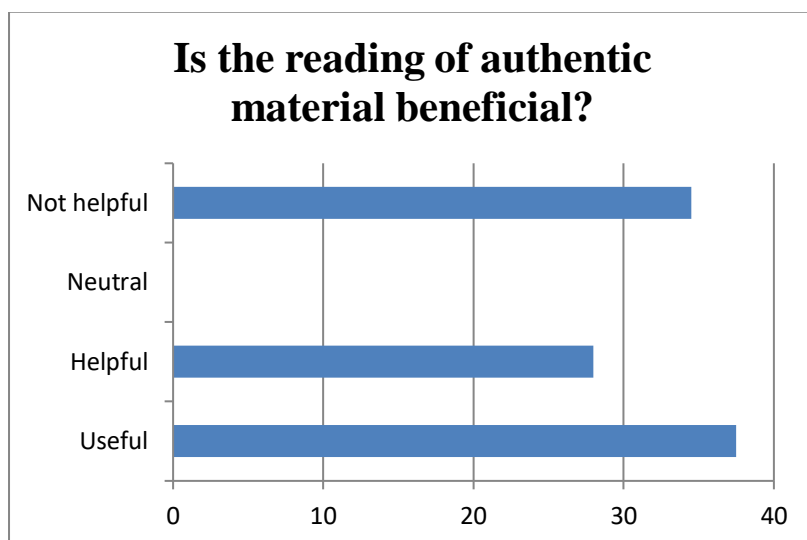


Figure 13. Figure of rates of participants of reading authentic materials

From both figure and table it is revealed that:

- ✓ The useful option ranked at the top with 12 respondents and 37.5% of total sample.
- ✓ Secondly, and as opponents comes 11 respondents who answered that reading authentic material in English is "not helpful" with a percentage of 34.5%.
- ✓ Then, 28% of participants claim that reading authentic medical sources is "helpful"
- ✓ None of the participant has chosen the option of "Neutral" about the benefit of reading medical sources written in English and all of the sample prefer to take a side, and refused to be neutral.

After analysis of the results of this question "In your opinion, is reading an authentic medical source in English beneficial?" it is induced that most (28% "helpful" and 37.5% "useful") of Anesthetic students in the High Institute of Nursing of Biskra found reading authentic sources written in English language useful and helpful. Thus, there is an acceptance of English as a language among the participants (Anesthetists)

Table 19 Table that describes the scale of difficulty of English authentic reading material

How can you rate the reading process of the authentic English medical sources?

Item	Participants	Percentage%
Hard	10	31%
Moderate	08	25%
Medium	06	19%
Easy	08	25%
Very easy	00	00%
Total	32	100%

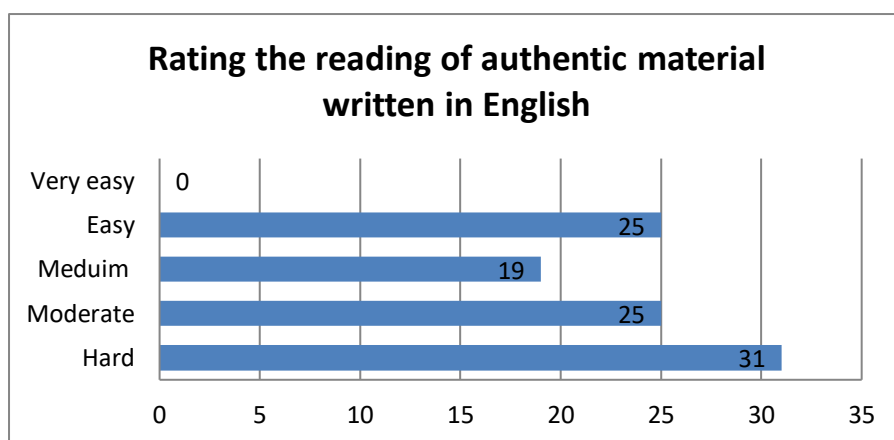


Figure 14. Figure that describes the scale of difficulty of English authentic reading material

Analysis of the figure and table runs as the following:

- ✓ 31% of the participants are 10 out of 32 refer to reading authentic medical material as hard.
- ✓ A considerable number of participants (08) declared that reading authentic medical sources written in English is moderate.

- ✓ Equally, another 08 participants with a percentage of 25% declared that the reading of authentic medical sources is easy.
- ✓ Only 06 participants who equal 19% of the total participants reveal that the reading process is average (medium)

Through the analysis it could be conducted that despite the recent trend of English usage among Algerian health practitioners in general and Anesthetists narrowly, it is still hard dealing with sources of medicine written in English.

Table 20 *Table describes the scope of difficulty on reading authentic material*

Where did you find difficulties in the reading process exactly?

Item	Participants	Percentage%
General /semi technical terms	24	75%
Medical/technical terms	08	25%
Total	32	100%

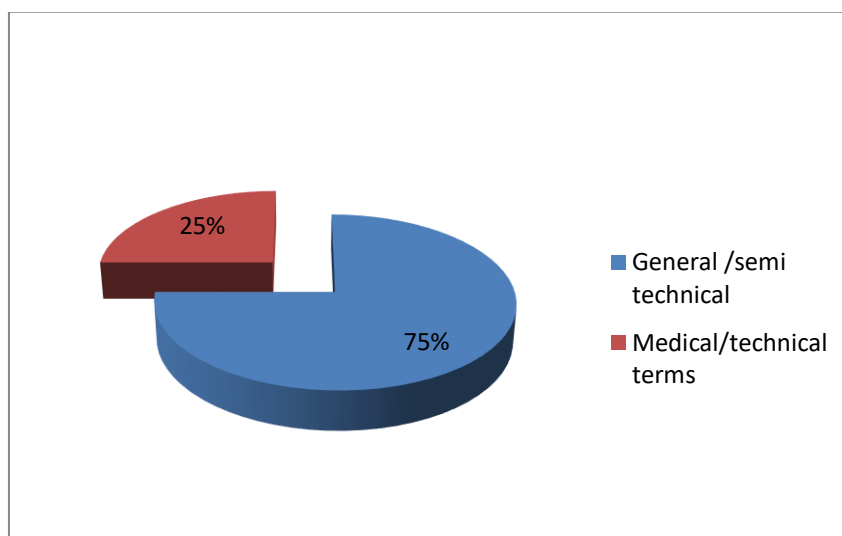


Figure 15. Figure describes the scope of difficulty on reading authentic material

From the figure and the table, it derives:

- ✓ The majority of Anesthetists (75% of students) find difficulties in reading general and semi technical words in English.
- ✓ In another view, only 08 participants (25%) of the total sample declared that the difficulty in reading authentic medical material resides in technical and medical vocabulary written in English.

After the analysis, it is obvious that most students of Anesthetic in Biskra found difficulties in reading English general vocabulary (75% of participants), in contrast to 25% who declared that the difficulties of reading medical sources of English are in the medical terminology.

Section three: Phonological awareness.

Table 21: table that describes the answers of participants about phonological awareness

Have you ever heard of phonological awareness?

Item	Participants	Percentage%

Yes	05	16%
No	27	84%
Total	32	100%

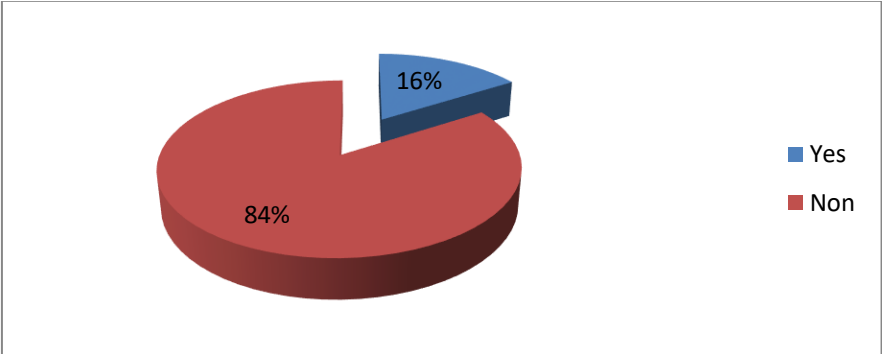


Figure 16. Pie chart that describes the answers of participants about phonological awareness

The data obtained from the question and analysis is as follows:

- ✓ The majority of participants declared that they never heard of phonological awareness with a percentage of 84%.
- ✓ 16% of participants which equates 05 respondents indicate that they have heard of phonological awareness.

25 out of 32 Anesthetists does not know about the concept of phonological awareness. On the other hand, only 05 participants know about phonological awareness which anticipates problems to come when implementing phonological awareness in reading authentic material.

In your point of view, what does

phonological awareness mean?

Options	Participants	Percentage%
Ability to write correctly	4	12.5%
Ability to read	16	50%

correctly		
Ability to manipulate sounds while reading	12	37.5%
Total	32	100

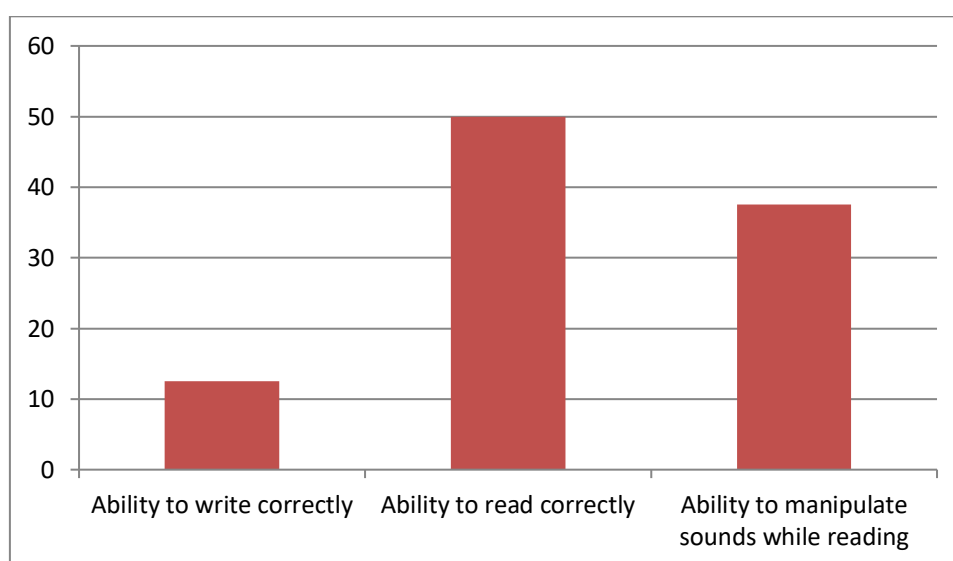


Figure 17. Chart that shows participants' opinion on the meaning of phonological awareness

The figure of bars and the table gives the following:

- ✓ Half of the students of Anesthetic (50%) view the concept of phonological awareness as the ability to read correctly.
- ✓ 37.5% of the respondents (12 out of 32) refer to phonological awareness as the ability to manipulate sounds of a language while reading.
- ✓ Then, 04 Anesthetic students (12%) answered the question of what is phonological awareness with the ability to write correctly.

Although there are four participants who said that phonological awareness is ability to write, the rest of the participants almost got the best option. 12 participants describe phonological awareness as the ability to manipulate language sounds while reading which is the most appropriate choice. However, half of the participants choose the second option which

the ability to read correctly and this can be acceptable due to the fact that phonological awareness is related to reading and the mastery of phonological awareness leads to gain reading ability.

Rate the following words according to difficulty of pronunciation:

Table 23 Rates of some technical and general words in terms of difficulty

level The word	Difficult	Hard	Medium	Easy	very easy
Analgesia	00	02	20	06	04
Hemorrhage	04	06	15	07	00
Epiglottis	08	06	15	03	00
Dorsal	16	08	08	00	00
Edema	18	09	03	01	01
Total	46	31	61	17	05

Anesthetic students were given opportunity to rate some technical and general words and analysis of both the table and figure is as follows:

- ✓ The word "Analgesia" received 20 votes as medium, and 06 as easy followed by 04 votes as very easy, two respondents rate it as hard.
- ✓ Also, most of the votes for the word "Hemorrhage" were on medium with 15 votes, and 07 for easy, 06 as hard and 04 as difficult.
- ✓ Then, 15 participants declared that "Epiglottis" is medium in pronunciation. 06 with hard and 08 have voted to difficult.
- ✓ Furthermore, the general word "Dorsal" ranked as the most difficult with 16 votes as difficult and 08 as hard and another 08 with medium, and no vote for easy and very easy.

- ✓ Lastly, "Edema" got all types of ranks (difficult, hard, medium, easy, and very easy), precisely 18 votes for difficult, 09 for hard, three as medium, and one for each easy and very easy scale.
- ✓ The most chosen scale of all the words was "Medium" with total of 61 votes, then "Difficult" with 46 votes. Followed by "Hard" because it gained 31 votes out of 160 votes. And "Easy" ranked the fourth with 17, and in the end of the scale "Very easy" with only 05 votes.

It is deduced that Anesthetists' easiest word to utter is analgesia, then hemorrhage. Also, the hardest word is dorsal which is a semi technical word, and results shows that Anesthetists students find difficulties much more on general words of English.

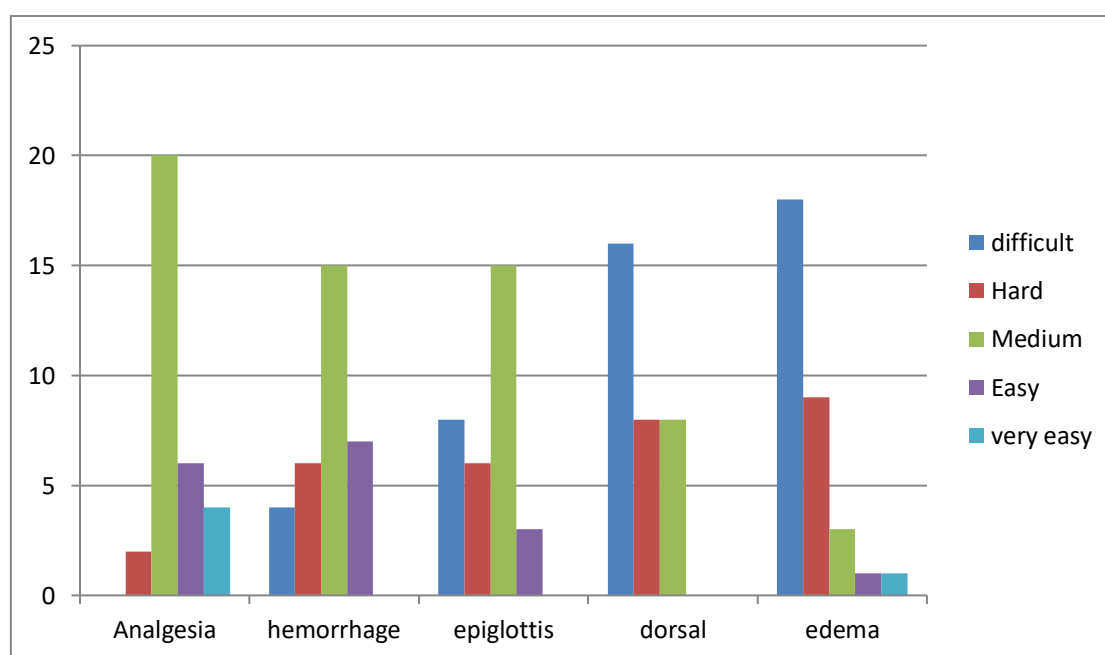


Figure 18. Chart that shows the rates of some technical and general words in terms of difficulty

Does implementing English phonological awareness important to you as Anesthetic student?

Table 24: table shows the importance of phonological awareness for Anesthetic stuents

Item	Participants	Percentage%
Yes	12	37.5%
No	20	62.5%
Total	32	100%

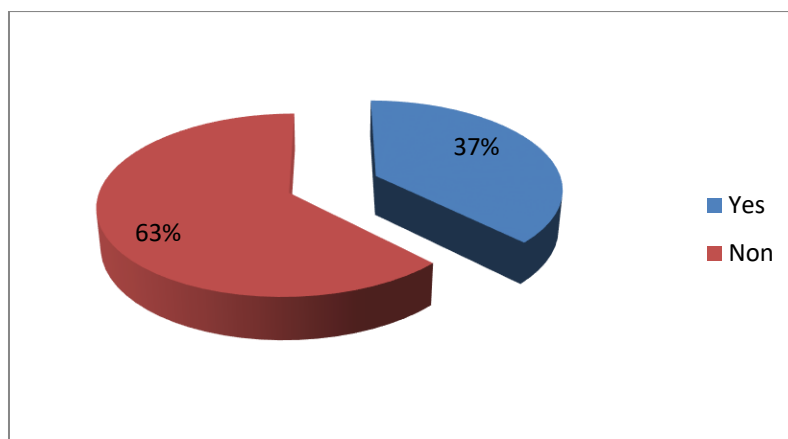


Figure 19. Pie chart that shows the importance of phonological awareness for Anesthetic students

From both figure and table that summarizes the data:

- The absolute majority of Anesthetic students (63%) said that there is no need to include phonological awareness.
- In contrast to them, a respectful number of participants (12 out of 32) views that implementing phonological awareness is beneficial to Anesthetic and Paramedical students in general.

Thus, most of Anesthetic students in High Institute of Nursing of Biskra consider implementing phonological awareness within their program is not necessary. This reveals that they have little or no prior knowledge of this technique. And, how it could helps them especially in research because nowadays almost Anesthetists and medical findings are in English language.

Table 25 Table that summarizes the reasons of the importance of the phonological awareness to anesthetic students

Response	Participants	Percentage%
Not important	04	12.5%
Not intrested	06	19%
I don't know	10	31.5%
It is difficult	02	6.25%
It eliminates reading problems	01	03%
To write and read medicale terms	02	6.25%
It facilitates researh prcess	01	03%
We need it	03	9.25%
Because I want to imigrate	03	%9.25
Total	32	100%

Either yes or no, why is it important or not

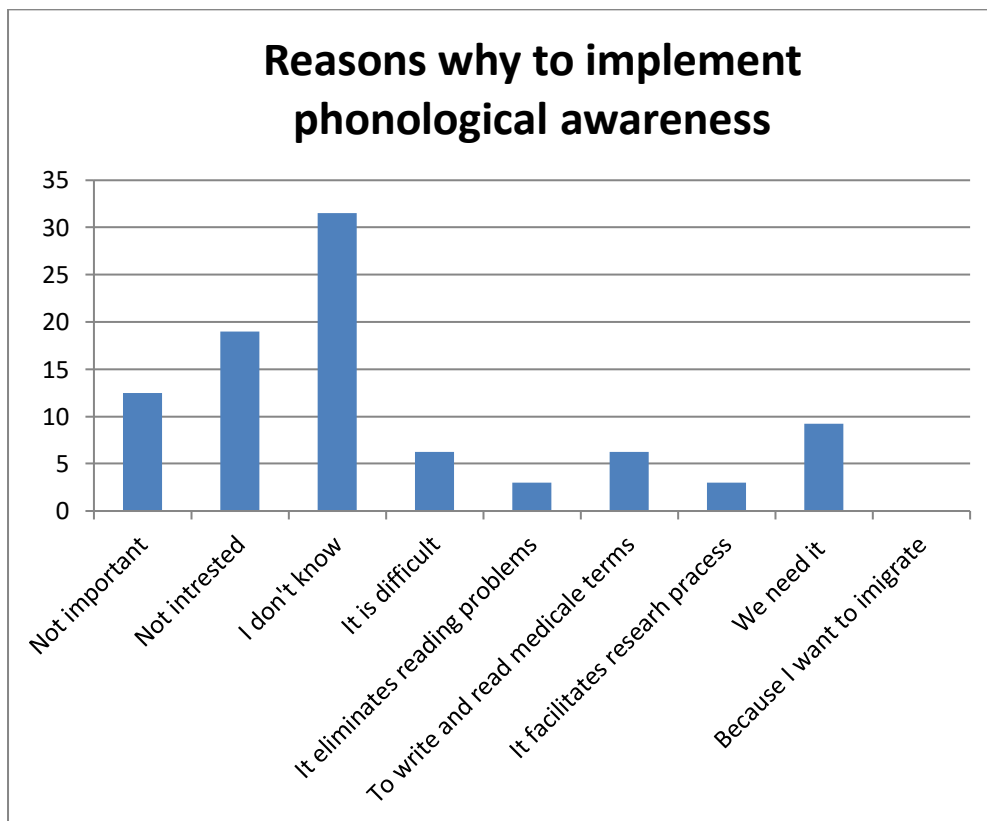


Figure 20. Bar chart that summarizes the reasons of the importance of the phonological awareness to anesthetic students

From both bar chart and table:

- ✓ Ten participants answered "I don't know" for the question why to implement phonological awareness.
- ✓ Also, 19% of the participants revealed that they are not interested.
- ✓ 04 participants who represent around 12% of the total sample declared its implementation is not important to them as Anesthetic students.
- ✓ Three participants declared their need to phonological awareness.
- ✓ And, three participants who represent 09% of the sample answered that they want implementing phonological awareness because they want to migrate.
- ✓ 06% of participants say that phonological awareness is difficult, and as equally as another 06% referred that implementing phonological awareness helps in reading and writing medical terms.
- ✓ An interesting answer received from one participant which indicates phonological awareness eliminates reading problems.

As an interpretation it is worth saying most of the Anesthetic students neglect phonological awareness. Nevertheless, there are some participants that show optimistic perspective about phonological awareness. Examples of these perspectives are, helping in writing and reading, and some want to learn it to migrate from Algeria.

2.13 Results discussion:

To review, this dissertation was intended to assess the implementation of phonological awareness in reading authentic material. This study aimed to determine the relationship between phonological awareness and reading authentic material. Moreover, it aims to assess

the implementation of phonological awareness while reading authentic material. Also, helping Algerian health practitioners read medical authentic material written in English. And most importantly develop strategies that help second language learners adopt phonological awareness in reading.

Interesting results were found through the analysis of the three instruments. Experiment was run on 20 students of Anesthetic, pretest, treatment, and posttest. Scores and results were presented through descriptive then inferential statistics. Furthermore, the structured observation tool data are analyzed and presented in tables. Lastly, questionnaire made of close ended and open ended questions that cover significant part of this dissertation.

First, while experiment is on, acceptability seems to be at the faces of some students. Others were negligent and lazy to participate in the experiment. Above all, 20 student of Anesthetic participated in this experiment and performed pretest and posttest and received treatment between the tests. Results shows that some students achieved best in the posttest (students: 03,04,05,06,07,14,15,16,19,20). Nine students achieved less in the posttest than pretest. And one student achievement is the same in both pre and posttest. Statistics of the experiment scores of pre and posttest suggested accepting the null hypothesis. So there is no significant relation between phonological awareness and reading authentic material.

Second, the structured observation includes two sections; phonological awareness and reading. Five criteria are on phonological awareness and three on reading section. Data obtained from this instrument indicates that most of the student can do rapid naming of words and half of them recognize the words. However, only 15% of participants have fluency when uttering English words. This was in relation to reading section, as for phonological awareness, results are the following. The majority of Anesthetic students master the macro-element of phonological awareness which are phoneme and syllable manipulation. But they found

difficulty with micro-elements which are onset-rime. Also, almost all students who delete phoneme opt similarly to substitution of syllables. Besides, students who meet the positive criteria of phonological awareness section equally fulfill the reading criteria. This is translated to the correlation between phonological awareness and reading.

Third, a questionnaire that contains three sections, mainly profile information, reading authentic materials, and third part of phonological awareness. To begin with background information, most of anesthetic students are females as the case for the rest of health care practitioners. Also, most of them have work experience, because in order to become Anesthetist, students must study nursing for three years then, work for another three as a major nurse to come back and take specific training for two years long to be certified as Anesthetist.

Questions about reading authentic medical material revealed critical results. For instance, the majority of the participants did not attend a course of English; however, there are 10 participants who attended a course of English. One of them, have a Master degree in English, others attended because they heard of good teacher. Additionally, almost half of the participants read authentic material of medicine written in English. Because of its richness of information and its availability and it is innovative. The general words and semi technical are harder to anesthetic students. This is attributed to their background; hence they study the technical (medical terminology) in French which are the same as in English language.

The last section of the questionnaire tackled phonological awareness. Results revealed that 85% of participants have not heard of phonological awareness. Despite of that, twelve participants guessed the appropriate definition of phonological awareness. And half of them selected the second suitable option which is acceptable. This encourages implementing phonological awareness. Furthermore, Anesthetists agreed on implementing phonological

awareness based on the following reasons. Most of answers reflect the level of Anesthetic students' awareness of English as a language. Some agreed on phonological awareness because they wanted to travel abroad, others revealed their need to it. Also, part of them knows that phonological awareness helps them in reading and eliminates reading problems.

2.13.1 Research questions:

The first research question "To what extent can phonological awareness contribute to enhancing anesthetic learners of English skills of reading authentic materials, i.e., medical materials?" was answered through the data collected and interpreted. The questionnaire shows the participants attitudes, where half of them agreed on the implementation of phonological awareness. Besides, only 07 participants failed in choosing phonological awareness definition. So phonological awareness contributes to enhancing anesthetic learners of English in reading authentic medical material and there exist a relation among the two variables.

Moreover, the second question "can phonological awareness technique be implemented? Does it need a special training for both teachers and (anesthetists) learners?" Through the observation, phonological awareness can be implemented. Hence, students show positive attitude. 20 students participated in the experiment and 32 who answered the questionnaire.

After the pretest, treatment used multiple techniques and posttest. Anesthetic learners of English need implementing lectures about reading as general skill and on reading authentic material. Also, tasks on phonological awareness such as segmenting words, word blending, identifying syllables are means of assessing. All the above mentioned is the answer of the third question of the research: "What means are needed to assess the implementation of phonological awareness to enhance anesthetists' skills in reading authentic materials, i.e., medical materials? "

2.13.2 Research hypotheses:

The null hypothesis: H_0 : It is hypothesized that there is no significant relation between reading authentic materials and phonological awareness. This hypothesis is confirmed by inferential statistics on the quasi experiment. The p value is higher than 0.05, so null hypothesis is accepted. There is no significant relationship between phonological awareness and reading authentic material.

The alternative hypothesis: H_1 : "It is hypothesized that there is a strong relation between reading authentic materials and phonological awareness" is rejected. According to inferential statistics assumptions, if "P" value is higher than 0.05, the alternative hypothesis is rejected.

2.14 Study limitations:

The current study used three instruments which are necessary to reach answers to the questions. However, this triangle of instruments takes time and efforts, and a Master student is limited in terms of period of submissions of the dissertation. In the same issue, anesthetic students are not that much collaborative and they also have lectures and exams of their official program which makes them busy and they are excused.

The results of the experiment and the wilcoxon test indicate accepting the null hypothesis and rejecting the alternative one. This result is paradoxical with the qualitative data collected and interpretation. Qualitative results show that there is a strong positive relation between authentic material reading and phonological awareness. This could be to the bias or inaccurate statistics or it could be attributed to the pre and posttest.

Conclusion:

This chapter was established to mirror the theoretical background of the study into practice. First, it determines research approach and design to be respected. Further it explains the rationale behind selecting approach, design, methods and data collecting methods. Second,

the experiment was described and presented in tables, bar charts and graphs, followed by analysis and interpretations. Thirdly, structured observation was presented in tables and results were analyzed and interpreted. Moreover, a questionnaire that target quantitative as well as qualitative data was summarized and described in various ways. Barr and pie charts, tables, and graphics to be best visualized, analyzed and interpreted. After that, discussion of results of the triangle of instruments was on this chapter. Discussion also, of the results is done in the light of research questions and hypotheses. And lastly, it highlighted the limitation of the study in terms of time and participants and the results as well.

General Conclusion

General conclusion

This dissertation has tested the implementation of phonological awareness in reading authentic material. Taking into consideration the research objectives, which are: assessing the implementation of phonological awareness, helping Algerian health practitioners read authentic material written in English. And most importantly, determining the relationship of phonological awareness and reading authentic material. Additionally, this work attempted to answer the research questions and the two hypotheses.

Starting with literature review is crucial to continue the study. The literature review occupied two chapters, one for phonological awareness, and a chapter was elaborated to reading, and reading authentic material. The first chapter defined phonological awareness from different dimensions. And it also gives types of phonological, means of assessment and its implementation in foreign language classroom. Accordingly, the second chapter talked about reading as general skill. Then, it was narrowed to reading authentic materials, how to select an authentic reading material, how to test and so on. Besides, it accounts for the advantages and merits of authentic materials.

Reaching to the third chapter of methodology and field work which is the larger chapter. It first highlighted the methodology approach and design, methods and instruments. Data of the quasi experimental one group pretest, treatment posttest revealed that there is no significant relation between phonological awareness and reading authentic material. Furthermore, the structured observation indicated that anesthetic students of BISKRA are poor readers referring to fluency and pronunciation; however, they can name words easily. And in regard to phonological awareness, observation shows that most of them utter syllables and phonemes correctly and fail in micro level of phonology which is onset-rime. The questionnaire results' analysis answers research questions, because qualitative data (open questions) shows acceptability of participants of implementing English phonological awareness and English in general.

As any research process, the current study faced obstacles and limitations. First, time limitations, and because this study used triangle of tools for collecting and exploring data, it was hard to give enough time to each instruments in preparing, conducting and analysis. Also, who conducts the study is also anesthetic student, which predicts the difficulty dealing with colleagues and teaching them. Moreover, the contradictory results of quantitative and qualitative results. The inferential statistics rejected the alternative hypothesis. On the other hand the qualitative data and analysis discovered the relationship between reading and phonological awareness.

In sum, this dissertation assessed the implementation of phonological awareness in reading authentic materials. It used mixed methods, and three data collecting instruments to test the hypotheses and answer research questions. Nevertheless, further studies must be done in the ways of implementing phonological awareness in reading. And on means of assessing it, and

uncover the nature of the relationship that exist between phonological awareness and reading authentic material.

Suggestions

Phonological awareness is of great importance to EFL learners and teachers. Also, authentic materials are the best way to help learners experience the native production of language.

These are some suggestions to be considered:

- Implement phonological awareness in all level of education
- Consider revising the syllabus of anesthetic and health practitioners in general of "Anglais médicale"
- Shift the medical studies in Algeria from French to English language
- Update the knowledge and information of English language teachers about the relation of reading and phonological awareness.
- More exposure of EFL learners to authentic material in the classroom
- Include English in Anesthetic syllabus as essential module so that they can catch up the development of their career outside Algeria
- Authentic material should be used widely in teaching English language

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List of Appendices

M. K. University of Biskra

English Departement

Major: Paramedic Stud

Module: Medical English

Time Allotted: 60 minute

Date: 25th, April 2023

Prepared by Belgacem MOULATI

Supervisor: Dr. Ahmed BACHER

Pretest

1. Reading authentic material

1. Read the following passage then answer thoroughly the questions:

Anaphylaxis is a type of hypersensitivity response that takes place to a particular allergen (such as drugs). Most of anesthetic medication such as thiopental, propofol, muscle relaxants, and etomidate may induce anaphylactic reaction.

a) Put (✓) in the right answer:

Anaphylaxis appears when:

- The patient is having a severe infection
- The patient has low blood pressure
- The patient is taking some anesthetic drugs

b) In the text examples of allergen that causes anaphylactic reactions, mention two:

.....

2. Read the following passage, then answer thoroughly the questions:

First degree burns

A first-degree burn is a superficial injury, characterized merely by reddening of the skin, even though the reddening may be quite intense. A sunburn or a mild scald (as by steam from boiling water) is an example of this type of burn. First-degree burns, while they may be very painful (as the case of moderate sunburn), will not cause scarring and will heal of their own accord.

A. Say whether the following statements are true/false

1. A second-degree burn is a superficial injury.
2. Sunburn and steam by boiling water are examples of first-degree burns.....

B. What is the famous sign in first-degree burn?

.....

Testing phonological awareness

3. Classify the words that have the same pronunciation at the end:

gastritis, amnesia, pancreatitis, hypocapnia, hypothermia, acidosis, atelectasis, anaphylaxis, trachea and meningitis.

Alkalosis	Anesthesia	Hepatitis

4. Put the following words in the right column:

burn, first, reddening, inhalation, patient, allergic, apnea, pain, and kidney.

One syllabus	Two syllabuses	Three and more

5. Divide the words in the list as shown in the example:

Word	Suffix	Root	Prefix
Hypoglycemia	hypo	Glyc	emia
Bradycardia			
Appendectomy			
Rabdomyosarcoma			

6. Match the following word units to form a meaningful word: an, tachy, dys, scopy, glyc, emia (you can use it more than once), endo, hypo, rhythmia, and cardia.

✓

- ✓
- ✓
- ✓
- ✓

7. Link each expression with the appropriate meaning:

Expression	Meaning
Anesthesia	Complete or partial collapse of the lung or a lobe of lung.
Cardiopulmonary bypass	a technique that temporarily takes over the function of heart and lungs
Central line	a state of loss of sensation and awareness during a surgery
Atelectasis	soft tube that anesthetist puts into a large vein to measure blood pressure in an invasive way

M. K. University of Biskra

English Departement

Major: Anesthetic (paramedical)

Module: Medical English

Prepared by Belgacem MOULATI

Supervisor: Dr. Ahmed BACHER

Treatment

1. Reading authentic material:

Practice:

Symptoms of barbiturate abuse: the barbiturates slow both the heart and respiratory rates and tend to lower the blood pressure. In higher doses the effects resemble alcoholic intoxication, with mental confusion slurred speech, staggering gait, and disorientation. The ability to think, to concentrate, and to work is impaired, and emotional control is weakened. Chronic users may become irritable, easily angered, and want to fight or assault someone. Finally, they may fall into deep sleep.

Hemorrhagic shock: in shock resulting from severe hemorrhage, both internal and external, the circulating blood volume is diminished by direct loss of both plasma and cellular elements. Therefore, at first, the number of red cells per cubic millimeter is unchanged. As tissue fluids tend to be drawn into the bloodstream, however, blood dilution and tissue dehydration result from the decreased blood volume and possible vasodilatation, arterial and venous pressure fall.

Diffuse esophageal spasm: the esophagus is a soft, rather thin-walled muscular tube which passes the bolus of food along by means of reflex peristaltic movement which proceeds evenly in one direction from the mouth to the stomach. One of the most painful affections to which esophagus is subject is known as diffuse esophageal spasm. This condition, disturbance of motility of the esophageal musculature was first described as long ago as 1889. Although it is a much more common occurrence than generally recognized, it has received relatively little medical attention.

2. Syllables:

Definition: A syllable is a unit of spoken or written language that forms an entire word or parts of words.

Syllables always contain a single vowel sound with a surrounding consonant sounds. Thus, when you are asked to count the syllables of an English word, you should count the vowels of the word then the syllables are according to the number of vowels.

However, sometimes as a foreign learner of English, students face words that contain two vowels that follow each other and pronounced together (Dighton) , they also called vowel team that should be seen together when devising a syllable.

Practice:

Traumatic → three syllable fracture → three syllables

Person → many →

Symptoms → suture →

Source → allergic →

Sign → apnea →

either → tracheotomy →

Sudden → collapse →

Require → rupture

3. Some common medical terms that Anesthetic students should know:

Synovitis: inflammation of the membrane lining a joint.

Systole: the period during which the heart contracts to force blood out into the circulation.

Tachypnea(tachypnee): technically means an excessively rapid rate of respiration; it also refers to a neurotic condition characterized by excessively rapid, shallow breathing.

Tracheotomy (trachiotomie): an opening made surgically in the trachea to create an airway in cases of respiratory obstruction.

Thrombocytopenia(thrombopenie) : lack of platelets in the blood.

Vagal shock(choc vagal) : a state of unconsciousness caused by stimulation or inhibition of the vagus nerve.

Vasopressor (vasopresseur): any agent which raises the blood pressure by causing contraction of the capillaries or smaller arteries.

Laryngoscope(laryngoscope): an instrument for directly visualizing the larynx and its related structures.

Exudate (exuda) : fluid containing white cells and other cellular elements given off by the tissues in response to infection or severe chemical irritation; pus.

Edema;(oedeme): retention of excess fluid in the tissues.

Cyanosis (cyanose): blueness of the skin due to insufficient oxygen in the blood.

Dehydration (déshydratation): loss of water from body or tissue, or the condition resulting from an inadequate supply of water.

Asthma (asthme): an allergic condition characterized by difficult breathing; caused by constriction and spasm of bronchial tubes.

Adenoma (adénome): a tumor, not necessarily cancerous, which resembles a gland in its cellular structure.

Albuminuria (albuminurie): presence of albumin in the urine.

M. K. University of Biskra

English Departement

Major: Anesthetic (paramedical)

Module: Medical English

Time Allotted: 60 minute

Date: 12th, May 2023

Prepared by Belgacem MOULATI

Supervisor: Dr. Ahmed BACHER

Posttest

Section one: Reading authentic medical materials

1. Read the following passages then answer thoroughly the questions:

Passage 01: General Anesthesia: a patient who gets general anesthesia is completely unconscious. They can't feel any pain, and are not aware of the surgery as it happens, and don't remember anything from when they are asleep.

Say whether the following statements are true or false:

A patient who gets general anesthesia is subconscious.....

In general anesthesia, the patient is awake and remembers everything.....

Patients during surgery don't feel anything except pain.....

2. Read the following passage then answer the question thoroughly

Passage 02: Regional anesthesia; this type of anesthesia is injected near a cluster of nerves in the spine. This makes a large area of the body numb and unable to feel pain. Common types of regional anesthesia include epidurals, spinal blocks, and peripheral nerve blocks.

What is regional anesthesia?

.....
.....

Mention two types of regional anesthesia?

.....

Section two: phonological awareness.

3. Classify the words according to pronunciation of their end syllable:

Epilepsy, pulmonary, diarrhea, cystitis, diphtheria, emergency, gastroenteritis, hemophilia, hydrophobia, infancy, anatomy, meningitis, laryngitis, mastoiditis , and apnea.

"y"	"ia"	"itis"

4. Put the following words in the right column:

Anemia, endoscopy, tachycardia, hypoglycemia, anesthetic, edema, pain, weight, blood.

One syllabus	Two syllabuses	Three and more

5. Divide the words in the list as shown in the example

Word	Prefix	root	Suffix
Hypoglycemia	Hypo	glyc	Emia
Auscultation			
Arrhythmia			
Anastomosis			

6. Segment the following words into meaningful syllables: bronchopneumonia, dysmenorrhea, gastroenteritis, hypodermic, pneumothorax.

7. Complete the table of what is appropriate:

Expression	Meaning
.....	Complete or partial collapse of the lung or a lobe of lung.
Cardiopulmonary bypass
.....	a state of loss of sensation and awareness during a surgery
.....	soft tube that anesthetist puts into a large vein to measure blood pressure in an invasive way

TOTAL								
-------	--	--	--	--	--	--	--	--

QUESTIONNAIRE

Dear colleagues:

You are warmly requested to fill in this questionnaire which is an attempt to gather information required to accomplish the master dissertation. The dissertation is entitled "**Assessing the Implementation of Phonological Awareness in Reading Authentic Material**"

In your answer(s), please tick (✓) in the corresponding choice and make full statements whenever necessary. Your answers will remain confidential and will be used for research purposes only.

Section one: Profile Information

1. Gendre: Male Female
2. Age:years old
3. Work experience:year

Section two: Reading Authentic Material

1. Have you ever attended the/an English language course?

Yes No

If yes, explain why?

.....

2. Do you read any medical sources in the English language?

Yes No

3. If yes or no, explain why?

.....

4. How often do you use sources written in English?

Never Rarely Sometimes Frequently Always

5. If happens you read sources written in English, what examples of authentic reading material do you prefer?

Articles Medical reports Books

6. In your opinion, is reading an authentic medical source in English beneficial?

Useful Helpful Neutral Not helpful

7. How can you rate the reading process of the authentic English medical sources?

Hard Moderate Medium Easy Very easy

8. Where did you find difficulties in the reading process exactly?

General words/semi-technical words Medical/technical terms

Section three: Phonological Awareness

1. Have you ever heard of phonological awareness?

Yes No

2. In your point of view, what does phonological awareness mean?

Ability to write correctly Ability to read correctly Ability to manipulate sounds while reading

3. Rate the following words according to difficulty of pronunciation:

Analgesia hemorrhage epiglottis dorsal edema

4. Does implementing English phonological awareness important to you as Anesthetic student?

Yes No

5. Either yes or no, why is it important or not?

.....

Your participation is deeply appreciated

ملخص:

يعاني المخدرون في الجزائر عند قراءة البحوث و المقالات العلمية و الطبية باللغة الانجليزية. لأنه عند دراستهم لتخصصهم فإنهم يدرسون باللغة الفرنسية, لذلك فاللغة الانجليزية هي تحد بالنسبة لهم. هذه المذكرة حاولت مساعدة هذه الفئة من خلال عدة وسائل بحث وكذلك معرفة العلاقة بين قراءة المستندات باللغة الانجليزية وصوتياتها, كالاستبيان والملاحظة و إجراء تجربة. طبقت هذه الوسائل عن طلبية التحذير في المعهد الوطني للتعليم العالي شبه طبي بسكرة. وكانت النتائج كالآتي, التجربة أسفرت انه لا يوجد علاقة بين قراءة المستندات والعلوم الانجليزية بالوعي بصوتيات اللغة. غير انه من خلال الملاحظة و الاستبيان تظهر انه هناك علاقة. وبين هذا وذاك تناول البحث معلومات هامة عن متغيرات البحث وكذا مناقشة المعلومات المأخوذة من المشاركين في التجربة و الاستبيان. وانهي البحث بخاتمة واقتراحات لذوي المصلحة.