

**The Effects of Morphological Instruction on  
Morphological Awareness and  
Vocabulary Knowledge of Grade-10  
Vietnamese Students**

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**The Effects of Morphological Instruction on Morphological Awareness and  
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## **TITLE**

The effects of morphological instruction on morphological awareness and vocabulary knowledge of grade-10 Vietnamese students

## **ABSTRACT**

Morphological awareness is a kind of metalinguistic ability that allows language learners to identify and manipulate the internal structure of words. Research and studies investigating the role of morphological awareness among native speakers have indicated that such knowledge about morphemes and their governing rules assists learners to improve and increase their vocabulary knowledge. Acknowledging the possible benefits that morphological awareness might bring to the learning of vocabulary among second language learners, this study attempted to investigate the effectiveness of morphological instruction on students' morphological awareness, and consequently their vocabulary size. The study involved a quasi-experiment with a pre-test and a post-test administered to two comparison groups as well as semi-structured interviews among 68 high-school students in central Vietnam. The results showed that the experimental group outperformed the control group in both tasks that assessed morphological awareness and vocabulary knowledge after the morphological intervention was introduced to the experimental group. The study also demonstrated that there was a moderate correlation between second language learners' morphological awareness and vocabulary size. The semi-structured interviews revealed that students in the experimental group had employed morphological knowledge gained during the time of the intervention as a learning strategy that assisted them in decoding lexical structures and meanings.

**Key words:** morphological awareness; vocabulary knowledge; vocabulary size; morphological instruction; morphological intervention; tenth-graders; EFL; EFL learners

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## GLOSSARY

|             |  |
|-------------|--|
| <b>CEFR</b> | Common European Framework of Reference |
| <b>CG</b>   | Control Group                          |
| <b>CLT</b>  | Communicative Language Teaching        |
| <b>EFL</b>  | English as a foreign language          |
| <b>EG</b>   | Experimental Group                     |
| <b>ESL</b>  | English as a second language           |
| <b>L1</b>   | first language                         |
| <b>L2</b>   | second language                        |
| <b>NDT</b>  | Non-Word Derivation Task               |
| <b>PBET</b> | Program-Based Entrance Test            |
| <b>PRT</b>  | Passive Recognition Test               |
| <b>RWDT</b> | Real-Word Decomposition Task           |
| <b>SCT</b>  | Suffix Choice Test                     |
| <b>TAVK</b> | Test of Absolute Vocabulary Knowledge  |
| <b>TMA</b>  | Test of Morphological Awareness        |
| <b>TMS</b>  | Test of Morphological Structure        |
| <b>TVS</b>  | Test of Vocabulary Size                |
| <b>TWR</b>  | Test of Word Reading                   |
| <b>VLТ</b>  | Vocabulary Level Test                  |
| <b>VSKT</b> | Verbal Suffix Knowledge Test           |
| <b>WKT</b>  | Word Knowledge Test                    |



## CHAPTER 1: INTRODUCTION AND CONTEXT

This chapter sets out to provide the background and context of the study. It first gives the description of the context where the study was taken place. It then moves on to present the rationale and significance of the study, which is followed by the introduction of the research objectives and research questions. Finally, this chapter demonstrates the organization of the study.

### 1.1. Context

This study was conducted in a public high school which provided specialized programs in central Vietnam. The researcher has established and maintained connections with some members of staff working at this school. In the next parts of the paper, the selected school will be referred to as “the school”.

The school was one of the top public high schools in central Vietnam where English was a compulsory subject. Different from other public high schools, the school provided students who had outstanding academic performance in specific subjects during their middle-school years with specialized programs of a specific subject. For instance, students with outstanding performance in English during their secondary school years could apply to pursue higher education with specialized programs in English at the school. The school provided a wide range of specialized programs from natural science disciplines such as Math, Physics or Chemistry to social science disciplines such as History, English or Literature. To attend the school, students would have to undertake two assessments. One assessment was the provincial entrance examination for English, Literature and Math, where students were assessed based on the national academic scheme. The other assessment was the program-based entrance exam (PBET), which evaluated the knowledge of the subject that students wished to receive specialized education and training in. This exam had a separate marking scheme proposed by the school and the marking criteria were usually higher than those in the

provincial entrance examination. For instance, students who wished to attend specialized program in English would have to sit the entrance exam and another PBET for English. However, aside from the specific subject that students received specialized education and training in, they still had to follow the national curriculum for all other the non-specialized subjects.

The targeted students for this study were grade-10 students studying in natural-science programs and English was a non-specialized subject for them. Therefore, the teaching and learning English of this group of students at the school could be comparable to students in other public high schools because they all followed the national guidelines for assessment and teaching of English. Regarding the amount of exposure to the target language of public high school students when studying English as a non-specialized subject, there were two forty-five minute English classes per week. Regarding the type of exposure, students in this group were studying with the national English textbook called “the Pilot English Textbooks for Vietnamese Upper Secondary School”. According to Van (2015), the implementation of the Pilot English Curriculum and the use of the new English textbook were a part of the National Foreign Language 2020 Project, which aimed at improving the teaching and learning of English in Vietnamese high schools by including innovative teaching contents and techniques. Hence, the new textbook employed certain changes in approach to English language learning, particularly vocabulary learning. A comparison between the old English textbook and the new English textbook for 10 graders is illustrated in Table 1.1 and Table 1.2.

Table 1.1. The lesson goals for unit 6 from the old and the new national textbooks for tenth-graders.

|  |   |  |  |                              |                                      |  |  |         |  |  |  |
|--|---|--|--|------------------------------|--------------------------------------|--|--|---------|--|--|--|
| <p style="text-align: center;"><b>Old Textbook</b></p> | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 20%;"><b>Unit 6</b><br/><b>AN EXCURSION</b></td> <td style="width: 30%; vertical-align: top;"> <ul style="list-style-type: none"> <li>● Extensive reading: multiple-choice questions</li> <li>● Passage comprehension</li> <li>● Intensive reading: gap-fill</li> </ul> </td> <td style="width: 50%; vertical-align: top;"> <ul style="list-style-type: none"> <li>● Expressing agreements and disagreements</li> <li>● Giving opinions</li> </ul> </td> </tr> <tr> <td colspan="4" style="text-align: center; font-size: small;">Page 62</td> </tr> </table> |  |  |                              | <b>Unit 6</b><br><b>AN EXCURSION</b> | <ul style="list-style-type: none"> <li>● Extensive reading: multiple-choice questions</li> <li>● Passage comprehension</li> <li>● Intensive reading: gap-fill</li> </ul> | <ul style="list-style-type: none"> <li>● Expressing agreements and disagreements</li> <li>● Giving opinions</li> </ul> | Page 62 |  |  |  |
|  | <b>Unit 6</b><br><b>AN EXCURSION</b>  | <ul style="list-style-type: none"> <li>● Extensive reading: multiple-choice questions</li> <li>● Passage comprehension</li> <li>● Intensive reading: gap-fill</li> </ul> | <ul style="list-style-type: none"> <li>● Expressing agreements and disagreements</li> <li>● Giving opinions</li> </ul> |                              |                                      |  |  |         |  |  |  |
| Page 62  |   |  |  |                              |                                      |  |  |         |  |  |  |
| <p style="text-align: center;"><b>New Textbook</b></p> | <b>UNIT</b>   | <b>Topic</b>   | <b>Vocabulary</b>  | <b>Pronunciation</b>         | <b>Grammar</b>                       |  |  |         |  |  |  |
|  | <b>Unit 6</b>   | <b>Gender Equality</b>   | Words and phrases related to gender equality   | Stress in two-syllable words | The Passive voice with modals        |  |  |         |  |  |  |

It can be inferred that the new textbook placed more focus on the teaching and learning of vocabulary. Hence, it treated vocabulary as one of the major sections that needed deliberate instruction, which can be illustrated in the lesson goals (Table 1.1). Additionally, the flow of the lesson in the new textbook was restructured. Particularly, it separated vocabulary learning as an independent section from reading and grammar practice (Table 1.2).

Table 1.2. The lesson structures from the old and the new national textbooks for tenth-graders.

| <b>Old Textbook</b>   | <b>New Textbook</b>                    |
|---|--|
| Section 1: Reading (embedded vocabulary learning)                                   | Section 1: Getting started – Listening |
| Section 2: Speaking   | Section 2: Vocabulary                  |
| Section 3: Listening  | Section 3: Grammar                     |
| Section 4: Writing  | Section 4: Reading                     |
| Section 5: Language Focus: Pronunciation and Grammar (embedded vocabulary learning) | Section 5: Listening                   |
|   | Section 6: Speaking                    |
|   | Section 7: Writing                     |

Regarding the diversity of vocabulary exercises, the new textbook included more types of vocabulary practice compared to the old version (Table 1.3). Accordingly, a new type of vocabulary learning technique introduced in the new textbook was the *word formation* exercise, which required students to form new words by manipulating the internal word structures without any contextual clues (Figure 1.1). Such type of practice can be classified as a morphological-awareness raising exercise that targets students' morphological knowledge when learning vocabulary.

Table 1.3. The types of vocabulary learning exercises from the old and the new national textbooks for tenth-graders.

| <b>Old Textbook</b>                 | <b>New Textbook</b>   |
|-------------------------------------|---|
| 1. Gapped sentence – word formation | 1. Gapped sentence – word formation                         |
| 2. Gapped-text – word formation     | 2. Gapped sentence – multiple choice                        |
| 3. Meaning matching                 | 3. Gapped text – word formation                             |
|                                     | 4. Meaning matching   |
|                                     | 5. Word-formation – manipulating internal lexical structure |

**2 Complete the table with the words from the box.**

|              |             |             |
|--------------|-------------|-------------|
| deforest     | protect     | consumption |
| confuse      | contaminate |             |
| preservation | deplete     | pollute     |

| Verb        | Noun          |
|-------------|---------------|
| 1. _____    | protection    |
| 2. preserve | _____         |
| 3. _____    | contamination |

Figure 1.1. The word formation exercise from the new textbook for tenth-graders.

From such premise, it can be interpreted that the Pilot English Program, particularly the implementation of “the Pilot English Textbooks for Vietnamese Upper Secondary School”, recognized the importance of vocabulary learning in the development of students’ English competency and measures had been taken to promote the deliberate teaching of vocabulary. The next section of this chapter will (1) briefly discuss the new vocabulary teaching technique introduced in the national English textbook as well as (2) rationalize why it is necessary to carry out further investigation into the effectiveness of the new teaching technique.

## 1.2. Rationale and significance of the study

According to Carlisle and Stone (2005), morphemes are one of the most fundamental representations of meaning in the spelling system of English; thus, morphemes can be considered as the basic units of English language learning (Carlisle, 2007). The understanding of the English morphemes and the rules governing them in the constructions of words can be referred to as morphological awareness (Kieffer & Lesaux, 2012). Hypothetically, morphological awareness, or learners’ metalinguistic understanding of the internal elements of word construction, can facilitate “rapid and accurate word identification”, which expectedly leads to development of vocabulary knowledge (Kieffer & Lesaux, 2012, p. 2).

The pedagogical interventions that raise morphological awareness to facilitate language development in classroom settings has been well-documented among first language (L1)

learners. It is reported that deliberate morphological instruction targeting morphological awareness might result in “more accurate and quicker learning and more explicit knowledge” for development of literacy skills compared to non-morphological instruction (Bowers, Kirby, & Deacon, 2010, p. 148). A meta-analysis conducted by Goodwin and Ahn (2013) found that morphological intervention among school-age children had positive impacts on their vocabulary growth. Particularly, the study indicated that analysing the morphological structures of words and identifying component morphemes helped “students use the meaning of a morpheme to determine the meaning of a morphologically related words” (Goodwin & Ahn, 2013, p. 278). In other words, explicit instruction to raise morphological awareness might lead to the development of students’ vocabulary size. Additionally, the results of the study also revealed that morphological awareness of roots and affixes indirectly supported students in accessing lexical semantics (Goodwin & Ahn, 2013).

Despite the suggested potentials of morphological instruction in helping L1 learners enhance their vocabulary repertoire, the advantages it might bring towards second language (L2) learners have not received much attention (Amirjalili & Jabbari, 2018). Indeed, little has been done to investigate the contribution of morphological instruction to L2 acquisition since most studies that explored the relationship between L2 learners’ morphological awareness and their vocabulary knowledge (Farsi, 2008; Tabatabaei & Yakhabi, 2011; Zhang & Koda, 2011) are correlational studies without examining the effects of morphological intervention on learners’ morphological awareness and their vocabulary acquisition. Such gap of knowledge in literature might pose major challenges to L2 teachers when implementing morphological instruction. This, consequently, could lead to teachers’ skepticism about the effectiveness of morphological instruction in L2 classroom settings.

Therefore, upon recognizing the potentials of morphological instruction on L2 learners’ morphological awareness and subsequently, their lexical growth, this study aimed to advance the researcher’s knowledge of the effects that morphological instruction might have on vocabulary knowledge of L2 learners. For long-term goals, the findings of this study might

hopefully promote the adoption of morphological instruction among high-school teachers in Vietnam as well as facilitate further improvements on how morphological instruction should be introduced to Vietnamese high-school students.

### **1.3. Objectives and research questions**

This study aimed to investigate the effects of morphological instruction on morphological awareness and vocabulary knowledge among Vietnamese tenth-graders in central Vietnam. It also intended to study how the students receiving morphological instruction utilized their morphological awareness when decoding lexical semantics and lexical structures. As indicated earlier in the rationale, the objectives of this research was to bridge the gap of knowledge in current literature regarding the implementation of morphological instruction in L2 settings to advance students' vocabulary knowledge. The set of research questions that guided the study to achieve its objectives are listed as follows:

- (1) Does the instruction to raise morphological awareness of roots and derived words affect students' awareness of morphological derivation?
- (2) Does the instruction to raise morphological awareness of roots and derived words affect students' vocabulary knowledge?
- (3) How do students receiving instruction in morphological awareness use their morphologically analytical and morphologically synthetic skills when they do the vocabulary test?

### **1.4. Organization of the study**

The presentation of this study includes five chapters presented in Table 1.4.

**Table 1.4. The organization of the study.**

**Chapter 1:** Introduction – providing the background information about the investigated context, research rationale and research objectives, research questions, and study structure

**Chapter 2:** Literature review – setting the theoretical framework for the study and presenting the empirical findings of prior research

**Chapter 3:** Methodology – rationalizing the adopted research approach, research methods and research instruments for data collection

**Chapter 4:** Analysis and Discussions – reporting, analyzing and discussing the results and findings

**Chapter 5:** Conclusion – summarizing the study, emphasizing significant findings, proposing future pedagogical implementations, stating the acknowledged limitation and proposing directions for further studies

In brief, this chapter has outlined the background as well as the investigated context of the study. It has covered the context of investigation, the rationale, the research objectives, the research questions and the presentation of the paper. In the next chapters, the key concepts of the research, including vocabulary knowledge, morphemes, morphological awareness, and morphological instruction will be further elaborated. Moreover, the hypothetical relationship between morphological awareness and vocabulary knowledge will also be discussed through analysis of key studies in current literature, which broke the grounds for the development and execution of this study.

## CHAPTER 2: REVIEW OF LITERATURE

### 2.1. Introduction

This chapter aims to establish the theoretical and conceptual framework for the current study. It first starts by presenting the definitions of vocabulary knowledge, morphology, morphological awareness and morphological instruction. Then, it moves on to discuss the hypothetical relationship between morphological awareness and vocabulary knowledge. This is followed by a critical analysis of the key studies involving morphological awareness and vocabulary knowledge, which provides insights into the research gap that this study set out to address.

### 2.2. Vocabulary Knowledge

Recent studies have indicated that vocabulary knowledge plays a crucial role in L2 development (Barcroft, 2004; Subon, 2016) and it can be a good predictor of learners' skill development when learning an L2 (Milton, 2013). Particularly, L2 learners' vocabulary knowledge have been indicated to be associated with the development of both receptive skills (i.e. listening and reading skills) (Harkio & Pietila, 2016; Sidek & Rahim, 2015; Stæhr, 2009) and productive skills (i.e. writing and speaking skills) (Karakoç & Köse, 2017; Khan, Radzuan, Shahbaz, Ibrahim & Mustafa, 2018). Other scholars have also noticed that L2 learners' vocabulary knowledge and their ability to use the target language share a reciprocal relationship (Nguyen & Nguyen, 2018). In other words, enhanced vocabulary knowledge can assist learners to sharpen other linguistics skills, which in turn accelerates their vocabulary acquisition. Research concerning vocabulary teaching and learning has also marked a clear distinction between two dimensions of vocabulary knowledge, namely *vocabulary size* (or *breadth*) and *vocabulary depth* (Milton, 2009). As their definitions suggest, the *size* of vocabulary knowledge refers to the number of words a learner knows, while the *breadth* of vocabulary knowledge indicates how much a learner knows about a word (Milton, 2009). On the other hand, some researchers have proposed that there is no such conceptual distinction between the *size* and *depth* of vocabulary knowledge since they are highly correlated and



might be accounted for by the same factors (Akbarian, 2010; Vermeer, 2001). While the discussion of which aspect of vocabulary knowledge matters more for L2 learners has yet come with a conclusion, evidence suggests that the *size* of vocabulary knowledge is a major contributor to L2 performance (Stæhr, 2008) of students at different Common European Framework for Reference (CEFR) (Council of Europe) levels (Milton, 2010). However, the measurement of *vocabulary size* should not be understood as the measurement of a discrete construct separated from *vocabulary depth* because Milton (2010) pointed out that these two qualities of vocabulary knowledge are closely inter-related and the measurement of one dimension can simultaneously evaluate the other. The next part of this chapter will continue the introduction of key concepts with the definition of the English morphemes.

### 2.3. The English morphemes

Theoretically, English is a morpho-phonemic language whose spelling system is constructed by representations of sounds (phonemes) and meaning (morphemes) (Carlisle & Stone, 2005). As such, morphemes can be considered as “the basic units of language learning” that learners are exposed to during their early stages of learning a language (Carlisle, 2007, p. 79). Basically, there are two perceived types of the English morphemes namely *free morphemes* and *bound morphemes* (Plag, Braun, Lappe & Schramm, 2007) (Figure 2.1).

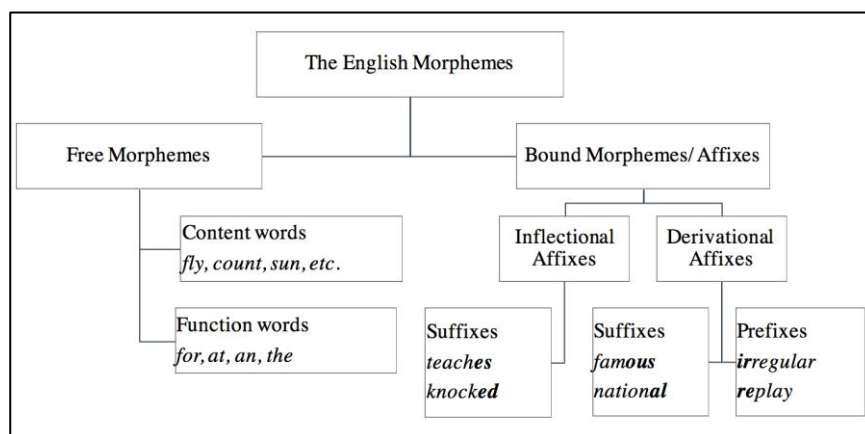


Figure 2.1. The composition of the English morphemes adopted from Plag et al.'s (2007).

While the *free morphemes* are the *base* that carries meanings on their own, *bound morphemes* or *affixes* “serve as building blocks” in a string of morphemes to deliver meaning (Carlisle, 2007, p. 80). In terms of positioning, there are two types of *affixes* in English, namely *prefixes* (i.e. morphemes that precede the *base*) and *suffixes* (i.e. morphemes that go after the *base*) (Plag et al., 2007). The interaction between *free morphemes* and *bound morphemes* in word construction is called *affixation*, which is illustrated in Figure 2.2.

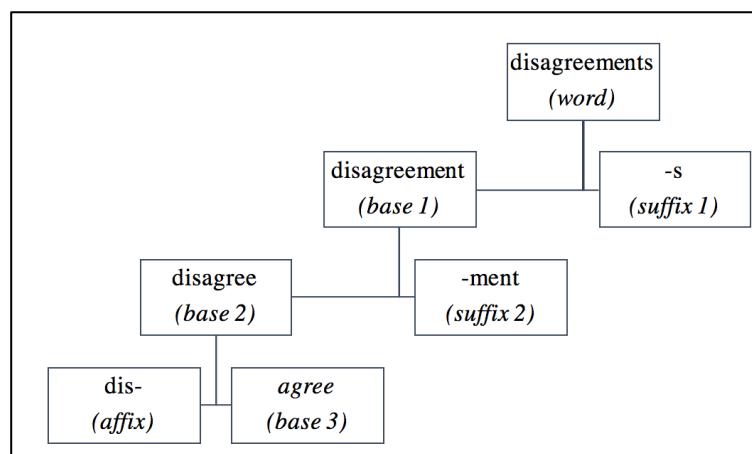


Figure 2.2. The affixation of lexical item “*disagreement*” with structure analysis adopted from Plag et al.’s (2007).

In terms of functions, *affixes* are comprised of *inflectional affixes*, which are employed for grammatical functions, and *derivational affixes*, which alter either the meaning or the grammatical category of the base (Rugaiyah, 2018). When considering lexical item “*disagreement*” in the retrieved example (1), the *suffix* –s ending, which demonstrates the plurality of its base noun, is added because the determiner “*several*” grammatically marks the quantity of its following noun as more than one (Merriam-Webster, n.d.).

(1) He mentioned he had **several disagreements** with Dana White before his fight against Rashad Evans (Vinod, 2020).

This kind of *affix* is called *inflectional suffix* and words constructed by *inflectional suffixes* have fully predictable meaning since *inflections* do not alter the semantics or the syntax of the *base* (Ford, Davis & Marslen-Wilson, 2010). *Inflectional morphemes* also come as *suffixes* after nouns or verbs (Rugaiyah, 2018). By contrast, *derivational affixes* adjust both the syntax (as

–*ment* ending changes “*agree*” from a verb into a noun in “*agreement*”), and the semantics (as –*dis* preceding reverses the meaning of “*agree*” into “*not agree*” in “*disagree*”) of a *base*. Additionally, the attachment styles and impacts on word construction of *derivational morphemes* are less systematic and predictable compared to *inflectional morphemes* (Ford et al., 2010). Hence, the unsystematic nature of *derivational morphemes* might tax on learners’ lexical processing to a greater extent than *inflected* words (Ford et al., 2010). Such challenging aspect of processing *derivational morphemes* might call for a need of deliberate instruction when it comes to *derived vocabulary* in classroom settings. In the next section, the definition of morphological awareness and morphological instruction will be presented.

## 2.4. Morphological Awareness and Morphological Instruction

### 2.4.1 Morphological Awareness

Morphological awareness is the kind of metalinguistic awareness that allows learners to reflect and manipulate the internal structure of a word (Carlisle, 1995; Kuo & Anderson, 2006). Kuo and Anderson (2006) also highlighted a need to differentiate morphological awareness from morphological acquisition to avoid confusion. Accordingly, the former looks at the ability to indicate and control word formation rules when communicative context is absent, whereas the latter focuses on the development of comprehending and producing morphologically constructed words in natural settings (Kuo & Anderson, 2006). As such, morphological awareness can be considered as a sub-category of morphological acquisition with narrowed-down context of investigation.

Research and studies concerning morphological awareness have focused mainly on three types of morphemes including *compounds* (e.g., *toothbrush*, *overlook*, *cupcake*), *inflections* (e.g., *she (explain) – she explains*), and *derivatives* (e.g., *explain – explan**ation***) (Kuo & Anderson, 2006) (Figure 2.3).

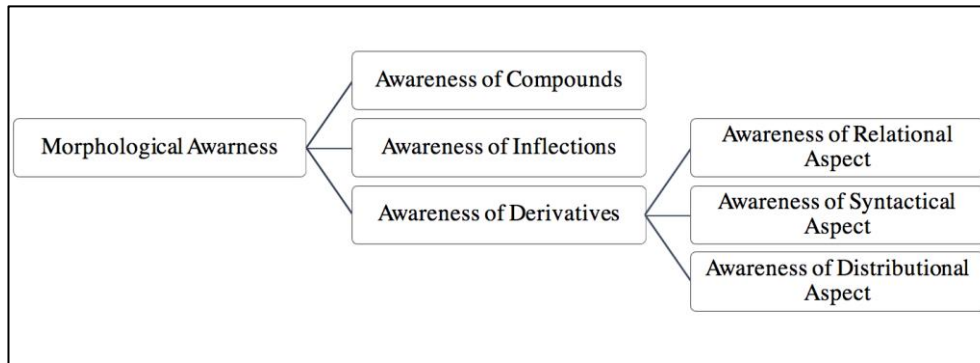


Figure 2.3. Types of morphological awareness adopted from Kuo and Anderson's (2006), and Tyler and Nagy's (1989).

As discussed in section 2.3 of this chapter, due to the less unsystematic and unpredictable nature of *derivational morphemes* compared to *inflectional morphemes*, *derivational morphemes* might pose greater challenges to the cognitive processing of L2 learners when learning vocabulary. Thus, the acquisition and development of *derivational morpheme* might require explicit instruction. Recognizing such importance of deliberate instruction in *derivational morphemes*, this study focuses on this specific type of morphemes and awareness of this morphological knowledge will be the topic of discussion. Theoretically, awareness of *derivational morphemes* involves at least three critical aspects, namely relational, syntactical and distributional aspects (Tyler & Nagy, 1989). With a morphologically complex word like “*disagreement*”, a learner who has relational awareness can tell the base – “*agree*” from its attached *affixes*. With the same word, if a learner has syntactical awareness, s/he knows that “*disagree*” functions as a verb and the addition of *suffix –ment* allows “*disagreement*” to perform as a noun in a sentence. At a higher level, learners possessing distributional awareness has knowledge of linguistic constraints of word formation. In other words, s/he understands that to form a noun directly from a *base “disagree”*, no suffixes other than *–ment* should be added.

Tyler and Nagy (1989) also pointed out that the three aspects of morphological awareness do not develop at the same time. Indeed, relational aspect is the simplest aspect of morphological awareness and thus, develops earlier than the other two aspects (Tyler & Nagy, 1989). Meanwhile, distributional aspect is considered to be the most challenging aspect and might

be developed at latter stages of learning (Kuo & Anderson, 2006). Next, the implementation of morphological instruction will be analyzed.

#### **2.4.2. Morphological Instruction**

According to Goodwin and Ahn (2013), morphological instruction is the type of literacy-support instruction that assists students to identify and analyse morphemes or units of meaning. In English as a foreign language (EFL) settings, morphological instruction can be considered as explicit instructions of language *forms*, which is gradually marginalized in many EFL classrooms due to the emergence of Communicative Language Teaching (CLT) to foster *fluency* of L2 performance (Farrag & Badawi, 2019). This is because the use of explicit instruction is usually understood as a way to reinforce *accuracy*, which in turn hinders development of *fluency*. However, such view of *fluency* optimization in CLT adoption is principally implausible because *accuracy* and *fluency* cannot be separated, but instead they are inter-related (Farrag & Badawi, 2019). In Kieffer and Lesaux's (2012) study, a morphological awareness test and a reading fluency test were conducted among L2 teenage learners of English to find out if the two variables had any relationship. The findings suggested that students with explicit knowledge of morphology had greater fluency in word reading. In other words, morphological awareness or the ability to verbalize the rules of morphological forms did help students recognize and read words faster. From such stance, the use of morphological instruction to enhance students' awareness about morphological rules can bring about positive effects of students' word knowledge. Further discussion of the contribution of morphological awareness to learners' vocabulary knowledge will be presented in the next section.

## 2.5. The Contribution of Morphological Awareness to the Growth of Vocabulary Knowledge

### 2.5.1. The Contribution of Morphological Awareness to the Growth of Vocabulary Knowledge in L1 Settings

The hypothesis regarding the relationship between morphological awareness and the growth of vocabulary knowledge has been well established among monolingual learners. According to Carlisle (2007), if a native speaker of English has created a mental representation of morphemic elements, “access to the (known) morphemes is likely to facilitate identification (of lexical structure)” and this subsequently allows access to (lexical) meaning (p. 81). For example, when decoding an unfamiliar word “*sunless*”, a speaker with morphological awareness would first access their knowledge of the constituent “*less*” and the morpheme “*sun*” before inferring the meaning of the item “*sunless*” via conceptualization of the two previously known morphemes (Carlisle, 2007). As such, it can be theorized that morphological awareness can mediate L1 learners’ vocabulary growth through morphological analysis.

In a study conducted to examine the effects of morphological awareness on vocabulary knowledge of monolingual third and fifth graders, Carlisle (2000) found that “there is a significant link between awareness of (internal morphological) structure and the ability to define morphologically complex words” (p. 183). Particularly, the study indicated that performance of students from both age groups on Test of Morphological Structure (TMS) was strongly correlated with their performance on Test of Word Reading (TWR), Reading Vocabulary (RV) and Test of Absolute Vocabulary Knowledge (TAVK) (Carlisle, 2000). Among the three mentioned correlations, that of TMS and TAVK was the most noticeable with  $r = 0.64$  ( $p < 0.001$ ) and  $r = 0.46$  ( $p < 0.01$ ) respectively for fifth graders and third graders (Carlisle, 2000). This was explained by Carlisle (2000) that for students to perform well in TAVK, which required them to define and use morphologically complex words correctly, they needed to have the knowledge of the meaning and grammatical role of the *suffix* as well as the *base* of the given items. Thus, the scores recorded from both groups indicated that they had employed

morphological analysis or morphological problem-solving skills to decode the meaning in TAVK (Carlisle, 2000). Such findings were also echoed in a longitudinal study involving L1 learners across three languages by McBride-Chang, Tardif, Cho, Shu, Fletcher, Stokes, Wong and Leung (2008). The coefficient correlations ( $r$ ) between morphological awareness and vocabulary knowledge among pre-school learners in Hong Kong, Beijing and Korea after a 1-year period were 0.48 ( $p < 0.01$ ), 0.38 ( $p < 0.01$ ), and 0.57 ( $p < 0.001$ ) in respective order for each L1 group. This made McBride-Chang, et al. (2008) come with a suggestion that morphological awareness could be an important predictor of L1 students' early vocabulary learning.

### **2.5.2. The Contribution of Morphological Awareness to the Growth of Vocabulary Knowledge in L2 Contexts**

Despite the recorded potentials of morphological awareness in L1 development, its impacts on the acquisition of L2 is somewhat limited (Jeon, 2011; Zhang & Koda, 2011). Among very few attempts to interpret the contribution of morphological awareness to L2 performance, some scholars hypothesized that morphological awareness might help L2 learners acquire the meaning of new words since it assists them to retrieve linguistic information that is related to the morphological structure of unknown lexical items (Kieffer & Lesaux, 2012; Zhang, 2002). For instance, learners with well-developed awareness of *derivational morphemes* might be better at deciphering morphologically complex words such as “*similarity*” or “*methodological*” by linking the *base* of such novel words with their simpler forms (i.e. “*similar*” or “*method*”), which appear more familiar to them (Kieffer & Lesaux, 2012). Although this prospective positive impact of morphological awareness on lexical access and acquisition is recognized much later in the context of L2 learning, it has laid the important theoretical foundation for recent research and studies concerning the role of morphological awareness in L2 vocabulary knowledge.

A few recent studies have set out to examine the relationship between morphological awareness and vocabulary growth among L2 learners in either EFL or English as a second language (ESL) contexts. A study conducted by Zhang (2002) found that L2 learners of Chinese who had received deliberate morphological instruction (N= 32) significantly outperformed their peers in control group (N=33) in the vocabulary test that tapped into learners' adjectival lexical knowledge. However, in a delayed test 24 hours later, the results yielded from both groups increased and were almost identical. The increase in the scores for both group might stem from the fact that Zhang (2002) only used 10 items in the vocabulary knowledge test, which might have resulted in students' memorization of the test items. Also, in his study, Zhang (2002) did not develop a test that could measure basic L2 morphological awareness or conduct any interviews for insights into whether students had used morphological awareness to deal with tested items or not. Instead, he used a Likert-scale question to elicit students' opinions about the importance of morphological knowledge, which was insufficient to justify the effectiveness of morphological awareness in L2 vocabulary development. Due to the two aforementioned reasons, despite being set out to earn the place for morphological awareness in L2 development, the findings from Zhang's (2002) research were still far from qualifying morphological awareness as a major contributor to L2 vocabulary growth.

It is not until much recently that studies concerning morphological awareness and vocabulary knowledge among L2 learners started to witness noticeable improvements. For instance, the research carried out by Jeon (2011) used more diverse measurement instruments as well as more complex statistical computations to gain broader overview of the studied variables. Particularly, in Jeon's (2011) study two assessment tests, namely TMS (a revised version of Carlisle's (2000) TMS) and Verbal Suffix Knowledge Test (VSKT) to measure the abilities to interpret and identify morphological structures of lexical items of Korean tenth-graders (N=188). The vocabulary knowledge of students, i.e. semantic knowledge and knowledge about parts of speech, was measured using Word Knowledge Test (WKT). The study found



that the correlation coefficient between TMS and WKT was 0.63 ( $p < 0.1$ ) and the correlation coefficient between VSKT and WKT was 0.54 ( $p < 0.01$ ) (Jeon, 2011). Although the moderate correlation between morphological awareness and vocabulary knowledge from Jeon's (2011) study suggested that these two types of knowledge might develop in linear pattern, the causality between them were not investigated. Furthermore, the measurement of morphological awareness in Jeon's (2011) studies only looked at the relational aspect without considering the syntactical aspect or distributional aspect of morphological awareness. This called for further investigation to confirm the causal relationship between morphological awareness and vocabulary knowledge among L2 learners.

Another study concerning the role of morphological awareness in L2 vocabulary development was conducted by Zhang and Koda (2012). The study was carried out among 130 high-level adult EFL learners in China. The measurement of morphological awareness in this study targeted the ability to identify the relational aspect of the English morphemes. Particularly, the test of morphology in this study presented students with 30 multi-morphemic words from which they had to select the *word base* from 3 provided choices. The measurement of *vocabulary size* of this study employed Vocabulary Level Test (VLT), which required students to match the words with their correct meanings. The result indicated that there was a moderate correlation between morphological awareness and VLT ( $r = 0.43$ ,  $p < 0.001$ ) and a moderate regression coefficient between morphological awareness and vocabulary knowledge ( $\beta = 0.520$ ,  $p < 0.001$ ). The explanation for such positive findings was that "some effect of morphological awareness on EFL vocabulary knowledge was realized via learners' skill to integrate structural (derivational morphology) and semantic (morpheme meaning) information to infer meanings of unknown complex words" (p. 1211). In other words, EFL students in Zhang and Koda's (2011) study might use their ability to identify the form and meaning of *derivational morphemes* to decode unknown complex words. However, it has to be noticed that this result only reflected a part of morphological awareness since the morphological awareness of L2 learners is reflected through not only skill of identifying but also ability to

manipulate *derivational morphemes* (Carlisle, 1995; Kuo & Anderson, 2006). Another issue of Zhang and Koda's (2011) study that needs further consideration is the level of proficiency of students. As indicated by Tyler and Nagy (1989), knowledge about relational and syntactical aspects of morphemes develops during early stages of learning language. Hence, the decision to tap into relational aspect while studying students at higher levels in Zhang and Koda's (2011) might not provide a plausible explanation whether higher-level students used merely knowledge about relational aspects of morphemes to decode the test items in the VLT.

The most recent study is the study carried out by Kieffer and Lesaux (2012), which investigated whether students' level of morphological awareness had any influence on their new word acquisition. There were 952 sixth-graders coming from different linguistic backgrounds in southern California participating in Kieffer and Lesaux's (2012) study. The measurement of morphological awareness in the study was administered in the spring semester and it employed two assessment tools. The first tool was Real-Word Decomposition Task (RWDT), which required students to extract the *base* from a morphological complex words to fill in a gapped sentence. The other tool is Non-word Derivation Task (NDT), which asked students to choose a correct *derivational form* from a group of meaningful and nonsense words to complete a sentence. Two of the measurement instruments indicated that Kieffer and Lesaux's (2012) study only tapped onto the syntactical aspect of students' morphological awareness. Students' knowledge of vocabulary in this study was assessed in the fall semester, using the Reading Vocabulary subtest (RVST) of the Gates-MacGinire Reading Test, Fourth Edition, which required students to select a synonym from a group of words for the underlined word in a given sentence. The study found that morphological awareness made a significant and substantial contribution to reading vocabulary of L2 learners across different L1 groups. Specifically, the regression coefficient ( $\beta$  value) for Filipino-speaking learners was 0.72 ( $p < 0.001$ ); the regression coefficient for Vietnamese learners was 0.48 ( $p < 0.01$ ); and the regression coefficient for Spanish learners was 0.51 ( $p < 0.001$ ). The positive findings from this study, however, have to be carefully considered because RVST was administered in the

fall semester while RWDT and NDT were administered much later in the spring semester. The large time gap between the measurements might cause a misleading test results because students might have developed knowledge about the test items by the time the RWDT and NDT were taken place. Also, the context of investigation in Kieffer and Lesaux's (2012) study was ESL setting while the current study examined the growth of vocabulary of L2 students in EFL settings, which might call the generalizability of findings from Kieffer and Lesaux's (2012) study into questions. Indeed, the growth of vocabulary of L2 learners in ESL and EFL settings might not be accounted for by the same variables. A study conducted by Longcope (2009) showed that ESL learners (1) had far more contact, (2) were exposed to larger variety of contacts with the target language, (3) received more input made comprehensible, and (4) were encouraged to produce more comprehensible output compared to their EFL counterparts. Such differences between the two learning environments suggested that the facilitating factors of L2 development in ESL context might be different from those in EFL setting.

In sum, although the aforementioned studies have found positive statistical evidence to suggest the influence of morphological awareness on L2 vocabulary growth, for better understanding of the relationship between the two examined aspects of L2 development, certain improvements regarding measurement instruments and sampling methods are required as discussed earlier. Moreover, these studies face another criticism that they are purely correlational studies without considering the effects of morphological instruction on morphological awareness and consequently, on vocabulary knowledge (Amirjalili & Jabbari, 2018). Besides, while regression analysis can testify the interdependence between vocabulary knowledge and morphological knowledge, it does not imply that L2 students actually use their morphological awareness to enhance their vocabulary knowledge. It neither provides further insights into how morphological awareness is utilized by L2 learners to allow practical implications in instructional contexts. Thus, with the instructional design followed by interviews in form of think-out-loud protocols, this study expects to bridge such gap of knowledge in current literature.



## CHAPTER 3: METHODOLOGY

This chapter covers the setting of the study, the sampling method, the rationale for methodology adoption, the development of data collection instruments, as well as the procedures of data collection and data analysis.

### 3.1. The setting of the study

The targeted educational setting of this research was a public high school which provided specialized programs in central Vietnam. The school provided a wide range of specialized programs from natural science disciplines such as Math, Physics or Chemistry to social science disciplines such as History, English or Literature. To attend the school, students would first take an entrance examination which covered Mathematics, English (see Appendix A for reference) and Literature, which followed the national assessment guidelines. After taking the provincial entrance examination, they would take another test – PBET (see Appendix B for reference) – which evaluated their knowledge and ability in a specific subject they students wish to receive specialized education and training in (i.e. subject of the specialized program). For instance, if students wished to attend the specialized program in English, they would first take a provincial entrance examination before taking the PBET, which was more academically demanding compared to that in the provincial entrance examination. Particularly, the PBET of English was more challenging than the provincial entrance English test in terms of test length, the diversity of task types and the use of language. After their successful enrolment in their targeted programs, students would receive specialized academic education and training in a specific subject that they had previously taken the PBET for while the rest of the non-specialized subjects would follow the national curriculum and be assessed against national marking schemes. As previous research (Zhang, 2002) suggested, morphological instruction might be beneficial for lower-level learners (B1 according to CEFR (Council of Europe)) when learning vocabulary. Hence, the effects of morphological instruction among tenth-graders registered in specialized natural-science programs was covered under the scope of this study because the level of proficiency of this groups was lower than those in specialized programs

in English as indicated by the provincial entrance examination and the PBET. According to the national curriculum for English as a non-specialized subject of high-school students, the targeted students received 2 forty-five lessons each week, which strictly followed the lesson plans proposed in “the grade-10 Pilot English Textbooks for Vietnamese Upper Secondary School”. The lesson plans in the national English textbook focused heavily on vocabulary and grammar learning.

### **3.2. Samples and sampling method**

Convenience sampling method of non-probability sampling approach is employed for this study. According to Creswell (2012), convenience sampling is used when researchers already have a group of participants who are “willing and available to be studied” (p. 143). Convenience sampling is a common method used in developmental science (e.g. educational research) because methods of probability approach are usually cost-prohibited and “most probability samples are ill-suited to examine developmental questions” (Jager, Punick, Bornstein, 2017, p. 20). There are two main reasons why convenience sampling is considered the best fit for this study. First, this research targeted a group of students in a public high school who were moving toward the end of their academic year. Therefore, any rearrangements that required students to learn in a new environment with new classmates might have exerted a confounding effect of learning anxiety in students’ performance. Second, prior to the official establishment of the study, the researcher had already obtained the permission from the school leaders to gain consent from the students and they subsequently agreed to participate in the study. As such, convenience sampling was one of the best sampling methods for this research.

Despite its popularity in educational research, convenience sampling usually raises concerns over its comparability from one group to another, which might undermine the validity of the research (Farrokhi & Mahmoudi-Hamidabad, 2012). One way to mitigate such effect is to plan strategic use of homogeneous convenience samples (Jager, et al., 2017, p. 20). In other

words, the use of the two groups of students that have similar level of competency would allow the researcher to have meaningful and valid comparisons between two groups and consequently, the validity and generalizability of the research findings are ensured. Hence, to examine the homogeneity of variance between two classes selected by convenience sampling in this study, students' results from the summative assessment in semester 1 were collected and analysed with Levene's Test in SPSS (version 26) for assessment of Equality of Variances. The result from Levene's Test revealed that the two classes enjoyed homogenous variance (Table 3.1). Specifically, the differences (Levene Statistics) between the two groups based on both Mean and Median were non-statistically significant at 1.03 ( $p > 0.05$ ) and 0.99 ( $p > 0.05$ ) respectively. Therefore, the null hypothesis that there was significant variance in students' performance between the two classes was rejected.

**Table 3.1. Results from Levene's Test of Homogeneity**

|             |   | <i>Test of Homogeneity of Variance</i> |     |        |       |
|-------------|---|--|-----|--------|-------|
|             |   | Levene                                 | df1 | df2    | Sig.  |
| Performance |   | Statistic                              |     |        |       |
|             | Based on Mean                           | 1.032                                  | 1   | 70     | .313  |
|             | Based on Median                         | 0.990                                  | 1   | 70     | .323  |
|             | Based on Median and<br>with adjusted df | 0.990                                  | 1   | 69.972 | .323  |
|             | Based on trimmed<br>mean                | 1.040                                  | 1   | 70     | 0.311 |

Note: df = degree of freedom

The rejected null hypothesis also allowed the researcher to conduct the research on the two classes which are categorized as a Control Group (CG, N=35) and an Experimental Group (EG, N=35). In the next section, a rationale for the research methodology will be discussed.

### **3.3. Justification of methodology**

To gather data for the research questions, this study employed a mixed-method research approach which involved both quantitative and qualitative approaches. In terms of data collection, quantitative approach utilizes statistical data while qualitative approach uses words or visual images as the unit of analysis (Denscombe, 2017). Regarding the research focus,

quantitative approach tends to focus on specific variables and their relationship with other isolated or range-limited variables, whereas qualitative approach tends to be operationalized based on the belief that “realities are wholes that cannot be understood in isolation from their contexts” (Denscombe, 2017, p. 6). Traditionally, notions of both approaches “carry with them an image of contrasting approaches to research design” (Denscombe, 2017, p. 7) since “each has its own unique ways of gathering and analyzing data” (Daniel, 2016, p. 92). However, regardless of their distinctive natures, the two types of approaches face the same criticism for not holistically capturing the complexity of educational phenomenon (Ponce & Maldonado, 2014). Particularly, the limitation of using quantitative approach is that it usually detaches the researcher from the participants, hence, creates challenges to obtain in-depth knowledge about the investigated topic (Daniel, 2016). Meanwhile, qualitative approach allows profound understanding of people’s experience (Johnson & Christensen, 2014) but it does not aim at replicability or generalizability of research’s findings (Harwell, 2011). This has led to the emergence of mixed-method approach, which aims at providing a more complete picture of the investigated topic by expanding the depth and breadth of understanding.

The mixed-method research approach of this study employed explanatory sequential design adopted from Creswell (2012). This research design comprised two phases. In phase 1, quantitative method (quasi-experiment) was used as a primary tool for data generation and data analysis. In phase 2, qualitative method (interview) was adopted to gain in-depth understanding of research findings in phase 1. This research design was selected because it has the ability to captivate the congruence between data gathering/analyzing tools and the research questions. For research question 1 and 2, the impacts of morphological instruction on students’ morphological awareness and vocabulary knowledge could be reflected through their performance on the two ability tests. For research question 3, how the morphological strategies might be used was discovered through semi-structured interviews with think-out-loud protocols where students were able to recall their experience with the two tests they took. The use of interviews was also expected to reveal more about students’ interest and



preference for morphological instruction. Further details about the research design and the development of research instruments to collect data will be covered in the following section.

### **3.4. Data collection and data analysis**

#### **3.4.1. A quasi-experiment**

In order to collect data for research question 1 and research question 2, a quasi-experiment was adopted. According to Denscombe (2017), any study that lacks no more than one of the below conditions can be listed as a quasi-experiment:

- including a *pre-test* and *post-test* before and after the intervention
- using a *control group* for comparison
- applying *probability sampling*
- introducing a variable whose effects are expected to observe

A quasi-experiment follows the spirit of experimental research but cannot meet all of the conditions due to practical reasons (Denscombe, 2017). As mentioned in the sampling section, non-probability sampling was employed in this study, which qualified it as a quasi-experiment. However, the shortcoming of not having subjects that were randomly selected was minimized because the result from Levene's Test of Homogeneity (Table 3.1) indicated that the variance of L2 ability between the two groups in this study was not statistically significant. Except from this unsatisfied condition of randomization, this study strictly followed an experimental design with a pre-test and a post-test administered to both groups of comparison prior to and after the instructional intervention took place.

##### **3.4.1.1. Participants**

Seventy students from two classes were divided into two groups, namely EG (N=35) and CG (N=35). These students' English lessons focused on developing grammar and vocabulary knowledge. Based on the analysis of students' exposure to English through their textbook,

their English test samples, and the in-charge teacher's report, two groups of students are around A2 or B1 levels (CEFR (Council of Europe)). Besides, the teacher who had been working with the two groups were also invited to introduce the morphological instruction to the EG. This teacher had a strong background in English language teaching and had basic knowledge about morphology as a part of her professional qualification.

#### **3.4.1.2. Data collection instruments**

To evaluate the effectiveness of morphological instruction on students' morphological awareness and *vocabulary size*, two tests that measured morphological awareness and vocabulary knowledge were adopted and revised.

##### **Test of Morphological Awareness (TMA)**

It is suggested that morphological awareness includes the skills of reflecting (i.e. identifying) and manipulating the structure of the English words (Carlisle, 1995; Kuo & Anderson, 2006). Hence, the TMA of this research tapped into students' abilities to identify and manipulate different aspects of the English *derivational morphemes*. Regarding the proficiency level of participants (i.e. between A2 and B1 according to CEFR (Council of Europe)), the TMA only assessed the relational and syntactical aspects which are hypothetically compatible with their developmental sequence as proposed by Kuo and Anderson (2006). The distributional aspect was not included in the TMA because it is the most challenging aspect to master and usually develops in latter stages of learning English (Kuo & Anderson, 2006). Additionally, only the words containing *derivational morphemes* were used for both testing and instruction because they are considered as more cognitively demanding compared to *inflectional morphemes* (Ford et al., 2010). Therefore, the deliberate instruction on *derivational morphemes* might make more critical contributions to students' knowledge of vocabulary.

The TMA comprised of 4 parts with 36 questions in total, and each part consisted of 9 items (see Appendix C for reference). The test items were selected based on word frequency and

suitability. Particularly, the test items for three parts of the TMA were selected from students' textbook. These items and their *suffixes* (i.e. *noun-making suffixes* (-ment, -ness, -ation, -tion), *adjective-making suffixes* (-ive, -ic, -al, -able), and *adverb-making suffix* (-ly)) were also the taught items for both groups during the time of treatment. Although previous studies based their selection on the corpus of the most frequently used words for learners of a specific level (Amirjalili & Jabbari, 2018), such selection might be overgeneralized for the participants in this research. This is because the participants in this study were EFL learners learning in an exposure-limited environment and the input they received mostly came from their textbooks. Hence, the use of students' textbook as resources for testing and teaching was considered more relevant to the participants. One exception was the assessment of ability to identify relational aspect, which did not employ the same technique to avoid confounding effect of existing knowledge of the test items. As suggested by Kou and Anderson (2006), if a learner could recognize the *base* and its *suffix(es)*, he/ she can be considered as having relational awareness. Therefore, the test items for this part were multiple-morphemic words randomly selected from Oxford Academic Word List (Oxford University Press). However, the suitability of *suffixes* for the chosen items was considered.

#### *Identifying Relational Aspect*

To tap into students' ability to identify relational aspect, a modified version of the "Comes From" test first developed and used by Carlisle (1995) was employed. In the original test, the students were presented with either an interrogative (e.g. *Do you think the word **employer** comes from the word **employ**?*) or a Why-question (e.g. *Why is a **farmer** called a **farmer**?*) and they had to write down **Yes/No** or a short response (e.g. *because he **farms***) for the answers. However, to avoid taxing on students' cognitive processing when reading and responding to the test items, this part provided students with a list of 9 separate words constructed by a *base* and its attached *suffixes/affixes*, which required them to decompose into smaller morphological units.

**Example: Question:** responsive = .....

**Expected Answer:** responsiveness = respons(e) + ive + ness

If the students provided the answer with a correct *base* and its *suffixes*, s/he received one mark. Regarding opaque *bases*, which required students to make minor changes to give exact forms (e.g. the *base* of *identification* is *identify*; *-i has to be converted to -y*), correct answers was not judged against original spelling of the *base*. As long as students could decompose the *base* (e.g. *identifi-*) from the word, they scored correspondingly. The total number of extractable morphemes in this test was 29 morphemes, which was then converted to a 9-score scale for data analysis.

### *Manipulating Relational Aspect*

To assess students' ability to manipulate relational aspect, the TMS from Jeon (2011) was adopted. In the previous version, students were presented with a list of *derivational words*, their corresponding meaning in L1 and attachable suffixes. Students were required to form new *derivational words* from the 3 given prompts together with their corresponding meaning in L1.

**Example: Question:** form a new word from such prompts: (1) "teach" [(2) L1 translation], (3) -"er"

**Answer:** teacher – a person who teaches (in L1)

Each correct *derivative* was given 1 point and each meaning carried 1 point. However, this version was problematic because it gave out the answer without allowing room for processing new *derivatives*. Recognizing the potentials of using familiar root words to elicit the manipulation of their *derivatives*, the revised test for the current study provided students with 9 common words selected from their textbook, which required them to form a new word(s) by adding suitable *suffixes*. Each correct *derivational form* carried 1 mark. The total score for this part of TMA was 12, which was then converted to a 9-score scale for data analysis.

**Example: Question:** create new words from the given words

love: 1. .... 2. ....

**Answer:** 1. lovely 2. lovable

Since this study concerned only *derivational morphemes*, explicit instruction that required students not to form inflectional forms was given in L1 both in the test paper and by the teacher before the test was administered.

### *Identifying Syntactical Aspect*

For assessment of identifying the syntactical aspect, a modified version of the Suffix Choice Test (SCT) by Nagy, Berninger, and Abbott (2006) was used. In the original version, each test item provided students with a gapped sentence and a range of *inflectional* or *derivational words* to choose from.

**Example:** Did you hear the .....

A. directs                      B. directions                      C. directing                      D. directed

However, this research targeted only *derivational morphemes*. Hence choices that carried inflectional morphemes were not considered. In the revised version of the SCT, each test item in this part of the TMA gave students a gapped sentence with three choices of either *decomposed* or *derivate words*, from which they had to select the correct form. Each correct response was given 1 score. The total score for this part of the test was 9.

**Example:** We want to encourage members to ..... in the running of the club.

A. participant                      B. participate                      C. participation

### *Manipulating Syntactical Aspect*

The evaluation of syntactical aspect manipulation employed the TMS – *Derivation* by Carlisle (2000) without any major modifications. In this part of the test, students were required to fill in the gapped sentences by adding *suffixes* to the given root words. Each correct answer earned students 1 score. The total score for this part of the test was 9.

**Example:** It's important for children to get a good ..... (educate).

### **Test of vocabulary size (TVS)**

As pointed out by Milton (2010), since the *breadth (size)* and the *depth* of L2 vocabulary knowledge are closely inter-related, the measurement of one aspect would simultaneously give insights into the other. Therefore, this study targeted the *vocabulary size* and the measurement of this aspect utilized the Passive Recognition Test (PRT) by Zhiying (2007). In the old version, students were required to match the given words with their listed L1 meanings. However, this version raised a concern that provision of L1 definitions might interfere with students' retrieving or decoding processes when accessing lexical meaning. Hence, in this new version, students were provided with 35 frequently encountered words selected from their English textbooks, which required them to provide the correct forms and meanings. The difficulty of test items in the TVS were also checked on Cambridge Dictionary (Cambridge University Press) to ensure that they were appropriate for students' current level. The meanings were checked using VDict – a Vietnamese Dictionary Online (VDict). Each correct form gained students 1 score and each correct meaning earned them 1 score. The total score for the TVS was 70.

#### **3.4.1.3. Data collection procedure**

##### **Step 1: Preparing and revising the tests**

The test preparation involved items selection and requirement writing. First, the test items in both tests were manually selected from the students' textbook. Then the selected test items for the TMA was discussed with the teacher to ensure that they were the targeted vocabulary for learning of both groups. The requirements were written in L1 and demonstrated with examples to reduce unnecessary cognitive loads for participants. The comprehensibility of requirements was checked by the teacher before assessment was taken place.

### **Step 2: Administering the pre-tests**

Two of the test were administered on alternative days to avoid fatigue. Before students took the test, the teacher also gave oral instruction and allowed time for queries to ensure the requirements were fully understood. Each of the test was timed at 10 minutes.

### **Step 3: Preparing and executing lesson plans**

To ensure that the EG received no extra learning time that might interfere the results' validity, the researcher prepared lesson plans with embedded 15-minute vocabulary learning section (see Appendix D for reference), which was at the same length, covered the same items with that of CG. The lesson plans were discussed with the teacher to make further modifications or clarifications before being executed.

### **Step 4: Administering the post-tests**

The post-test was conducted in the same manner with the pre-test on the 4<sup>th</sup> week since the first day of morphological instruction.

#### **3.4.1.4. Data analysis procedure**

The collected data was analysed using SPSS (version 26). The total score for the TMA (i.e. 36) and the total score for the TVS (i.e. 70) were converted to percentages prior to the data analysis. Regarding research question 1, the variance in the TMA performance between CG and EG was measured using an independent-sample t-test. Meanwhile, the progression (the improvement) in the TMA of each group was measured using two paired-samples t-tests. A Cohen's d statistics for within-subject comparison was also carried out to measure the effect size. To answer research question 2, an independent-sample t-test was used to investigate the variance in *vocabulary size* of students in CG and EG. For measurement of improvement in TVS, other two paired-samples t-tests were employed. Next, a Cohen's d statistics for

within-subject comparison was followed to measure the effect size. To identify the relevance in developing patterns between morphological awareness and *vocabulary size* after the instructional intervention, a Pearson correlation test was used to analyse the correlation coefficient between performance in TVS and performance in TMA of students in EG, who received morphological instruction.

### **3.4.2. Interview**

#### **3.4.2.1. Participants**

After the results had been revealed from the analysis for research question 1 and 2, students from EG were invited for interviews.

#### **3.4.2.2. Data collection instruments**

To facilitate answers for research question 3, a list of open-ended questions following a model of semi-structured interview was prepared (Table 3.2). The semi-structured interview was selected for this research because it is more flexible than the structured interviews and the interviewees have more room to elaborate on their answers (Denscombe, 2017). At the same time, a list of questions in semi-structured interviews was the spring-board for collecting focused data compared to unstructured interviews (Duffy, Ferguson, & Watson, 2004). In particular, question 1, 2, 3 played a role as eliciting students' personal experience with their learning before and after the introduction of the technique. The term *research* was used in replacement of *morphological instructions* to avoid the effect of leading students to certain answers. Question 4, and 5 directed students' attention into the lessons to gather students' experience when the intervention was introduced. Question 6, 7, 8 used think-out-loud protocols to testify whether the morphological knowledge was used in decoding vocabulary items, which generated the most critical response for research question 3. The selection of the test item to recall experience was based on students' specific performance. Through these questions, the question whether a causal relationship between morphological instruction and



vocabulary knowledge existed was answered. Question 9 was used in expectation to shed light on future pedagogical implementations.

Table 3.2. List of interviewing questions

1. What challenges do you have when learning vocabulary?
2. Before the lessons, what strategies did you use to learn vocabulary?
3. After the lessons, what strategies have you considered useful for your vocabulary learning?
4. What do you think about the lessons using morphological instruction?
5. How did you decode this ..... in TVS?
6. How did you decode this ..... in TVS?
7. How did you decode this ..... in TVS?
8. How did you decode this ..... in TVS?
9. What are your expectations for future lessons of vocabulary?

It has to be noticed that elaboration of responses by follow-up questions was expected in each question for further insights. Additionally, regarding student's level of proficiency, the interviews would be conducted in L1 since the ultimate purpose of interviewing was to elicit data rather than to assess L2 performance.

#### ***3.4.1.3. Data collection procedure***

After the post-test had been administered to both groups, the researcher gave out invitations for interviews. The interviews were conducted online using Skypes and the recordings were saved under anonymous file names in the computer with encrypted password.

#### ***3.4.1.4. Data analysis procedure***

The data collected from the interviews was transcribed using Otter.ai software before being categorized and analysed.

## **3.5 Ethical considerations**

### ***3.5.1. Voluntary informed consent***

Participants in this project were given detailed information about the study in Participant Information Sheet (Appendix E, Appendix F) before they signed Participant Consent Form (Appendix G) as proof of voluntary participation.

### ***3.5.2. Confidentiality***

Regarding confidentiality of participants, the data gathered from the study was kept confidential in a secure device with encrypted password under anonymised markers and was only used for the purpose of this study only.

### ***3.5.3. Participants' rights and benefits***

Participants were announced that they could decide to withdraw from the study as they wished without having to inform the reasons. At the end of the study, each class of students was rewarded a sum of funding for their year-end party. The choice gift of appreciation was agreed by all of the students. Further elaboration on participants' rights, their benefits and their contributions can be traced in Research Ethical Approval Form (see Appendix H for reference)

In brief, this chapter presented the detailed information about the setting of the study, the justification of methodology, the data collection tools, data collection procedures, data analysis tools and data analysis procedures. The ethical considerations concerning participants' rights was also discussed. In the next chapter, the interpretation of the collected data will be covered.

## CHAPTER 4: ANALYSIS AND DISCUSSION

### 4.1. Introduction

This chapter aims to provide the presentation, analysis and discussion of the collected data from the students from the two assigned groups. At the beginning, 35 students from both groups agreed to take part in the study. However, during the time of the study, one student from each group decided to withdraw from the study. Hence, the data collected from these two students will not be used for the data analysis and discussion. The summary of participants in the study is presented in Table 4.1.

Table 4.1. Summary of participants according to time (pre-test and post-test) and divided groups (CG and EG)

|    | <b>Pre-test</b> | <b>Post-test</b> |
|----|-----------------|------------------|
| CG | N=34            | N=34             |
| EG | N=34            | N=34             |

### 4.2. Research question 1 – the effects of morphological instruction on roots and derived words on students' awareness of morphological derivation

The mean scores, standard deviations, minimum scores and maximum scores at different times (pre-test and post-test of TMA) of two treatment groups (CG and EG) are presented in Table 4.2.

Table 4.2. Descriptive Statistics (Performance on TMA) according to time and divided groups

| <i>Summary of Performance on TMA</i> |       |       |                |    |      |      |
|--------------------------------------|-------|-------|----------------|----|------|------|
| Time                                 | Group | MEAN  | Std. Deviation | N. | Min  | Max  |
| Pre-test                             | CG    | 65.09 | 9.70           | 34 | 35.3 | 85.0 |
|                                      | EG    | 66.11 | 7.06           | 34 | 45.2 | 81.9 |
| Post-test                            | CG    | 63.10 | 12.68          | 34 | 32.5 | 85.6 |
|                                      | EG    | 78.90 | 5.42           | 34 | 63.3 | 88.4 |

The independent-sample t-test of the pre-test scores on TMA of both groups (Table 4.3) showed that there was no significant difference in students' performance between CG and EG

on the TMA before morphological intervention was introduced to EG. Particularly, the results from the Levene's Test for equality of variances with F at 0.78 ( $p > 0.05$ ) and the t-test for equality of means with t (66) at -0.50 ( $p > 0.05$ ) indicated that the variance as well as the mean of performance between CG and EG was statistically non-significant at the beginning. The negative t value showed that the mean score of CG on TMA pre-test was 0.5 score lower than that of EG; however, the difference was not statistically significant.

| Table 4.3. Independent-sample t-test of pre-test scores of TMA between CG and EG |   |      |                              |      |                 |                       |
|--|---|------|------------------------------|------|-----------------|-----------------------|
| <i>Comparison of Pre-test Performance on TMA</i>                                 |   |      |                              |      |                 |                       |
|  | Levene's Test for Equality of Variances |      | t-test for Equality of Means |      |                 |                       |
|  | F                                       | Sig. | t(df)                        | Sig. | Mean Difference | Std. Error Difference |
| TMA_Pre-test (CG-EG)   | 0.78                                    | 0.38 | -.050(66)                    | 0.62 | -1.02           | 2.06                  |

Note: df = degree of freedom

Another independent-sample t-test was used to compare the performance in the post-test of TMA between CG and EG after the intervention. As illustrated in Table 4.4, the differences between two groups were statistically significant with F (value of equality of variances in Levene's Test) at 19.94 ( $p < 0.001$ ) and t (66) (value of equality of mean in t-test) at -6.68 ( $p < 0.001$ ). The negative t- value indicated the mean score of CG on TMA post-test was 15.80 scores lower than that of EG. This finding also demonstrated that EG significantly outperformed CG after the intervention was introduced.

Table 4.4. Independent-sample t-test of post-test scores of TMA between CG and EG

| <i>Comparison of Post-test Performance on TMA</i> |   |              |                              |              |                    |                          |
|---|---|--------------|------------------------------|--------------|--------------------|--------------------------|
| TMA_Post-test<br>(CG-EG)                          | Levene's Test for<br>Equality of<br>Variances |              | t-test for Equality of Means |              |                    |                          |
|   | F   | Sig.         | t(df)                        | Sig.         | Mean<br>Difference | Std. Error<br>Difference |
|   | 19.94   | p <<br>0.001 | -<br>6.68(66)                | p <<br>0.001 | -15.80             | 2.3651                   |

Note: df = degree of freedom

To measure the progress, or the gained scores, of students in terms of their morphological awareness after the morphological instruction was implemented, two paired-samples t-test were employed. It can be seen from Table 4.5 that the improvements of EG ( $M_{pre-post} = -12.79$ ,  $t(33) = -16.27$ ,  $p < 0.001$ ) in the TMA was significantly greater than that ( $M_{pre-post} = 1.99$ ,  $t = 1.09$ ,  $p > 0.05$ ) of CG. The positive t value of CG in the paired-samples t-test of TMA showed that students in CG performed worse in the post-test compared to their pre-test performance. Additionally, with p-value at 0.28, the difference of performance between pre-test and post-test of TMA of CG was not statistically significant, thus, it is reasonable to conclude that CG did not improve on their morphological awareness when following the conventional approach to vocabulary learning. By contrast, the negative mean score and t value of EG in TMA pointed out that students in EG performed much better in the post-test compared to their performance in the pre-test. This combined with the p-value standing below 0.001 supported the hypothesis that morphological intervention had strong positive impacts on students' ability to reflect and manipulate the relational and syntactical aspects of the English morphemes in EG. The result for power analysis using Cohen's  $d_m$  for within-subject comparison adopted from Lakens (2013) indicated that there was a large effect size ( $d_m = 1.93$ ) detected in the gained scores of EG on TMA.

Table 4.5. Paired-samples t-tests of students' performance on TMA

| <i>Comparison of Gained Scores on TMA</i> |  |
|---|--|
|---|--|

|                 | Paired-samples t-test |                |            |                 | Effect Size      |
|-----------------|-----------------------|----------------|------------|-----------------|------------------|
|                 | Mean                  | Std. Deviation | t(df)      | Sig. (2-tailed) | Cohen's $d_{rm}$ |
| CG (Pre – Post) | 1.99                  | 10.64          | 1.09(33)   | 0.28            | N/A              |
| EG (Pre – Post) | -12.79                | 4.58           | -16.27(33) | $p < 0.001$     | 1.93             |

Note: df = degree of freedom

The progression of students from both groups, before and after the intervention is further illustrated in Figure 4.1. During a three-week period of intervention, students receiving morphological instructions made noticeable progress with their morphological awareness while those in control group learning vocabulary without intervention experienced a slight decrease in their performance.

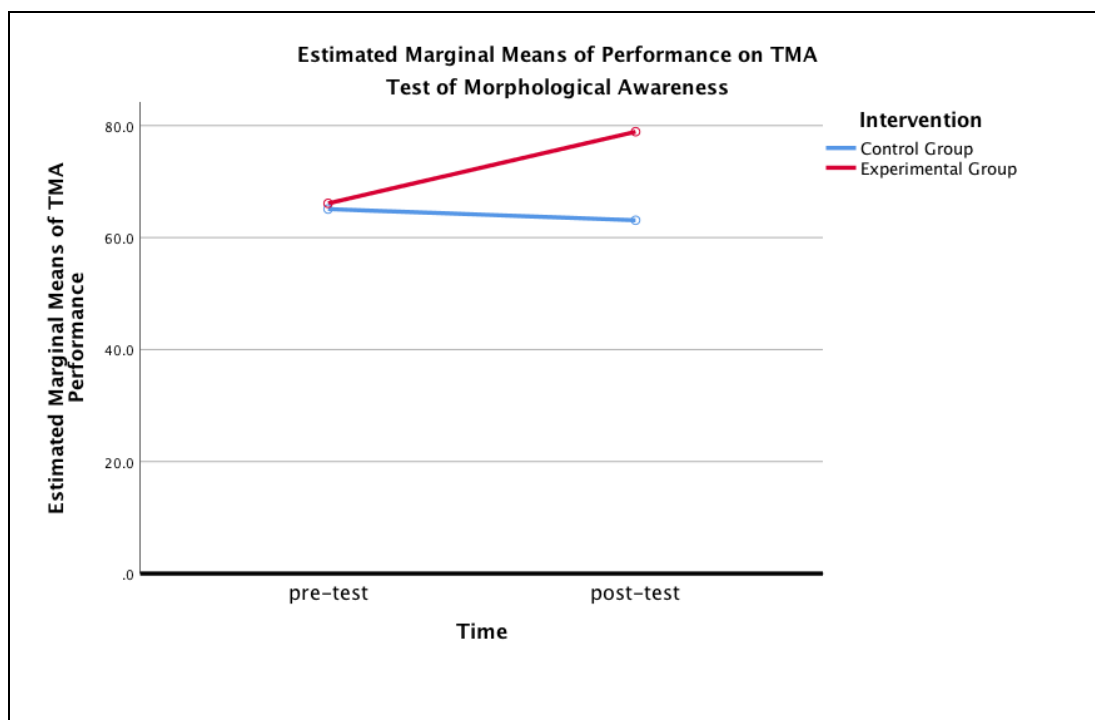


Figure 4.1. Comparison of students' progression on TMA

Such results were in line with the findings from Amirjalili and Jabbari's (2018) study, one of the very rare studies that took instructional intervention into consideration when concerning the growth of morphological awareness among L2 learners. According to Amirjalili and Jabbari (2018), the students from low-proficiency experimental group (which was comparable to the group of students in this study), scored significantly higher in both examined morphological

aspects compared to their counterparts who followed the conventional approach to vocabulary learning. The promising results from this study and its alignment with previous literature suggest that explicit instruction in derivational morphology can bring positive impacts on lower-level L2 learners' morphological awareness.

#### 4.3. Research question 2 – the effects of morphological instruction on roots and derived words on students' vocabulary size

The mean scores, standard deviations, minimum scores and maximum scores at different times (pre-test and post-test of TVS) of two treatment groups (CG and EG) are presented in Table 4.6.

Table 4.6. Descriptive Statistics (Performance on TVS) according to time and divided groups

| Summary of Performance on TVS |       |       |                |    |      |      |
|-------------------------------|-------|-------|----------------|----|------|------|
| Time                          | Group | Mean  | Std. Deviation | N  | Min  | Max  |
| Pre-test                      | CG    | 62.39 | 11.81          | 34 | 44.3 | 88.6 |
|                               | EG    | 62.26 | 9.25           | 34 | 44.3 | 78.6 |
| Post-test                     | CG    | 58.86 | 18.75          | 34 | 17.1 | 90.0 |
|                               | EG    | 76.42 | 5.21           | 34 | 65.7 | 87.1 |

Preliminary analysis of students' pre-test performance on TVS showed homogeneity of variance between CG and EG was not violated (Levene's variance equality value –  $F = 1.85$ ,  $p > 0.05$ ) (Table 4.7). Additionally, the measurement of mean equality between two groups ( $t(66) = 0.001$ ,  $p > 0.05$ ) supported the null hypothesis that there was no significant difference in students' vocabulary size between the two groups before the teaching technique to raise morphological awareness was applied for students in EG. The findings indicated that the performance of students in CG was slightly higher than that of students in EG; however, the difference was non-significant.

Table 4.7. Independent-sample t-test of pre-test scores of TVS between CG and EG

| Comparison of Pre-test Performance on TVS |   |                              |       |      |                 |                       |
|---|---|------------------------------|-------|------|-----------------|-----------------------|
| Levene's Test for Equality of Variances   |   | t-test for Equality of Means |       |      |                 |                       |
|   | F | Sig.                         | t(df) | Sig. | Mean Difference | Std. Error Difference |
|   |   |                              |       |      |                 |                       |

|                           |      |      |           |       |       |      |
|---------------------------|------|------|-----------|-------|-------|------|
| TVS_Pre-test<br>(CG - EG) | 1.85 | 0.18 | 0.001(66) | 0.999 | 0.003 | 2.59 |
|---------------------------|------|------|-----------|-------|-------|------|

Note: df = degree of freedom

To measure the differences in students' performance in TVS after the three-week period of instructional intervention, another independent-sample t-test was conducted between CG and EG in terms of their post-test scores. Table 4.8 shows the results of the analysis. According to the analysis of variance equality using Levene's Test, the difference between two groups in the post-test of TVS was statistically significant ( $F = 29.98$ ,  $p < 0.001$ ). At the same time, the result of mean equality analysis using t-test showed that there was a statistically big difference ( $t(66) = -5.26$ ,  $p < 0.001$ ) in students' performance in the post-test of TVS. The negative t-value represented that the mean score of students CG in the post-test of TVS was much lower (17.60 scores lower) than that of their counterpart. Hence, there is sufficient evidence to suggest that students in EG remarkably outperformed their peers in CG in the post-test of TVS.

Table 4.8. Independent-sample t-test of post-test scores of TVS between CG and EG

| <i>Comparison of Post-test Performance on TVS</i> |   |             |                              |             |                 |                       |
|---|---|-------------|------------------------------|-------------|-----------------|-----------------------|
|   | Levene's Test for Equality of Variances |             | t-test for Equality of Means |             |                 |                       |
|   | F                                       | Sig.        | t(df)                        | Sig.        | Mean Difference | Std. Error Difference |
| TVS_Post-test<br>(CG-EG)                          | 29.98                                   | $p < 0.001$ | -5.26(66)                    | $p < 0.001$ | -17.60          | 3.34                  |

Note: df = degree of freedom

Further analysis using paired-samples t-tests was employed to compare the progress of students in both groups when dealing with the test items in TVS before and after the intervention took place. As represented in Table 4.9, students in EG considerably outscored students in CG on TVS. Specifically, the mean score of EG ( $M_{pre-post} = -14.15$ ) was much higher than that of CG ( $M_{pre-post} = 3.54$ ). Additionally, the  $t_{pre-post}$  value of EG was  $-9.97$  ( $p < 0.001$ ) while the  $t_{pre-post}$  value of CG was  $1.74$  ( $p > 0.05$ ). In simpler terms, the results showed that students in the EG made outstanding improvements while those in CG did not show any development on TVS. The positive values of mean score and t- values of CG signal a trivial decrease in the post-test compared to the pre-test of TVS of this group. The Cohen's  $d_m$  for



within-subject comparison also indicated that there was a large effect size ( $d_{rm} = 1.78$ ) detected in the gained scores of EG on TVS.

Table 10. Paired-samples t-tests of students' performance on TVS

| Comparison of Gained Scores on TVS |                       |                |           |                 |                  |
|------------------------------------|-----------------------|----------------|-----------|-----------------|------------------|
|                                    | Paired-Samples t-test |                |           |                 | Effect Size      |
|                                    | Mean                  | Std. Deviation | t(df)     | Sig. (2-tailed) | Cohen's $d_{rm}$ |
| CG(Pre-Post)                       | 3.54                  | 11.85          | 1.74(33)  | 0.91            | N/A              |
| EG(Pre-Post)                       | -14.15                | 8.28           | -9.97(33) | $p < 0.001$     | 1.78             |

Note: df = degree of freedom

The progression in TVS of students from both groups is demonstrated in Figure 4.2. According to the line graph, the mean score of students in EG saw a sharp increase by around 15 scores while the mean score of students in CG slightly dropped by 3.5 scores.

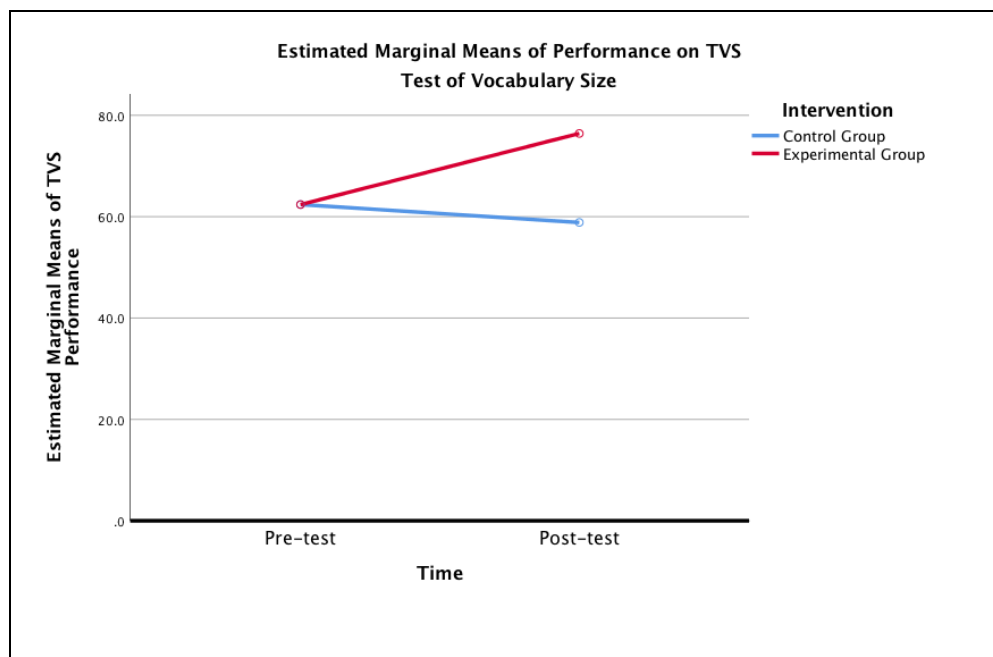


Figure 4.2. Comparison of students' progression on TVS

The answer to the question whether the introduction of morphological awareness could lead to the growth in *vocabulary size* among students in EG, however, needed further analysis. First, to examine the strength of relationship between EG students' morphological awareness and their *vocabulary size* in post-test performance, a Pearson Correlation Test was used

(Table 4.10). According to the analysis, there was a moderate correlation between EG students' morphological awareness and the size of their vocabulary ( $r = 0.62$ ) and the correlation is statistically significant ( $p < 0.001$ ). The positive  $r$ -value indicated that the growth in EG students' morphological awareness and their *vocabulary size* followed the same patterns (i.e. increasing) after the morphological intervention was implemented. Such findings of this study was in accordance with the results and findings from Zhang's (2002)'s study ( $r = 0.62$ ,  $p < 0.002$ ), Jeon's (2011) study ( $r = 0.63$ ,  $p < 0.01$ ), and Zhang and Koda's (2012) study ( $r = 0.43$  ( $p < 0.001$ )).

Table 4.10. Pearson Correlation Test on performance of post-TVS and post-TMA of EG

| <i>Pearson Correlation of EG's Performance on Post-tests</i> |                     |                  |                  |
|--|---------------------|------------------|------------------|
|  |                     | EG_TMA_Post-test | EG_TVS_Post-test |
| EG_TMA_Post-Test   | Pearson Correlation | 1                | 0.62**           |
|  | Sig. (2-tailed)     | N/A              | $p < 0.001$      |
|  | N                   | 34               | 34               |

Note: \*\* = Correlation is significant at the 0.01 level (2-tailed)

However, the significant positive correlation between two types of knowledge cannot confirm the causal relationship between them since correlational analysis does not deduce a cause-and-effect relationship between two examined variables (Creswell, 2012; Denscombe, 2017). Thus, there was a need for further analysis to investigate whether students in EG utilized their knowledge about morphology in TVS or not, and if so, how the morphological awareness was used. The response to these two questions will be elaborated in answer to research question 3.

#### **4.4. Research question 3 – the utilization of morphological awareness (morphologically analytical, i.e. reflecting, and morphologically synthetic, i.e. manipulating, skills) when learning vocabulary**

To investigate whether students utilized the knowledge gained from deliberate morphological instruction when dealing with test items in TVS, the researcher invited students in EG to

participate in post-intervention interviews. After the invitations were sent out, six students agreed to take part in 15-minute semi-structured interviews via Skype and all of them acknowledged that the interviews were recorded for academic purposes only. The questions in the semi-structured interviews facilitated students' personal experience with learning vocabulary and their past learning techniques before eliciting further information about how they used morphological awareness to decode test items in TVS. The critical questions to facilitate answers from students can be traced back in Table 3.2.

First, to investigate whether students utilized knowledge about morphemes and their governing rules in word construction when learning vocabulary, they were invited to participate in think-out-loud protocols to recall how they decoded the vocabulary items when completing the TVS. To avoid fatigue caused by test length (30 test items), students were allowed to pick up the test items of their memorization as well as interest. The extractions of some of their answers of their protocols were:

**Student 1:** *“discriminate and discrimination. The –ation ending makes discriminate a noun”*

**Student 2:** *“the verb of the noun movement is move.”*

**Student 3:** *“manager – the –er ending makes a verb become a noun representing humans. (...) Other examples are teacher, writer.”*

**Student 4:** *“I can extract pollute from pollution. (...) The –ion ending can come after a verb to make it a noun.”*

**Student 5:** *“The verb of education is educate. (...) I don't remember the adjective form of it.”*

**Student 6:** *“central is an adjective because it ends with –al. Simply is an adverb because it ends with –ly.”*

Interestingly, student 5 initiated her turn to talk about the taught items that she used morphological strategies to memorize them without elicitation from the interviewer. She mentioned the two words, “apply” and “discrimination” and identified their word forms right afterwards. When being asked further for her knowledge about the derived form of “apply” and the root of “discrimination”, student 5 gave totally correct answers. Recognizing that the

student could recall such a challenging word like “discrimination” (at C1 level according to Cambridge Dictionary Online), which is above her current level, the researcher facilitated further elaboration from student 5 on how she managed to memorize it. She responded that:

*“I really enjoyed it when Ms. Duong (the teacher in-charge) introduced to us the new learning technique. It helps me memorize the items longer and I can recall the taught items during three weeks of intervention more quickly than the items I have learned so many times before.”*

Generally, the think-out-loud protocols revealed that all of the students used morphological knowledge to decode the test items on TVS. Indeed, most of the students can recall the noun derivational forms of verbs, which ends in **-ation**, **-ion**, **-er**, or **-ment**. Some students remember the adjective-building morphemes such as **-al**, **-ic**, or **-ive** but these morphemes were not as much consolidated as noun-making morphemes. Such information collected from the think-out-loud protocols confirmed the hypothesis that the introduction of morphological instruction had a causal relationship with the EG students’ *vocabulary size*. In other words, students in EG could make significant progress when enlarging their *vocabulary size* when morphological instruction was the main teaching technique during vocabulary learning sections. In other words, students in EG could make significant progress when enlarging their *vocabulary size* when morphological instruction was the main teaching technique during vocabulary learning sections. These findings, therefore, added critical values in the gap of knowledge in current literature concerning the contribution of morphological awareness to the growth of vocabulary knowledge in L2 contexts. Indeed, the findings supported the hypothesis that morphological awareness can mediate L2 learners’ vocabulary growth through morphological identification and morphological manipulation. This also provides a strong foundation for implementation of morphological instruction to improve vocabulary learning in EFL classrooms where the amount, type and quality of L2 input is rather limited.

A step further in developing applicable instructional strategies is to examine students’ needs and their preferences for learning approaches. This encouraged the researcher to investigate

students' past experience with vocabulary learning, their perspectives towards morphological instruction and their expectations for future lessons. Regarding students' personal experience with vocabulary learning prior to the study, five out of six students had problems with vocabulary memorization. The reasons for this challenge in learning vocabulary, as reported by the students, were that (1) the conventional approach to teaching vocabulary was not effective, (2) they did not know any useful strategy to learn long and irrelevant vocabulary, (3) the vocabulary items being taught were too complicated. Particularly, some students reported that:

**Student 2:** *"My teachers usually present a list of vocabulary with translated meaning without showing us the strategies to build connection between the vocabulary items so I find it difficult for me to memorize".*

**Student 5:** *"I can learn by heart the vocabulary quickly but I soon forget them all because the taught items are irrelevant."*

One student confessed that she used to have problems with identification of word form and word meaning:

**Student 1:** *"I did not know that different word forms have different meaning. I did not recognize the parts that change the form of the words either. Now I have learnt that word forms can change the word meanings. In the past, I used to think that the word "book" had only one meaning - "s piece of printed work". Now I know that the word "book" in verb form means "reserve"."*

The other student did not have any specific problems with vocabulary learning and her greatest challenge was pronunciation.

Concerning the vocabulary learning strategies, the answers from students are represented in Table 4.11. As can be indicated from Table 4.11, most students learnt vocabulary by cramming in lists of given vocabulary, which were usually the lists of vocabulary at the end of their textbook or lists of vocabulary from a newly learnt reading passage.

Table 4.11. Past vocabulary learning strategies reported by students

|   | Student 1 | Student 2 | Student 3 | Student 4 | Student 5 | Student 6 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|
| 1. Learning by heart a given list of vocabulary                               | Yes       |           | Yes       | Yes       | Yes       | Yes       |
| 2. L1 translation   | Yes       | Yes       |           |           |           |           |
| 3. Rewriting vocabulary items   |           |           |           | Yes       |           | Yes       |
| 4. Contextualizing through songs, readings, example sentences from dictionary | Yes       | Yes       |           |           |           |           |
| 5. Doing mock tests   |           |           | Yes       |           |           |           |
| 6. Doing vocabulary exercises in text books                                   |           |           |           |           | Yes       |           |
| 7. Using flashcards   |           |           |           |           |           | Yes       |

Most of them learnt the lists of vocabulary for the exam and forgot soon after that. The other 3 preferred ways of learning vocabulary were L1 translation, rewriting vocabulary items for several times and learning through contextualizing the items. Other techniques used by the students were doing exam mock tests, doing vocabulary exercises (gap-filling or word formation), or using flash cards. None of the students reported that they had prior experience with morphological strategies when learning vocabulary.

When being asked to state their opinions on the morphological instruction, all students responded positively to the new learning method:

**Student 1:** *“I found it helpful because it helped me remember the new words as groups of relevant words. I prefer this learning technique to learning separate vocabulary items.”*

**Student 2:** *“With the new learning technique, now I can draw a map of all relevant vocabulary items (word family) and it helps me to learn and memorize more words.”*

**Student 3:** *“The new technique makes it easier for me to recognize and remember the form of a newly taught item.”*

It is evident to suggest that EG students included morphological identifying and decoding as new vocabulary learning strategies.

Regarding the expectations for future English vocabulary lessons, five out of six students expressed that they would use the morphological awareness to learn complex vocabulary and preferred to have more lessons as well as practice exercises with morphemes and morphological rules. One student, however, confessed that although the new learning technique was helpful, three-week intervention was a short period for her to make significant progress.

In summary, the findings from this study demonstrated the positive impacts of morphological instruction concerning the skills of reflecting and manipulating the relational and syntactical aspects on lower-level students' morphological awareness. Such knowledge about morphemes, in turn, was found to be useful for students when dealing with morphologically complex words to enlarge their *vocabulary size*. The demonstrated effectiveness of morphological instruction and the positive attitudes of students in EG towards the new teaching technique, consequently, provide important empirical evidence to promote the development and use of morphological instruction among Vietnamese high-school teachers their future classroom.

## CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

This chapter aims to provide an overview of the study outcomes and its significance in current literature. It also sets out to recommend further improvements for future research based on the strength and limitations acknowledged in current study. Finally, it will discuss the contribution of the research findings to the researcher's professional development.

### 5.1. Overview of the study outcomes and its significance

The objective of this study was to investigate the effectiveness of morphological instruction on Vietnamese tenth-graders' morphological awareness and vocabulary knowledge. It also aimed to study how the students receiving morphological instruction utilized their morphological knowledge in decoding semantics and structures of the targeted vocabulary. The major findings can be summarized as follows.

Firstly, regarding the impacts of morphological instruction on students' morphological awareness, this study found that students receiving deliberate morphological instruction made significant progress in improving their morphological awareness as compared to their peers, who followed traditional approach to vocabulary instruction.

Secondly, in terms of the contribution of morphological instruction to students' vocabulary growth, it was indicated from the results that students engaged in morphological-awareness-raising activities achieved considerable growth in their *vocabulary size*. On the contrary, their counterparts, who continued to learn vocabulary with the traditional method did not make any progress. The statistical results also showed that the growth in morphological awareness and *vocabulary size* followed the same increasing patterns for students receiving intervention.

Thirdly, concerning how students utilized their morphological knowledge, the interviews and think-out-loud protocols revealed that student in the intervened group employed morphological strategies to decode the internal structures, and consequently make morphologically rule-based inferences about the meaning of learned vocabulary. The study also pointed out



students' positive attitudes towards the newly introduced approach to vocabulary teaching and learning, which will hopefully facilitate further investigation in how morphological instruction can be effectively exploited in EFT classroom to accelerate the growth of lower-level L2 students' vocabulary knowledge.

## **5.2. Recommendations for future research**

Regarding the strengths, this study managed to include morphological intervention as the main research instrument, which has not been done in prior research and studies that target the same topic of investigation. In terms of research methodology, this study strictly followed the quasi-experimental design with a pre-test and a post-test administered to both groups of comparison. The confounding effect of variance of students' performance as a result of non-randomized samplings was also minimized in this study. Moreover, this study was able to combine quantitative and qualitative data to reveal a more holistic picture of a case where educational intervention to improve learners' performance was successful.

For further investigation of the impacts of the intervention on students' improvement, this study called out for longitudinal research which can allow students more time to effectively process and successfully internalize the new learning strategies. As indicated by one student in the interview, three-week intervention was insufficient for her to make full use of the introduced morphological knowledge. Additionally, future studies should also consider the employment of a delayed post-test, which was not used in this study due to time constraints, to confirm whether the gained morphological awareness can bring long-lasting effects on students' vocabulary learning.

### **5.3. The contribution of the research findings to the researcher's professional development**

Upon completion of the study, the researcher has gained valuable experience especially regarding the research skills and time management strategies. The study also brought about critical reflection on the researcher's teaching expertise as a life-long learning teacher and one of the most important lesson learnt from the project for the researcher is to always search for improvements.

In summary, this chapter has mentioned the findings to answer the three proposed questions. It also suggested plans for change in future studies based on the study's strengths and weaknesses. Lastly, it presented the study's contribution to the professional development of the researcher.

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APPENDICES

APPENDIX A

SỞ GIÁO DỤC VÀ ĐÀO TẠO  
THPT CHUYÊN QUẢNG NAM  
2019

KỶ THI TUYỂN SINH LỚP 10  
Năm học: 2018 -

ĐỀ CHÍNH THỨC

Môn thi : TIẾNG ANH (CHUNG)  
Thời gian: 60 phút (*không kể  
thời gian giao đề*) Ngày thi :  
08/6/2018

SECTION ONE: USE OF ENGLISH (5.0 pts)

*Part 1. Choose the best answer (A, B, C or D) to finish each of the following sentences. 0 has been done as an example. Write your answers in the numbered boxes below. (3.0 pts)*

0. I \_\_\_\_\_ a student.

A. am                      B. is                      C. are                      D. be

1. They \_\_\_\_\_ there last summer holiday.

A. have stayed      B. stayed              C. stay                      D. staying

2. My friend \_\_\_\_\_ me that he was going to the Botanical Gardens.

A. spoke                B. told                      C. said                      D. talked

3. Car exhaust is the main reason for the city's \_\_\_\_\_.

A. polluted              B. pollute                C. pollution                D. polluter

4. **Nam:** Would you like to have dinner with me?

**Daisy:** \_\_\_\_\_.

A. Yes, I'd love to      B. Yes, so do I          C. I'm very happy      D. Yes, it is

5. **Linda:** May I help you?

**Hong:** \_\_\_\_\_

A. I'm sorry, I can't.      B. No problem.  
C. No, thank you.          D. How can I help you?

6. So far, English \_\_\_\_\_ in England for more than 1,500 years.

A. has spoken      B. spoke                      C. were spoken      D. has been spoken

7. Paolo has recently joined a health club in order to \_\_\_\_\_ fit.

A. continue              B. make                      C. help                      D. keep

8. John's mother, \_\_\_\_\_ lives in Scotland, has 6 grandchildren.

A. which                B. that                      C. who                      D. whose

9. I have \_\_\_\_\_ my car key everywhere but I can't find it.

A. looked for          B. turn on                      C. got up                      D. looked

- through
10. If they had enough money, they \_\_\_\_\_ a new car.  
 A. would buy      B. will buy      C. bought      D. were buying
11. I suggest \_\_\_\_\_ out for a walk.  
 A. go      B. we should go      C. that going      D. that should go
12. He has decided to become an English teacher \_\_\_\_\_ he loves Maths.  
 A. so      B. if      C. because      D. although

Write your answers here:

|          |          |          |          |          |          |          |          |          |          |           |           |           |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|
| <b>0</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> | <b>8</b> | <b>9</b> | <b>10</b> | <b>11</b> | <b>12</b> |
| A        |          |          |          |          |          |          |          |          |          |           |           |           |

**Part 2. Supply the correct form of the words in bold in brackets to complete each of the following sentences. 0 has been done as an example. Write your answers in the numbered boxes below. (1.0 pt)**

0. He plays the guitar very \_\_\_\_\_. (**GOOD**)
1. What's the name of the \_\_\_\_\_ you sang last night? (**SING**)
2. They have a wonderful \_\_\_\_\_ of stamps. (**COLLECT**)
3. If you want to know it, you can ask him. He is very \_\_\_\_\_. (**HELP**)
4. Mom hates those shoes. They are so \_\_\_\_\_. (**COMFORT**)

Write your answers here:

|                |    |    |    |    |
|----------------|----|----|----|----|
| <b>0. well</b> | 1. | 2. | 3. | 4. |
|----------------|----|----|----|----|

**Part 3. There is one mistake in each line in the paragraph below. Underline the mistake and write the correction at the end of each line.**

| Line | <b>0 has been done as an example. (1.0 pt)</b>  | Correction   |
|------|---|--------------|
| 0    | The British Council estimates that more than one billion people <u>is</u> learning English as a second language today. English is teaching at school as a | <u>are</u> . |
| 1    | second language in hundred of countries all over the world. You will  | .....        |
| 2    | never feel alone during you learning process, and it will be very easy  | .....        |
| 3    | finding other English learners who can share their experiences with you.  | .....        |
| 4    |   | .....        |

**SECTION TWO: READING (3.0 pts)**

**Part 1. Read the text below and decide which answer (A, B, C, or D)**

**best fits each numbered gap. 0 has been done as an example. Write your answers in the numbered boxes below.(1.5 pts) BEARS**

The bear can (0)\_\_\_ a dangerous animal. The adult bear is very strong and it can kill a person. Bears are good at (1)\_\_\_\_\_trees and they can run very fast. Like most animals, they find food by using (2)\_\_\_\_\_noses.

There are seven kinds of bear. The (3)\_\_\_ is the white polar bear, which is almost three metres tall. There are two kinds of black bear. One lives in the forest of North America, and the other lives in South-East Asia. But not (4)\_\_\_\_\_black bears are black. They may be dark brown or a reddish brown.

Everyone loves the black and white panda bear, which (5)\_\_\_from China. Not many pandas live in the forest today because (6)\_\_\_ is difficult to find food.

- |                       |                  |                    |                        |
|-----------------------|------------------|--------------------|------------------------|
| 0. <b>A.</b> be       | <b>B.</b> is     | <b>C.</b> being    | <b>D.</b> to be        |
| 1. <b>A.</b> climbing | <b>B.</b> climb  | <b>C.</b> climbed  | <b>D.</b> to climb     |
| 2. <b>A.</b> them     | <b>B.</b> they   | <b>C.</b> those    | <b>D.</b> their        |
| 3. <b>A.</b> large    | <b>B.</b> larger | <b>C.</b> largest  | <b>D.</b> most largest |
| 4. <b>A.</b> each     | <b>B.</b> all    | <b>C.</b> every    | <b>D.</b> much         |
| 5. <b>A.</b> comes    | <b>B.</b> lives  | <b>C.</b> goes     | <b>D.</b> turns        |
| 6. <b>A.</b> there    | <b>B.</b> it     | <b>C.</b> anything | <b>D.</b> something    |

**Write your answers here:**

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| A |   |   |   |   |   |   |

**Part 2. Read Joe's Vacation Review below and answer the questions that follow.(1.5 pts).**

### Hiking in New Zealand's West Coast

Last autumn, I went hiking in New Zealand with my friends. We started from Motueka on the West Coast. On day 1, we met our tour guide at the office, and then we hiked through the forest. On that first day, we walked for about four hours. We followed a river to the National Park, where we stopped. It was really hot, so we swam in the river, and made camp. It was amazing!

The next day, we climbed to the summit of Mount Arthur. The scenery was fantastic, but it was really tiring! We walked back down the summit, and at the bottom, a car from the tour company drove us back to camp. We were so pleased!

We spent 11 days walking along the West Coast. We climbed mountains, we swam in beautiful rivers, and we saw some wonderful scenery. This was a five star vacation!

1. What was the weather like on the first day?

---

2. How long was Joe's vacation?

---

3. List TWO things they did during the vacation.

-

---

### SECTION THREE: WRITING (2.0 pts)

**Part 1. Finish each of the following sentences in such a way that it means exactly the same as the sentence printed before it. 0 has been done as an example. (1.0 pt)**

0. Let's go out for a drink.

—> How about going out for a drink?

1. We have learned English for 5 years.

—> We started

---

2. "Will you come to the English club next weekend, Daisy?", asked Nam.

—> Nam asked

---

3. May I ask you a few questions?

—> Would you mind

---

4. Jenny could swim for miles when she was younger.

—> Jenny was

---

**Part 2. Use the words provided to make meaningful sentences. 0 has been done as an example. (1.0 pt)**

0. Peter/ good student.

—> Peter is a good student.

1. We / suggest / go / bike / save energy.

—>

---

2. Although / rain / heavily / we / went / school meeting.

—>

---

3. A great deal / wine / produced / France / each / year.

—>

---

4. I / pay / double / if / get / work / finished / by Friday.

—>

---

APPENDIX B

SỞ GIÁO DỤC VÀ ĐÀO TẠO  
QUẢNG NAM

KỶ THI TUYỂN SINH LỚP 10 THPT CHUYÊN  
NĂM HỌC 2019-2020

ĐỀ CHÍNH THỨC

(Đề có 10 trang)

Môn: TIẾNG ANH (chuyên)

Thời gian: 150 phút (không kể thời gian giao  
đề)

Khóa thi ngày: 10 - 12/06/2019

SECTION ONE: LISTENING(2.0 pts)

There are three parts in this listening test. You will hear each part twice.

PART 1. Questions from 1 to 5. You will hear 5 short conversations.

There is one question for each conversation.

For questions from 1 to 5, write your answers (A, B or C) in the  
corresponding numbered boxes below. (0.5 pt)

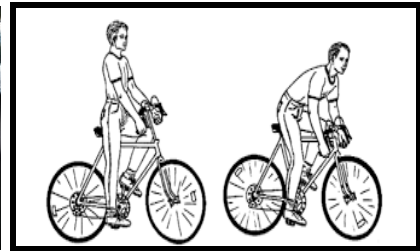
1. How did the woman get to work today?



A

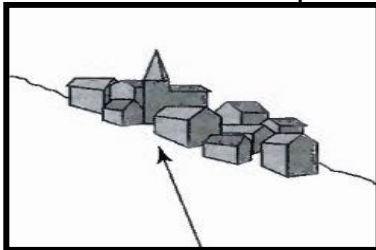


B



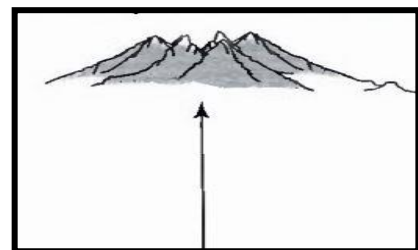
C

2. Where does the pollution come from?



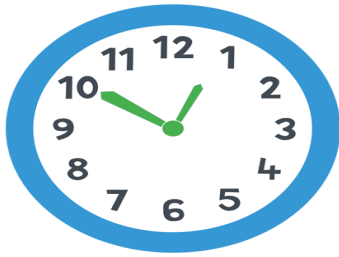
A

B



C

3. When must the boys get on the coach?



A

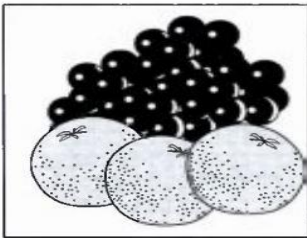


B

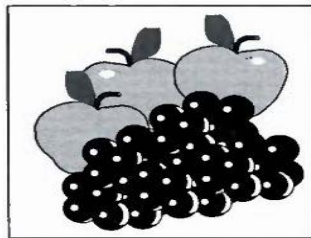


C

4. Which fruit do they take?



A

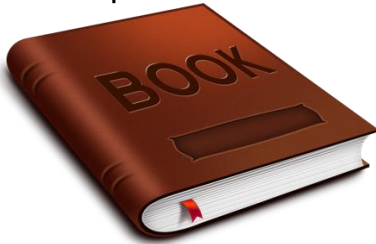


B



C

5. Which present has the man bought?



A



B



C

✎ Write your answers here:

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|   |   |   |   |   |



**PART 2. Questions from 6 to 10. You will hear a student talking about the survey conducted among people of different age groups to find out how architecture may affect people's lives. Listen carefully and choose the correct answer A, B or C to each question. Write your answers in the corresponding numbered boxes below. (0.5 pt)**

6. The purpose of the data collection was to \_\_\_\_\_.
  - A. test people's reaction to different buildings.
  - B. collect detailed information on various buildings.
  - C. assess the beauty of different public buildings.
7. The initial plan to use a questionnaire was abandoned because \_\_\_\_\_.
  - A. it would take too much time to produce.
  - B. the questions were difficult to write.
  - C. it would take too long for people to complete.
8. People indicated their reactions on 1-5 scale, \_\_\_\_\_.
  - A. giving rise to some interesting answers.
  - B. ensuring that the information was easier to collect.
  - C. making it quicker to choose the three images.
9. What was done to preserve the images when being used?
  - A. They were covered in plastic with a special machine.
  - B. People were asked to wear gloves when touching them
  - C. The images were handled only by the researcher.
10. What was the reason for appointing a leader for the group?
  - A. To comply with the instructions for the task.
  - B. To help hold the team together.
  - C. To allocate tasks to the various members.

**✎ Write your answers here:**

| 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|----|
|   |   |   |   |    |

**PART 3. Questions from 11 to 20. You are going to hear a talk on Canada. As you listen to the talk, complete the summary by using ONE WORD for each**

**gap. Write your answers in the corresponding numbered boxes below. (1.0 pt)**

Canada is located in the northern half of the continent of North (11)\_\_\_\_\_. The most northern parts of Canada are called the land of the (12) \_\_\_\_\_sun because at certain times of the year the sun never sets. This northern part of Canada is cold and mostly covered with snow all year round. The original people in the northern part of Canada are called (13) \_\_\_\_\_. They are also called the "First Nation". The populations in the Atlantic provinces of Nova Scotia, Newfoundland, New Brunswick and Prince Edward Island are small. The land there is not very fertile so their main industries are forestry, (14) \_\_\_\_\_and mining. The province of British Columbia is in the far (15) \_\_\_\_\_of Canada and is an attractive place for tourists because of its mild climate, mountains, seacoast and beautiful (16) \_\_\_\_\_. The original settlers came from (17) \_\_\_\_\_. In the 16th century, the first Europeans arrived in (18) \_\_\_\_\_Canada. They came from Britain and (19) \_\_\_\_\_. By the end of the (20) \_\_\_\_\_century, all of Canada was under British rule. In this century, Canada has had an influence of settlers from all over the world.

**Write your answers here:**

|     |     |     |
|-----|-----|-----|
| 11. | 15. | 19. |
| 12. | 16. | 20. |
| 13. | 17. |     |
| 14. | 18. |     |

## **SECTION TWO: LEXICO - GRAMMAR (3.0 pts)**

**PART 1. For the questions 1-14, choose the best answer (marked A, B, C or D) to finish each of the following sentences. Write your answers in the numbered boxes below. (0) has been done as an example.(1.4 pt)**

0. I \_\_\_\_\_ a student.

- A. am                      B. is                      C. are                      D. be**

1. In all English towns there is a speed \_\_\_\_\_of 30 miles an hour.

- A. control              B. allowance              C. condition              D. limit**

2. You shouldn't go to the meeting \_\_\_\_\_ you've got an invitation.

- A. except              B. if not              C. without              D. unless**

3. Susan couldn't help \_\_\_\_\_at the fat man.

- A. to laugh              B. laughing              C. for laughing              D. laughed**

4. Neither Linh nor her classmates \_\_\_\_\_ the National Museum so far.  
 A. visit                    B. visited                    C. have visited                    D. has visited
5. You should pay \_\_\_\_\_ to what the instruction is saying.  
 A. attendance                    B. intention                    C. convention                    D. attention
6. **Hoa:** Do you collect stamps or other things?  
**Mai:** Yes, I am a stamp \_\_\_\_\_  
 A. collector                    B. collecting                    C. collection                    D. collect
7. We regret \_\_\_\_\_ you that we cannot approve your suggestion.  
 A. inform                    B. to inform                    C. informing                    D. informed
8. I need \_\_\_\_\_ time to think about \_\_\_\_\_ offer you made me.  
 A. the/ the                    B. X/ the                    C. X/ an                    D. a/ the
9. What's the difference \_\_\_\_\_ a boat and a ship?  
 A. between                    B. from                    C. under                    D. with
10. The secretary \_\_\_\_\_ what the managing director was saying in shorthand.  
 A. turned up                    B. took down                    C. brought up                    D. turned off
11. **Tom:** Thank you for a lovely evening.  
**Mary:** \_\_\_\_\_ .  
 A. Don't mention it.                    B. I'm glad you enjoyed it.  
 C. Yes, I'd like that.                    D. Yes, that would be very nice.
12. **Tom:** Have a nice weekend.  
**Peter:** \_\_\_\_\_ .  
 A. You are the same                    B. So do I.  
 C. The same to you.                    D. Will you?
13. Soccer is one of the most popular \_\_\_\_\_ sports in the world.  
 A. spectator                    B. spectacle                    C. audience                    D. viewed
14. If we want to \_\_\_\_\_ up with them, we'd better hurry.  
 A. come                    B. catch                    C. approach                    D. arrive

✎ **Write your answers here:**

|   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |
|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| A |   |   |   |   |   |   |   |   |   |    |    |    |    |    |

**PART 2. Choose the word or phrase that is CLOSEST in meaning to the underlined part in each of the following questions. Write your answers in the numbered boxes below. (0) has been done as an example. (0.2 pt)**

0. Primary education in the United States is compulsory.  
 A. free of charge                    B. required                    C. excellent                    D. easy
1. Please let me know right away when you hear the news.  
 A. at once                    B. at home                    C. by noon                    D. by phone

2. The typhoon is considered as a **catastrophe** because it resulted in thousands of deaths.

- A. sudden occurrence                      B. terrible disaster                      C. pleasant experience                      D. mild disaster

✎ **Write your answers here:**

|          |          |          |
|----------|----------|----------|
| <b>0</b> | <b>1</b> | <b>2</b> |
| <b>B</b> |          |          |

**PART 3. Read the following passage. There are SIX mistakes in the passage. Find the words that need correction and correct them. Write your answer in the numbered boxes below. (0) has been done as an example (0.6pt).**

1 I was born in Newcastle, a city in the North East of English. Newcastle is on the bank of the River Tyne. It is quite big, with a populatte of about 200,000 people. There is a cathedral and an university. There are five bridges over the River Tyne, which link Newcastle to the next town, 5 Gateshead, where there is one of the biggest shopping centers in the world. A few years ago, the main industries was shipbuilding and coalmining, but now the chemical and soap industries are important. I move to London ten years ago but I often return to Newcastle. I miss the people, who are very friendly, and I miss the beautifully countryside near 10 the city, where there are so much hills and streams. People who are born near the River Tyne have a special name. They are called "Geodies". I am very pleased to be called a "Geodies".

✎ **Write your answers here:**

| Questions | Line     | Mistakes       | Correction     |
|-----------|----------|----------------|----------------|
| <b>0</b>  | <b>1</b> | <i>English</i> | <i>England</i> |
| <b>1</b>  |          |                |                |
| <b>2</b>  |          |                |                |
| <b>3</b>  |          |                |                |
| <b>4</b>  |          |                |                |
| <b>5</b>  |          |                |                |
| <b>6</b>  |          |                |                |

**PART 4. Use the word given in the box to the right of the text to form a word that fits in the same numbered space in the text. Write your answers in the numbered boxes below. (0) has been done as an example. (0.8pt).**

|   |               |
|---|---------------|
| Humans have long been fascinated by (0)_____space, and have wondered if there are intelligent life-forms elsewhere, | <b>0. OUT</b> |
|---|---------------|

|   |  |
|---|--|
| <p>which we might be able to contact. (1) _____, we've all seen space creatures on our TV and cinema screens, but "aliens" like these owe more to the (2) _____ of using human actors to (3) _____ the parts than to any real form of (4) _____ investigation.</p> <p>However, many serious space (5) _____ are now beginning to turn their attention to the question of what alien life might (6) _____ look like. One early result is Arnold the Alien, (7) _____ by biologist, Dougal Dixon. This strange being, unlike humans, has its eyes, ears and limbs in groups of three instead of pairs but, despite its odd (8) _____, its behavior not very different from our own.</p> | <p><b>1. NATURE</b></p> <p><b>2. CONVENIENT</b></p> <p><b>3. PLAY</b></p> <p><b>4. SCIENCE</b></p> <p><b>5. RESEARCH</b></p> <p><b>6. ACTUAL</b></p> <p><b>7. DESIGN</b></p> <p><b>8. APPEAR</b></p> |
|---|--|

✎ **Write your answers here:**

|                        |           |           |
|------------------------|-----------|-----------|
| <b>0.</b> <i>outer</i> | <b>3.</b> | <b>6.</b> |
| <b>1.</b>              | <b>4.</b> | <b>7.</b> |
| <b>2.</b>              | <b>5.</b> | <b>8.</b> |

**SECTION THREE: READING (2.5pts)**

**PART 1. Read the text below and decide which answer (A, B, C, or D) best fits each numbered gap. Write your answers in the numbered boxes below. (0) has been done as an example. (1.0 pt)**

Face-to-face conversation is two-way (0) \_\_\_\_\_: You speak to me, I reply to you and so on. Two-way (1) \_\_\_\_\_ depends on having a coding system that is understood by both (2) \_\_\_\_\_ and receiver, and an agreed convention about signaling the beginning and end of the (3) \_\_\_\_\_. In speech, the coding system is the (4) \_\_\_\_\_ like English or Spanish; the convention that one (5) \_\_\_\_\_ speaks at a time may seem too obvious to mention. In fact, the (6) \_\_\_\_\_ that people use in conversations and meetings are often non-verbal.(7) \_\_\_\_\_ example, lowering the pitch of the voice may mean the end of the sentence; a sharp intake of breath may signal the desire to (8) \_\_\_\_\_, catching the chairman's (9) \_\_\_\_\_ may indicate the desire to speak in a formal setting like a debate, a clenched fist may indicate anger. When these (10) \_\_\_\_\_ signals are not impossible, more formal signals may be needed.

- |  |                                 |                            |                          |
|--|---------------------------------|----------------------------|--------------------------|
| <b>0.</b> <b>A.</b> <i>process</i>       | <b>B.</b> <i>part</i>           | <b>C.</b> <i>dialogues</i> | <b>D.</b> <i>meeting</i> |
| <b>1.</b> <b>A.</b> <i>communication</i> | <b>B.</b> <i>communicate</i>    | <b>C.</b>                  |                          |
| <b>2.</b> <b>A.</b> <i>teacher</i>       | <b>B.</b> <i>to communicate</i> |                            |                          |
| <b>3.</b> <b>A.</b> <i>message</i>       | <b>B.</b> <i>transmitter</i>    | <b>C.</b> <i>messenger</i> | <b>D.</b> <i>sender</i>  |
| <b>4.</b> <b>A.</b> <i>language</i>      | <b>B.</b> <i>topic</i>          | <b>C.</b> <i>idea</i>      | <b>D.</b> <i>theme</i>   |
| <b>5.</b> <b>A.</b> <i>message</i>       | <b>B.</b> <i>voice</i>          | <b>C.</b> <i>talk</i>      | <b>D.</b> <i>word</i>    |
| <b>6.</b> <b>A.</b> <i>signals</i>       | <b>B.</b> <i>person</i>         | <b>C.</b> <i>people</i>    | <b>D.</b> <i>thing</i>   |
| <b>7.</b> <b>A.</b> <i>In</i>            | <b>B.</b> <i>symptoms</i>       | <b>C.</b> <i>symbols</i>   | <b>D.</b> <i>signs</i>   |
|  | <b>B.</b> <i>At</i>             | <b>C.</b> <i>For</i>       | <b>D.</b> <i>On</i>      |

8. A. play                      B. answer                      C. interrupt                      D. tell  
 9. A. elbow                      B. eye                      C. shoulder                      D. hand  
 10. A. visual                      B. auditory                      C. verbal                      D. sensory

✎ **Write your answers here:**

|   |   |   |   |   |   |   |   |   |   |    |
|---|---|---|---|---|---|---|---|---|---|----|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| A |   |   |   |   |   |   |   |   |   |    |

**PART 2. Read the text below and think of the word which best fits each gap. Use only ONE word in each gap. Write your answers in the numbered boxes below. (0) has been done as an example. (1.0 pt)**

In modern zoos, people can see animals in more natural (0) \_\_\_\_\_. The animals are given more freedom in larger areas in (1) \_\_\_\_\_ that they can live more as they would be in nature. Even the appearance of zoos has (2) \_\_\_\_\_. Trees and grass grow in the cages and streams of water (3) \_\_\_\_\_ through the areas that the animals live in. There are few bars; instead, there is often only a cheap ditch, filled with water, which is called a moat. The moat surrounds an area where several (4) \_\_\_\_\_ of animals live together as they would naturally. For example, in the San Diego Zoo, the visitor can walk through a huge special cage that is filled (5) \_\_\_\_\_ trees, some small animals and many birds. This particular (6) \_\_\_\_\_ of cage is called an aviary: it is large (7) \_\_\_\_\_ for the birds to live naturally. The birds in the aviary fly around, make (8) \_\_\_\_\_ in the trees and hunt for food.

Modern zoos display animals for visitors; (9) \_\_\_\_\_ addition, they preserve and save (10) \_\_\_\_\_ species. These species such as the American bald eagle and bison are now living and producing offspring in the zoos.

✎ **Write your answers here:**

|                    |     |
|--------------------|-----|
| 0. <i>habitats</i> |     |
| 1.                 | 6.  |
| 2.                 | 7.  |
| 3.                 | 8.  |
| 4.                 | 9.  |
| 5.                 | 10. |

**PART 3. Read the text and choose the best answer (A, B, C or D) to each of the following questions. Write your answers in the numbered boxes below. (0.5pt)**

The ruined temples of Angkor are perhaps one of the most impressive Seven Wonders of the World. Located in modern day Cambodia near Lake Tonle Sap, the largest freshwater lake in Asia, Angkor was the **seat** of power for the Khmer Empire from the ninth to the fifteenth century. The ruins of Angkor are documented as some of the most impressive ones in the world, rivaling the pyramids of Giza in Egypt. Why this mighty civilization died out is a question that archeologists are now only beginning to ponder. The answer, it turns out, may be linked with the availability of fresh water.

One possible explanation for the downfall of the Khmer Empire has to do with the inhabitant's irrigation system. The temples and palaces of Angkor were constructed around a series of artificial reservoirs and canals which were annually flooded to capacity by the Mekong River. Once filled, **they** were used to irrigate the surrounding rice paddies and farmland during the course of the year. Farmers were completely dependent on the water for their crucial rice crop. Without consistent irrigation, the farmers would have been unable to maintain functional crop production.

Scientists speculate that toward the end of the Khmer Empire the hydraulic systems of the reservoirs and canals broke down. The construction of hundreds of sandstone temples and palaces required an enormous amount of physical labor. In addition, as the capital of Khmer Empire, Angkor contained upwards of one hundred thousand people who resided in and around Angkor. In order to feed so many people, the local farmers were driven to grow food more quickly and more efficiently. After centuries of continual use, the irrigation system was pushed beyond its capacity. Soil erosion, nutrient depletion, and loss of water led to decrease in the food supply. With the less food available, the people of Angkor slowly began to migrate to other parts of Cambodia, thus leaving the marvelous city of Angkor to be swallowed by the jungle. Therefore, it is speculated that the Khmer Empire may have fallen victim to its own decrepit infrastructure.

1. According to the passage, Lake Tonle Sap in Cambodia \_\_\_\_\_.  
A. was unable to supply fish for the people of Angkor  
B. is one of the Seven Wonders of the World  
C. is an enormous body of fresh water in Asia  
D. became polluted due to a population explosion
2. The word "**seat**" in paragraph 1 is closest in meaning to \_\_\_\_\_.  
A. battle                      B. summit                      C. location                      D. chief
3. The hydraulic system of reservoirs \_\_\_\_\_.  
A. supplied irrigation from the Indian Ocean  
B. helped transport the sandstone for constructing temples  
C. were destroyed by nearby warrior's tribes  
D. became non-functional due to overuse
4. The word "**they**" in paragraph 2 refers to \_\_\_\_\_.  
A. reservoirs and canals                      B. temples and palaces  
C. rice paddies                      D. farmland

5. All of the following are mentioned as events that can affect food supply **EXCEPT**

A. reduction of nutrients

B. contamination of soil

C. loss of water supply

D. erosion of soil

Write your answers here:

|    |    |    |    |    |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

**SECTION FOUR: WRITING (2.5 pts)**

**PART 1. This is a complaint letter from a man to the manager of a store. Make any changes and additions when necessary to build the sentences from the following sets of words and phrases into a suitable letter. Write each sentence in the space provided. (0.8 pt)**

*EXAMPLE: When Jane / be / young / she / want / be/ nurse.*

*When Jane was young, she wanted to be a nurse.*

Dear Mr. Johnson,

1. Exactly / two weeks / I / purchase / shirt / your store / High street.

---

2. When / I / wear / time / I / amazed / find/ hole / left sleeve.

---

3. What / more / shirt / not / cheap/ I/ expect.

---

4. I / take / immediately / salesperson / from whom / I / buy / it.

---

5. She / refuse / exchange / or/ let/ see/ manager.

---

6. I / write / hope / gain / satisfaction.

---

7. I / enclose / shirt / receipt / price/ date /which / it / purchase.

---



8. Thank / advance.

---

Yours sincerely,

*Peter Smith*

**PART 2. Complete the second sentence so that it has a similar meaning to the first one, using the word given in capital. DO NOT CHANGE THE WORD GIVEN. You must use between THREE and SIX words, including the word given. (0) has been done as an example. (0.7 pt)**

0. I haven't seen my brother since he left for Australia. **(LAST)**

The last time I saw my brother was when he left for Australia.

1. Despite knowing the area well, I got lost. **(EVEN)**

I got lost \_\_\_\_\_ the area well.

2. I hadn't made a speech before, so I was very nervous. **(USED)**

Because I \_\_\_\_\_ speeches, I was very nervous.

3. I'd rather you didn't phone me at work. **(PREFER)**

I'd \_\_\_\_\_ me at work.

4. There are more tourists in the city this year than ever before. **(BEFORE)**

Never \_\_\_\_\_ tourists in the city as this year.

5. When I heard her speak, it affected me profoundly. **(IMPACT)**

When I heard her speak, it \_\_\_\_\_ me.

6. Why are you against inviting John to the party? **(OBJECTION)**

What \_\_\_\_\_ John to the party?

7. Our plans for the camping trip have been spoilt by the weather. **(FALLEN)**

Our plans for the camping trip \_\_\_\_\_ because of the weather.

**PART 3. What would you like to be in the future? Write a paragraph (about 120 words) about your dream job. (1.0 pt)**

.....The end.....

## APPENDIX C

**Bài Tập 1** – *Hãy phân tích cấu tạo từ của các từ sau đây:*

Ví dụ: (a) beautiful = beauty + ful

(b) unbelievable = un + believ + able

|                            |
|----------------------------|
| 1. <b>inconsistently</b> = |
| 2. <b>unapproachable</b> = |
| 3. <b>responsiveness</b> = |
| 4. <b>uneconomic</b> =     |
| 5. <b>reassessment</b> =   |
| 6. <b>redefinition</b> =   |
| 7. <b>theoretically</b> =  |
| 8. <b>specification</b> =  |
| 9. <b>unidentifiable</b> = |

**Bài Tập 2:** *Hãy chọn từ thích hợp để điền vào chỗ trống cho các câu sau đây:*

1. Having healthy eating habits can ..... heart diseases. (elimination)  
a. elimination                      b. eliminate                      c. eliminator
2. They want to ..... their children in their local school. (enrollment)  
a. enrollment                      b. enrollee                      c. enroll
3. People ..... her against the color of her skin. (discrimination)  
a. discriminate                      b. discrimination                      c. discriminator
4. All people are ..... regardless of the language they speak. (equality)  
a. equalize                      b. equal                      c. equality
5. We want to encourage members to ..... in the running of the club.  
(participation)  
a. participate                      b. participant                      c. participation
6. Her ..... about English vocabulary is really intensive. (knowledgeable)  
a. knowledgeably                      b. knowledgeable                      c. knowledge

7. They wish to ..... her ambition to visit South America. (achievement)
  - a. achievable
  - b. achieve
  - c. achievement
8. She hopes to ..... as a teacher at the end of the year. (qualification)
  - a. qualifier
  - b. qualification
  - c. qualify
9. The city council is ..... for keeping the streets clean. (responsibility)
  - a. responsibility
  - b. responsible
  - c. responsibly

**Bài Tập 3:** Hãy điền vào chỗ trống trong các câu sau dựa vào từ cho sẵn, thay đổi cấu tạo từ khi cần thiết:

1. Cutting down trees in the rainforests can cause ..... warming. (globe)
2. It's important for children to get a good ..... (educate)
3. Vietnam is a ..... country in South East Asia. (coast)
4. Her explanation is not ..... because she has lied many times before. (believe)
5. .... is destroying large areas of our rain forest. (deforest)
6. The film is not ..... for children. (suit)
7. They have had an ..... about what to do on their summer holiday. (argue)
8. They hope to see an ..... in their English listening skills by listening to podcast every day. (improve)
9. They use dictionaries to look for Vietnamese ..... of the English words they don't know. (translate)

**Bài tập 4:** Hãy tạo thêm 1 đến 2 từ có nghĩa với mỗi từ cho sẵn sau đây bằng cách viết thêm các hậu tố (các gốc từ theo sau từ chính)

Ví dụ:

- |            |             |              |
|------------|-------------|--------------|
| (a) nature | 1. natural  | 2. naturally |
| (b) value  | 1. valuable | 2. valueless |

(\*) Lưu ý: **KHÔNG** thể thêm đuôi **-ing** hoặc **-ed** vào sau từ

- |    |         |    |    |
|----|---------|----|----|
| 1. | act     | 1. |    |
| 2. | solve   | 1. |    |
| 3. | discuss | 1. |    |
| 4. | flora   | 1. |    |
| 5. | nation  | 1. | 2. |
| 6. | region  | 1. |    |
| 7. | use     | 1. |    |
| 8. | love    | 1. | 2. |
| 9. | like    | 1. | 2. |



|                     |   |   |
|---------------------|---|---|
|                     | 5. Read and self-correct activity 2<br><br>6. Read and do activity 4  | Reading for the main ideas<br><br>Reading for the key details |
| <b>Post-reading</b> | 7. Implicit introduction of the morphological awareness raising technique through exercise 8 – 12 ( <i>selection of activities is based on time allowance and students' performance</i> ) | Form-focused<br><br>Meaning-focused & Form-focused            |

**Handout 1:**

**Activity 1:** Can you put these **problems** into 4 groups?

as global warming    reduced soil richness    polluted underground water  
increased heart rate    hearing loss    ice melting    destroyed  
trees and plants    loss of underwater animals    rising sea levels  
loss of land    stress

**Your answer:**

| Group 1 | Group 2 | Group 3 | Group 4 |
|---------|---------|---------|---------|
|         |         |         |         |

**Activity 2:** Can you give the names for the 4 groups?

|          |          |          |          |
|----------|----------|----------|----------|
| Group 1: | Group 2: | Group 3: | Group 4: |
|----------|----------|----------|----------|

**Activity 3:** Can you match words in column A with words in column B that have the same meanings?

| Column A   | Column B      | Your Answer |
|--|---------------|-------------|
| 1. vegetables, plants, trees                                       | A. ecosystem  | 1 +         |
| 2. an environment where plants, animals and micro-creatures live   | B. pesticide  | 2 +         |
| 3. things that kill animals that attack plants and trees           | C. fertilizer | 3 +         |
| 4. things that make water and air becomes harmful                  | D. vegetation | 4 +         |
| 5. things that farmers use to make the soil become good for plants | E. pollutant  | 5 +         |

**Activity 7:** Can you tell the word form of each word? Can you find the **similarity** and **differences** of these words in each group?

|   |   |  |
|---|---|--|
| <p><b>Group 1:</b><br/>pollute – pollution – pollutant<br/><i>Word form:</i><br/><i>Similarity:</i><br/><i>Differences:</i></p> | <p><b>Group 2:</b><br/>vegetate – vegetation – vegetable<br/><i>Word form:</i><br/><i>Similarity:</i><br/><i>Differences:</i></p> | <p><b>Group 3:</b><br/>deforest - deforestation<br/><i>Word form:</i><br/><i>Similarity:</i><br/><i>Differences:</i></p> |
|---|---|--|

**Activity 8:** In your opinion, what do the differences do to each word?

For example:

teach (verb) => teacher (noun)

Difference: -er

- a. The difference makes a **v**..... become a **n**.....
- b. The difference makes an **a**..... become a **p**.....

**1. pollute (.....) => pollution (.....)**

*Difference:*

- a. The difference makes a ..... become a .....
- b. The difference makes an ..... become a .....

**2. vegetate (.....) => vegetation (.....)**

*Difference:*

- a. The difference makes a ..... become a .....
- b. The difference makes an ..... become a .....

**3. deforest (.....) => deforestation (.....)**

*Difference:*

- a. The difference makes a ..... become a .....
- b. The difference makes an ..... become a .....

**Activity 9:** *In your opinion, what can be the meaning(s) of -ion/ -ation?*

- A. process
- B. action
- C. result

**Activity 10:** *Can you fill in the blanks in this table?*

**Formation of Noun**

| Vocabulary   | Meaning    | The root | The following part | Meaning of the following part |
|--------------|------------|----------|--------------------|-------------------------------|
| pollution    | sự ô nhiễm | pollute  | -ion               | result                        |
| confusion    |            |          |                    |                               |
| depletion    |            |          |                    |                               |
| preservation |            |          |                    |                               |



|               |  |  |  |  |
|---------------|--|--|--|--|
| deforestation |  |  |  |  |
| vegetation    |  |  |  |  |

**Activity 11:** *Can you fill in these blanks with the given word?*

**Pollute:**

1. We should respect the environment and not ..... it.
2. The company said it is not responsible for the ..... in the river.
3. Air ..... is a serious global problem.

**Deforest:**

1. They ..... this area to build a new shopping mall.
2. .... is a process of cutting a number of trees in large areas.
3. Scientists have said that ..... is dangerous because it can cause floods.

**Preserve:**

1. To me, the most useful way to ..... is good farming.
2. It's our duty to ..... the planet for future generations.
3. The benefits of environmental ..... can be good health, and good food supplies.

**Activity 12:** *How fast can you cut down these words into smaller parts? - Optional*

**Step 1:** *Set a timer on your phone*

**Step 2:** *Do the task*

**Step 3:** *Stop the timer*

**Step 4:** *Check the dictionary if you need to*

**Step 5:** *How many words can you cut?*

|                     |                    |                     |
|---------------------|--------------------|---------------------|
| 1. education =      | 2. information =   | 3. discrimination = |
| 4. promotion =      | 5. consumption =   | 6. deforestation =  |
| 7. limitation =     | 8. decision =      | 9. protection =     |
| 10. completion =    | 11. presentation = | 12. introduction =  |
| 13. communication = | 14. recognition =  | 15. instruction =   |



## **APPENDIX E**

### **PARTICIPANT INFORMATION SHEET**

**Research Project Title:** *The Effects of Morphological Instruction on Morphological Awareness and Vocabulary Knowledge of Grade-10 Vietnamese Students*

Thank you for reading this. I am inviting you to take part in my research project. This sheet gives you a little information about it. Please ask me if something is not clear.

#### **What is the purpose of the project?**

I am doing a project for my dissertation which forms part of my university postgraduate (Master) degree. I am interested in finding out how instruction in morphological awareness affects the vocabulary knowledge of Vietnamese learners of English. Particularly, morphological awareness is knowledge about word construction. For example, a person with morphological knowledge about the word “artist” knows that “artist” is constructed by “art” and “-ist”. He/ she might also know that “artist” is used as a noun. The reason why I choose this topic for research is because I am aware of its benefits as a life-long language learner myself; however, the investigated technique has not been effectively exploited in Vietnamese English teaching and learning context to enhance students’ vocabulary knowledge. The findings of this research can hopefully promote a better use of morphological instructions in the investigated context.

#### **Why have I been chosen?**

Your participation in this project is meaningful in two major ways. First of all, your participation in this research can help the researcher understand the effects of morphological instruction on foreign language learners’ vocabulary knowledge to a greater extent. It has to be noticed again that the impacts of morphological intervention have not been profoundly understood in your context (learning English as a foreign language) although it has been well documented among learners learning English as their native language. Secondly, upon participating in this study, you would make contributions to (1) the improvement of the vocabulary section in the current national textbook and (2) the promotion of this technique among Vietnamese teachers of English. Despite

being included in the national English textbook for grade 10 Vietnamese students, morphological instruction has been limited to introducing level without more meaningful practice exercises. Besides, Vietnamese teachers of English that I know seems to be doubtful of morphological instruction's effectiveness. Hence, the collected data from this project would hopefully bring about positive changes in textbook-based vocabulary learning sections as well as current teaching practice in Vietnamese high schools.

### **Do I have to take part in this study?**

No, not if you don't want to. You can also withdraw at any point – you don't need to say why.

### **What do I have to do?**

Upon your agreement to take part in the study, the researcher would ask you to sign a consent form which will be printed for you before the study actually begins. You would also be given a unique identifier and assigned to either the intervention or the control group. For participants in the control group, the teaching and learning of vocabulary would take place as usual and no intervention is given during the period of the study (of approximately 3 weeks). For participants in the experimental group, there would be an introduction of the morphological instruction in the teaching and learning of vocabulary. The intervention of the experimental group would only be practiced during the period of the study. To ensure the control group is blind, the researcher cannot add more detail of which group you would be participating in.

However, participants in both group would take the same assessments before and after the intervention is taken place. Hence, you will be invited to take part in 2 assessments at the beginning and at the end of the introduction of the technique. One assessment is for the researcher to understand your current knowledge of word construction and the other is for the researcher to measure your current vocabulary knowledge. Each assessment should take no more than 10 minutes of your time.

### **Are there any disadvantages to taking part?**

No, as far as we know. If you are worried, please talk to me (the researcher) or get in touch with Dr

**Will all my personal details be kept confidential?**

Yes. Any information about you which is collected will be strictly confidential. Data will be anonymised before being used in my dissertation. It will comply with the Data Protection Act and ethical research guidelines and principles.

**What will happen to the results of the research study?**

The results of this research will be written up in my dissertation and presented for assessment in September 2020. If you would like a copy please contact me.

**Who has reviewed and approved the study, and who can be contacted for further information?**

Dr

**Name & Contact Details of Researcher:**

## APPENDIX F

### PARTICIPANT INFORMATION SHEET

**Research Project Title:** *The Effects of Morphological Instruction on Morphological Awareness and Vocabulary Knowledge of Grade-10 Vietnamese Students*

Thank you for reading this. I am inviting you to take part in my research project. This sheet gives you a little information about it. Please ask me if something is not clear.

#### **What is the purpose of the project?**

I am doing a project for my dissertation which forms part of my university postgraduate (Master) degree. I am interested in finding out how instruction in morphological awareness affects the vocabulary knowledge of Vietnamese learners of English. Particularly, morphological awareness is knowledge about word construction. For example, a person with morphological knowledge about the word “artist” knows that “artist” is constructed by “art” and “-ist”. He/ she might also know that “artist” is used as a noun. The reason why I choose this topic for research is because I am aware of its benefits as a life-long language learner myself; however, the investigated technique has not been effectively exploited in Vietnamese English teaching and learning context to enhance students’ vocabulary knowledge. The findings of this research can hopefully promote a better use of morphological instructions in the investigated context.

#### **Why have I been chosen?**

Your participation in this project is meaningful in two major ways. First of all, your participation in this research can provide a clear reflection of the introduced technique’s effectiveness. Different from younger learners, language learners around your age have been indicated in research and studies to start forming rules when learning a foreign language. Therefore, the instruction in morphological awareness which helps you become familiar with the rules of word formation is compatible with your thinking patterns, which in turn creates an expectedly accurate picture of morphological instruction’s effectiveness. Secondly, up on participating in this study, you would

make contributions to (1) the improvement of the vocabulary section in the current national textbook and (2) the promotion of this technique among Vietnamese teachers of English. Despite being included in the national English textbook for grade 10 Vietnamese students, morphological instruction has been limited to introducing level without more meaningful practice exercises. Besides, Vietnamese teachers of English that I know seems to be doubtful of morphological instruction's effectiveness. Hence, the collected data from this project would hopefully bring about positive changes in textbook-based vocabulary learning sections as well as current teaching practice in Vietnamese high schools.

### **Do I have to take part in this study?**

No, not if you don't want to. You can also withdraw at any point – you don't need to say why.

### **What do I have to do?**

Upon your agreement to take part in the study, the researcher would ask you to sign a consent form which will be printed for you before the study actually begins. You will be invited to take part in 2 assessments at the beginning and at the end of the introduction of the technique. One assessment is for the researcher to understand your current knowledge of word construction and the other is for the researcher to measure your current vocabulary knowledge. Each assessment should take no more than 10 minutes of your time.

During the period of the study, which is approximately 3 weeks, you would be studying vocabulary with morphological instruction. You would be announced before each lesson employing morphological instruction to approach vocabulary by your teacher. The activities raising morphological awareness would be explicitly introduced and discussed with you during the lessons to ensure that you understand the principles of morphological instruction.

Besides, you would also take part in a short online interview of minutes after the introduction of the technique. In this interview, the researcher wants to know more about your experience and opinions about morphological instruction to analyse if it makes any impacts on how you learn vocabulary.

### **Are there any disadvantages to taking part?**

No, as far as we know. If you are worried, please talk to me (the researcher) or get in touch with

**Will all my personal details be kept confidential?**

Yes. Any information about you which is collected will be strictly confidential. Data will be anonymised before being used in my dissertation. It will comply with the Data Protection Act and ethical research guidelines and principles.

**What will happen to the results of the research study?**

The results of this research will be written up in my dissertation and presented for assessment in September 2020. If you would like a copy please contact me.

**Who has reviewed and approved the study, and who can be contacted for further information?**

Dr

**Name & Contact Details of Researcher:**



**APPENDIX G**

**PARTICIPANT CONSENT FORM**

**Title of Research Study: *The Effects of Morphological Instruction on Morphological Awareness and Vocabulary Knowledge of Grade-10 Vietnamese Students***

- I confirm that I have read and understood the participant Information sheet related to this research, and have had the opportunity to ask questions.
- I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason.
- I understand that all my responses will be anonymised so nobody will know who I am.
- I give permission for members of the teaching team to have access to my anonymised responses.
- I agree to take part in the above study.

**Name of Participant:** .....

**Signature of Participant:** .....

**Date:** .....

Name of Researcher:

Signature of Researcher:

Date: 30<sup>th</sup> May 2020

**APPENDIX H**

**APPLICATION FORM FOR RESEARCH ACTIVITY REQUIRING HUMAN RESEARCH  
ETHICS CONSIDERATION OR APPROVAL**

**Student Name/Number**

**Course / Year**

**Student University Email Address**

**DBS check completed (give date)**

**Module**

**Title of Research Project / Study**

The Effects of Morphological Instruction on Morphological Awareness and Vocabulary Knowledge of Grade-10 Vietnamese Students

**Start date for the project**

1<sup>st</sup> June 2020

**Expected end date for the project**

31<sup>st</sup> August 2020

**Brief description of proposed activity and its objectives (e.g. numbers involved, research location/s). Be specific about any involvement of children, young people, vulnerable adults or research around illegality or activity at the margins of the law:**

This research aims at studying the effects of instruction in morphological awareness on vocabulary knowledge of Vietnamese high-school students. Particularly, this research involves 70 students divided into 2 groups namely, experimental group and control group. These students are all grade 10 students around 16 years old. They non-English major students in Nguyen Binh Khiem High School for the gifted which is located in Tam Ky City, Quang Nam Province, Vietnam. The involvement of these students as participants take place for approximately a month between June and July 2020 before they sit their final examinations. During their participation, the experimental group would receive instruction in morphological awareness while the control group receive no intervention. Before and after the introduction of the new instruction in morphological awareness, students in both groups would take a pre-test and a post-test

assessing their morphological awareness and vocabulary knowledge. Besides, 9 students from the experimental group, including students from the top, the middle and the non-changing performances would be interviewed for deeper insights about their use of the newly introduced learning method.

Regarding the effects that this research might have on students in the experimental group, the introduction of new instructional method is expectedly aligned with the study progress of students for three following reasons. First, the instruction only circulates around the learning of vocabulary without tapping into more complex areas such as grammar learning or macro skill building which are listening, reading, speaking or writing. Moreover, in each lesson where there is a section for vocabulary, the teacher in charge would formerly work with the researcher to ensure that the introduction of the new instructional method including its content and its demonstration is suitable for that specific group of students. Modifications in the introduction would be discussed and made before the lessons actually take place. Last but not least, the students in this group is well-informed about the goals and objectives of the study so that they are aware of their performance are being studied to serve academic research purposes.

**Ethical issues identified:**

**Ethical issues concerning participants:**

1. Participants might experience test-taking anxiety due to their expectations of being graded and assessed during the pre-test and the post-test stage.
2. The in-charge teacher might experience lack of confidence during the implementation of new method due to its nature of being new and intensive.

**How these will be addressed:**

**Solutions to address ethical issues concerning participants:**

1. Participants are informed of the goals and objectives of the research provided in the participant information sheet (E3), which is translated into Vietnamese before handing out because of their current level of proficiency in English (around A2 – B1). The information sheet would demonstrate clearly that the grading and assessing processes are not a part of their academic performance assessment but for studying their learning progress. Besides, before any test, the in-charge teacher always reminds students of the nature of the test, which is to generate data rather than to be assessed against their academic performance.
2. Before any lesson takes place, the researcher would work in close collaboration with the in-charge teacher to ensure that every step of the instruction is thoroughly understood and the teacher is confident to teach using the new method.

**Ethical issues concerning the transparency of the research:**

1. Participants might be confused by the highly academic terms written in the participant information sheet and consent form due to students' current level of proficiency in English (around A2 – B1).

**Solutions to address ethical issues concerning the transparency of the research:**

1. First, the researcher would translate the completed participant information sheet and the participant consent form into Vietnamese, which is the first language of the involved students. Modifications to simplify academic terms are considered and discussed with the in-charge teacher because the participants are high-school students around 16 years old.

Next, before the actual research takes place, the in-charge teacher and the stake-holder would receive the participants consent forms in two versions – English and Vietnamese, to ensure that (1) the goals and objectives of the study are suitable for their students and that (2) the Vietnamese version of the participant information sheet and the consent form truly reflect the English versions, thus, makes it transparent for participants.

**Will this proposal involve any health and safety risks to yourself or others? (e.g. lone working in unsafe locations) Is a formal Risk Assessment needed?**

No

**Will this proposal include any security sensitive information?**

**(if yes, please explain below)**

No

Checklist for applicant:

1. Have you attached completed drafts of your Participant Information Form (E3), Participant Consent Sheet (E4) and Agency Consent Sheet (E5)? Yes
2. Have you read and ensured compliance with the General Data Protection Regulation (GDPR)? Yes

**Indicate the statement/s relevant to your research.**

I have read and understood [please indicate the relevant framework]:

- BERA Ethical Guidelines for Educational Research (2018)
- BASR ethical guidelines for research
- Code of Ethics for Social Work and Social Care Research (2002)

**Student Undertaking**

I hereby confirm that I will conduct my research in line with the guidelines indicated. I also confirm that I am proposing to undertake this research project in the manner described. I understand that no research activity should start until consent is granted. I understand that once consent is granted, I may not make any substantial amendments to this project without further consent – for example in widening or changing the participant group or significantly changing a questionnaire. *I also understand that if I infringe the terms of this approval, my work may not be marked, and the study / dissertation would have to be repeated. If appropriate, issues of professional suitability may be raised.*

Signature of Researcher / Student:

Date: 30<sup>th</sup> May 2020

**Authorisation**

Signature of Supervisor:

Date:

Appropriate Authorising Signature (where required):

Date: