AMERICAN UNIVERSITY OF ARMENIA

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The COMPARISON of RECEPTIVE and PRODUCTIVE VOCABULARY SIZE of AFGHAN TERTIARY STUDENTS

A thesis submitted in

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By

Mohammad Asif Amin

Dr. Marina Dodigovic

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We hereby approve that this thesis

By

Mohammad Amin

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Committee on the MA Thesis/Design Project

……..……

Dr. Dr. Marina Dodigovic, Adviser

……..……

First and Last Name, Reader

……..……

Dr. Irshat Madyarov

MA TEFL Program Chair

Yerevan, Armenia

6/7/2018

DEDICATION

It was a challenging work, while it was in progress seriously bad news was constantly coming from my homeland. Even today, while writing my dedication, when I started my day and opened Facebook, I saw a journalist was killed a few minutes ago in southern Afghanistan. So, I dedicate this humble work to those Afghans, who lost their precious lives in the conflict since the start of this work, especially, Soldiers, children and women. Finally, I hope that I will be alive to witness the days of peace in Afghanistan.

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I also admire all my instructors who taught me during these two years at AUA.

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Abstract

This quantitative and qualitative study was designed to find out the receptive and productive vocabulary size of Afghan tertiary students. Furthermore, it investigated the differences between the receptive and productive vocabulary size and explained it through the context of vocabulary learning and teaching for Afghan students. For this purpose, the study used Vocabulary Size Test (VST) to gauge the receptive vocabulary knowledge and Vocabulary Level Controlled Productive Test (VLCPT) to find out the productive vocabulary. 54 senior students participated in the study from the English department of Nangrahar University. Three instructors were interviewed to explore the vocabulary learning context of the participants. The data was analyzed through the Statistical Package for the Social Sciences (SPSS) for significant difference, frequency and percentage. Furthermore, t-test was conducted to investigate the significance of the difference between the receptive (VST) and productive (VLCPT) test results.

The interview data was analyzed for common patterns of opportunities provided for learning vocabulary. The study found that the participants' receptive vocabulary was larger than productive but the gap was not significant. Moreover, the vocabulary learning context of the participants' was not suitable for the best vocabulary increment. This is followed by suggestions for instructors to be implemented in future vocabulary teaching, for example, to dedicate more class time to deliberate vocabulary learning and to create assignments for incidental vocabulary learning outside the class.

Keywords: Receptive, productive, Vocabulary and strategies

CHAPTER ONE: INTRODUCTION

Vocabulary knowledge is considered a key element of language learning. Nation and Waring (1997) stated that "vocabulary knowledge enables language use, language use enables the increase of vocabulary knowledge and knowledge of the world enables the increase of vocabulary knowledge and language use" (p.2). Furthermore, Schmitt (2008) claimed that " one thing that students, teachers, materials writers, and researchers can all agree upon is that learning vocabulary is an essential part of mastering a second language" (p.2). Additionally, many scholars' (Hirsch & Nation, 1992; Laufer, 1989; 1992) applied linguistics research suggest that a high level of vocabulary knowledge is needed by a reader in order to comprehend a text (Dodigovic, 2005). Zimmerman (1997; cited in Tran, 2009) specifies that vocabulary is the central element of language and equally important to its learners. In fact, Wilkins (1972, p.111, cited in Tran, 2009, p.2) emphasizes the role of vocabulary as follows: "Without grammar very little can be conveyed, without vocabulary nothing can be conveyed".

In order to enhance the learners' vocabulary knowledge, it is logical to investigate their current vocabulary size in order to use the results for diagnostic purposes. Gyllstad, et al. (2015) provided a common definition for vocabulary size claiming that it is the amount or quantity of words for which the learner has some basic form-meaning mapping knowledge. Research has proven that a large vocabulary size is needed for a language learner to succeed and efficiently function in English (e.g. Nation, 2006; Schmitt & Schmitt, 2012), (Gyllstad, et al., 2015). The question arises here as to what size of vocabulary is needed for a second language learner to succeed in English? In a new research study, van Zeeland & Schmitt (2012) propose that 95% coverage of vocabulary will be sufficient for listening comprehension and this percentage can be accomplished with 2,000–3,000 word families. From the reading perspective, a word family is

the set of a base word and all its derived and inflected forms. Knowing one form can facilitate the learning of others (Bauer, and Nation, 1993). Nation (2006) suggests vocabulary size of 8,000 to 9,000 word-family for reading comprehension and 6,000 to 7,000 for speaking. Moreover, Laufer (1992) suggested 3000 word families for understanding an authentic written text and Hirsch and Nation (1992) mentioned 5000 word families for reading for pleasure. In addition, Laufer and Ravenhorst-Kalovski (2010) indicated that for independent learning, 8000 word families are required. Additionally, Schmitt (2000) suggests 2000 words for conversational speaking, 3000 word families for reading authentic text, 10000 word families for academic text comprehension and 15,000 to 20,000 thresholds to equal a native speaker at a college level.

As researchers (Nation, 1990; Dodigovic, 2005; Thornbury, 2002) divided vocabulary knowledge into receptive and productive, it is important to understand the overall vocabulary knowledge of learners through exploring these two components. Nation (2001) states that receptive vocabulary knowledge is the conscious awareness of the form of a word and bringing its meaning back when listening or reading it, while productive knowledge is the appropriate use of the word in spoken or written form in the proper linguistic and social context.

As mentioned, receptive and productive aspects of word knowledge consist of eight components, as presented by Nation (1990, p.31):

1. A word's spoken form
2. A word's written form
3. A word's part-of-speech, derivative forms, and grammatical patterns
4. A word's collocations
5. How frequently a word is used in a language

6. The many stylistic constraints which determine if a word is appropriate in a particular context (register)

7. A word's conceptual meaning(s)

8. A word's semantic network of associations

In order to measure vocabulary size through receptive and productive aspects, several tests are available, such as Vocabulary Size Test and Vocabulary Level Test Control Productive A Version. The former is for measuring the receptive vocabulary and the later is for measuring the productive one. VST assesses the written form of the word, the form and meaning relationships and students' partial conceptual knowledge. This test contains 140 multiple-choice items, ten for every 14 thousand levels (Beglar & Nation, 2007). VLCPT Control Productive Version A test has items from five frequency levels (2000 words level, 3000 words level, 5000 words level, University words list and 10000 word level) (Laufer and Nation, 1999). The current study is using these two tests for measuring the receptive and productive vocabulary of Afghan EFL students.

Explicit and implicit learning components should be included in vocabulary syllabuses in order to maximize exposure and incidental learning (Schmitt, 2008). Unconsciously or incidentally leaning new information (words) is implicit learning (Dodigovic, 2005; Nation, 2013; Schmitt, 2000; Sun, 2008; Thornbury, 2002) and making conscious attempt to learn new information is explicit learning (Dornyei, 2009; Dodigovic, 2005; Nation, 2013; Schmitt, 2000; Thornbury, 2002). Every lexical item should receive increased amount of learners' engagement in order to maximize vocabulary learning (Schmitt, 2008). Therefore, sufficient level of vocabulary growth can be accomplished through constant exposure to comprehensible input. According to Krashen, "comprehensible input is the essential environmental ingredient-a richly

specified internal language acquisition device" (Krashen, 1989. P.1, cited in Nagy, 1997). Furthermore, Fuente (2002) found in her research that negotiated interaction, -i.e. negotiation process carried out by learners to find meaning (Ellis, 2015) has affirmative effects on learning second language words and her results included that pushed output, -i.e. language production which has short and socially proper messages (Ellis, 2015), supported receptive and productive vocabulary knowledge. Negotiation is also suggested by Nation (2013) alongside other learning conditions and Thornbury (2002) recommended learning (input) and using (output) for vocabulary comprehension.

1.1 Statement of the Problem

While the receptive vocabulary of native speakers is found to be considerably larger than his or her receptive vocabulary (Nation, 2013; Thurnbury, 2002, Schmitt, 2000), the size of this difference in non-native speakers has been found to be smaller, especially in productive learning environments.

The similarity in the sizes of receptive and productive vocabulary of L2 learners is sometimes associated with the use of contemporary communicative approaches to language teaching (Thornbury, 2002, Nation 2013). However, it cannot be assumed that such approaches are widespread in Afghanistan. On the other hand, given the scarcity of opportunities to receive comprehensible input and gain sufficient exposure to warrant receptive vocabulary learning, it might also be the case that the receptive and productive vocabulary sizes of Afghan L2 English learners could be similarly small. Gaining insight into their receptive and productive vocabulary sizes would therefore yield some objective clues as to what is working in ELT in Afghanistan and what is not.

CHAPTER TWO: LITERATURE REVIEW

Acquiring second languages can be traced back to Roman times (Schmitt, 2000). Throughout the history, different language learning approaches have been utilized with diverse focus on vocabulary teaching and learning. At points when rhetoric was important and the need for well-developed vocabulary was high, vocabulary received precedence but when the focus was on grammar teaching, vocabulary was neglected (Schmitt, 2000).

As Schmitt (2008) stated: "One thing that students, teachers, materials writers, and researchers can all agree upon is that learning vocabulary is an essential part of mastering a second language" (p.1). Hence, to master a language and text comprehension or production, vocabulary learning plays a vital role. Achieving these skills requires sufficient vocabulary knowledge. So, in order to attain advanced language skills, it is crucial for EFL students to have a good command of vocabulary (Teng, 2015).

Vocabulary knowledge is also considered essential in view of the fact that lexical errors are more common compared to grammar errors, which impede the flow of communication (Moghadam, Zainal and Ghaderpour, 2012). Yunus, Mohamad, & Waelateh, (2016) briefly explained all aspects involved in vocabulary knowledge;

> Vocabulary knowledge involves knowing the many aspects of words. It involves knowing the tokens (number of words, e.g., five in The man entertained the elephant.), types (number of different words, e.g., four different words (underlined) in The man entertained the elephant. by excluding one the), lemma (a headword and its most frequent inflection, e.g., entertains, entertained, and entertaining are the lemma of the verb but not entertainment as it is a noun), and word family (different words with various parts of speech, for example, entertain, entertaining, and entertainers). (p.8)

Acquiring vocabulary is not a direct process. Research (Dodigovic, 2005; Nation, 1990; Schmitt, 2000; Thornburry, 2002) has listed seven aspects of single word knowledge: the meaning(s), the spoken form, the collocations, the written form, the register and the associations,

the grammatical behavior, and frequency. All of these have to be learnt in order for a learner to know the word. The same elements of word knowledge are repeated by Dodigovic (2005), Folse (2004) and Thornbury (2002) with adding connotations and derivations when assessing vocabulary knowledge. Nation (2013) explains that, other meanings associated with a word, rather than its core meaning, are called connotations of a word. Thornbury (2002) suggested that these elements of word knowledge can be tested through recognizing or recalling. This recognizing and recalling are the receptive and productive knowledge of the word, respectively. Furthermore, several scholars, such as Nation (1990, 2001), Richards (1976), and Ringbom (1987) included another element, i.e., the knowledge of social constraint to be practiced while using a word, in the definition of word knowledge (Cited in Laufer and Goldstein, 2004).

Based on earlier descriptions, frequency is a commonly accepted criterion for vocabulary teaching. Frequency refers to how often the word occurs in normal language use (Nation and Waring, 1997). Schmitt and Schmitt (2014) stated that one of the main selections criteria for vocabulary in second language teaching is frequency. Moreover, Nation (2011) divided vocabulary frequency into four groups: high-frequency words, academic words, technical words, and low frequency words. The first 2,000 word families are accepted as high frequency words by many scholars (e.g. Nation 1990; Read, 2000; Schmitt 2000; Thornbury, 2002) (Schmitt and Schmitt, 2014), as Nation and Waring (1997) bring up the fact that this first 2000 high-frequency words cover 80% of text. These words came from The General Service List (West, 1953), which was developed in the 1940s by Michael West and consists of 2000 most frequent words (Nation and Waring, 1997). Brezina and Gablasova (2015) revised the GSL list and named it (New-GSL). They compared 12 billion running words in four language corpora. In linguistics, corpus is a large and structured set of texts (Dodigovic, 2005). They eventually produced a list of 2,494

most frequent words (Brezina and Gablasova, 2015). Furthermore, the UWL (University Word List) consists of 836 words which are not included the first 2000 words of the GSL. The words on this list frequently occur in a wide range of academic texts (Nation and Waring, 1997). According to Schmitt, (2000) usefulness is also a core criterion for selecting vocabulary to teach beside frequency. Useful vocabulary is defined as the one, which is related to learner's field of interest (Schmitt, 2000) and can be put to immediate use (Thurnburry, 2002).

Secondly, Coxhead (2000) compiled a list of 570 academic word families which cover 10% of words in academic text. Thirdly, "Technical vocabulary is subject related, occurs in a specialist domain, and is part of a system of subject knowledge" (Chung and Nation, 2003. P.252). Lastly, low-frequency words are beyond 9000 words families and are just covering 2% of an average text (Nation, 2006). Based on frequency categories Thornbury (2002) suggests a vocabulary size of over 5000 word families for specialized needs of learners, which includes low-frequency, academic and some low-frequency words.

EFL (English as a Foreign Language) learners need to learn a certain number of words in order to do well at University level. The number of words a learner knows is called the size or breadth of vocabulary (Nation, 2001). According to Laufer (1989, 1992) and Hirsh and Nation (1992), in order to understand a text, it is required to know 95% of the text's vocabulary or even 98% of it (Nation, 2009). This target can be achieved by acquiring 2570 most common words, which consist of the first 2000 most common words and 570 Academic word list (Coxhead, 2000). Nation stated that this sum of common words covers 90% of most academic texts (2006). Moreover, Nation (1990) expects EFL high school graduates to have learnt about 3,500-4000 word families. According to Milton, "word family that refers to different words with various parts of speech, for example, guide, guides, guidance" (Milton, 2009.p.76). On the other hand,

Nation (1990) suggests that, an 18 year-old native speaker is estimated to have a vocabulary size of 18,000-20,000 word families, when graduating from high school. Thus there are considerable differences in vocabulary size between a native speaker and an EFL learner.

Additionally, studies have suggested a necessary vocabulary threshold level for language skills mastery. Laufer (1992) advocated a threshold of 3,000 word families (5,000 lexical items) for comprehension of written authentic prose, "most word families have several members (e.g. stimulate, stimulated, stimulating, stimulates, stimulation, stimulative)" (Van Zeeland and Schmitt, 2012, p.2). Word families differ from lexical items to the extent that lexical items convey a single meaning like a lexeme but they can also be a group of words (Lewis, 1997). Furthermore, Nation (2006) suggests vocabulary size of 8,000 to 9,000 word-family for reading comprehension and 6,000 to 7,000 for speaking, as these words will cover 98% of any text. Likewise, Van Zeeland and Schmitt (2012) suggest a vocabulary size of 2,000–3,000 word families for listening comprehension. These suggested numbers of words for receptive and productive language skills manifest that there is already a perceived difference in vocabulary needs for receptive and productive purposes. Therefore, there is a small number of words that occur frequently and cover a large percentage of running words in spoken and written context that enables learners to achieve high degree of Comprehension (Moghadam, Zainal, & Ghaderpour, 2012) as well as an ability to communicate.

According to Pignot-Shahov (2012), recognizing a word is the receptive knowledge and using the word in a proper context is its productive knowledge. The person who acquires these two aspects of a word is considered to know the word. Similarly, Nation (1990) stated that receptive vocabulary knowledge is bringing back the meaning of a word and writing or speaking

the word in its proper situation is the word's productive knowledge. On the other hand, Nation (1990) used the term "passive" for receptive and term "active" for productive.

The next important aspect of vocabulary knowledge is depth of vocabulary knowledge. According to Webb (2012), "vocabulary depth is how well a word is known" (p.1). In other words, according to Read (1993), "the quality of learners' vocabulary knowledge" (p.27). Depth is mostly used for broader range of word knowledge features (Moghadam. et al, 2012). These word knowledge characteristics that a learner must know are pronunciation, spelling, register, stylistic, and morphological features (Nation, 1990), including syntactic and semantic relationships of the words (Read, 2000). More focus is given to measure breadth comparing to depth by second language researchers (Vermeer, 2001), but it does not mean that breadth of vocabulary is more important than depth. Hence, there is no evidence to confirm that depth and breadth are not associated to higher level of word proficiency (Vermeer, 2001).

While discussing vocabulary, register also needs to be discussed as it is an important construct of vocabulary knowledge. Register portrays the unique properties of language, these properties differs because of divers purposes, situations and forms of language use (Biber & Vasquez, 2008; Halliday & Hasan, 1976). Language features vary in agreement with linguistics mode (oral and written) and text type (Biber, 2009). Commonly, register is divided into formal vs informal, oral vs written or pro discipline vocabulary (Biber & Kurjian, 2007). Vocabulary teaching should be provided keeping in mind the variation of register. According to Morris and Cobb (2004), students will face problems in schools if they are not able to switch from an informal to a more formal academic register. Moreover, Morris and Cobb (2004) conclude their investigation by stating that if students have better access to formal academic register, their performance will improve in the academia. Hence, AWL (Academic Words List), which is

consist of words that university students face in academic texts, is important to master, as it highlights the words for learners to focus on (Coxhead, 2000).

As discussed above, knowledge of a word is not a single entity but it covers many dimensions or degrees of knowledge. A general consensus can be found from scholars to prove this claim (e.g. Dodigovic, 2005; Nation, 1990; Richards, 1976; Thornbury, 2002), The receptive/productive division is well accepted (Laufer & Nation, 1999). The reason to measure receptive and productive vocabulary is described by (Webb, 2008. P.79), he claimed that "knowing students' receptive vocabulary size provides teachers with an estimate as to whether those students would be able to comprehend a text or a listening task, whereas knowing their productive vocabulary size provides some indication as to the degree to which students will be able to speak or write" As previously stated by Nation (1993) and Thornbury (2002), in order to investigate whether the learners have reached the vocabulary threshold of 5000 words for reading and specialized needs, this number of words can be measured through receptive and productive tests for two reasons: firstly, to gauge whether learners will be able to understand reading or listening, and secondly, to know if they will produce in speaking and writing (Webb, 2008).

Nation (2013), Thurnbury (2002) and Schmitt (2000) report that the receptive vocabulary of native speakers is considerably larger than their productive vocabulary. Thus, Chamberlain 1965 (cited in Melka, 1997) reported a 5 times larger receptive vocabulary for native speakers, compared to receptive. On the other hand, with L2 learners, the difference seems to be less pronounced. Referring to one of the oldest recorded vocabulary learning studies (Stoddard, 1929, cited in Nation, 2013), Nation (2013) highlights a productive learning environment as one of the reasons for a smaller difference between the sizes of receptive and productive L2 vocabulary.

Another reason for this could be deliberate vocabulary learning, as observed in EFL learners as opposed to ESL leaerns (Laufer & Paribakht, 1998; Nation, 2013). Studies by Melka (1997) and Takla (1984) recorded no significant differences between the productive and receptive L2 vocabulary knowledge, while Waring (1997) found that productive knowledge could even exceed receptive knowledge.

Thus, Waring (1997) reported that the participants in her study had 77% productive knowledge of receptive vocabulary (Nation, 2013). Melka (1997) reported studies that found 92% receptive vocabulary is known productively (Schmitt, 2000). This is in stark contrast with such studies that found significant differences between the L2 productive and receptive vocabulary knowledge, such as the one by Eringa (1974).

In order to find the difference between receptive and productive vocabulary sizes, several research studies have been conducted, e.g. (Fan, 2000; Hajiyeva, 2015; Harji, et al 2015; Pignot-Shahov, 2012; Waring, 1997; Webb, 2008; Wise, J. C et al, 2007; Yamamoto, 2011; Zhou, 2010). The central focus of these studies was to illuminate the gaps, relationships, difference and comparisons of receptive and productive knowledge of vocabulary. However, they did not stop there. They also investigated the nature, the increase and the notion, while suggesting that extensive reading and knowledge of academic vocabulary could narrow down the gap between receptive and productive vocabulary. These studies found a larger receptive than productive vocabulary and observed that the gap decreased as more time is spent on learning vocabulary.

Furthermore, various vocabulary assessment tools were used to measure the size of receptive and productive vocabulary across various studies. For example, Zhou (2010) employed the academic section of the Vocabulary Levels Test developed by Schmitt et al (2001); in which learners' vocabulary knowledge is measured using different frequency levels, to gauge

receptive vocabulary. On the other hand, Zhou (2010) designed a new 30 item productive test for productive measurement because the productive section of Nation has 18 items.

Besides, Harji et al (2015) used Nation and Laufer's (1999), Version A of Vocabulary Level Controlled Productive Test, where every item is presented with a context and to facilitate the recall, the first few letters of every item are provided. Yamamoto, (2011) used three different instruments: The first one was the Vocabulary size Test (Nation, 1990). According to Nation, "the Vocabulary Size Test is designed to measure both first language and second language learners' written receptive vocabulary size in English" (Nation, 2012, p.1). Second, Yamamoto (2011) used the Vocabulary Level Controlled Productive Test. This latter is used to measure controlled productive vocabulary knowledge (Laufer & Nation, 1999). Third, Yamamoto (2011) used the VocabProfile (Cobb, 2010), which is used to explore the number as well as the percentage of words used from the first 2000 word families level and academic word list. By using the three mentioned instruments, Yamamoto, (2011) gauged the size of receptive and productive vocabulary. Fan (2000) also gathered data through Vocabulary Level Controlled Productive Test designed by Nation (1998), Nation's receptive test (1990), and vocabulary learning strategies questionnaire which contained 60 items.

Along with investigating other aspects of vocabulary knowledge, the studies (Fan, 2000; Hajiyeva, 2015; Harji, et al 2015; Pignot-Shahov, 2012; Waring, 1997; Webb, 2008; Wise, J. C et al, 2007; Yamamoto, 2011; Zhou, 2010) found no significant difference between receptive and productive vocabulary through time and enhancement interventions. However, Zhou, (2010) observed significant relationship at $p< 001$ level between the results of the receptive academic vocabulary size test and the productive one $r =.617$. Moreover, the results of (Hajiyeva, 2015; Laufer and Paribakht, 1998; Webb, 2008; Zhou, 2010) found a larger receptive vocabulary of

participants than the productive. This suggests that generally receptive comprehension comes first and is likely followed by productive knowledge, but there are exceptions in language learning (Schmitt, 2000).

As evident from the preceding discussions, for measuring receptive and productive vocabulary, three online resources are commonly used alongside other measurements tools. Vocabulary size test (VST) for measuring receptive vocabulary, vocabulary profiler and Vocabulary Level Controlled Productive Test version A for productive vocabulary measurements. Vocabulary size test (VST) created by Nation (2012) is a test that "measure[s] both first language and second language learners' written receptive vocabulary size in English" (p. 86). Coxhead, Nation, and Sim (2015) used the VST in their cross-sectional study to measure the vocabulary knowledge of English native speakers in New Zealand secondary schools. Nguyen and Nation (2011), on the other hand, developed a bilingual version of the same test and administered it to 62 Vietnamese students. The results revealed that, the bilingual version of VST performed in the same way as the monolingual test. The importance of vocabulary size test lies in the fact that it provides information about the students' vocabulary knowledge, which "can then be related to the vocabulary demands of the material that the learner needs to work with" (Nguyen and Nation, 2011, p. 87). As research shows, comprehension in reading occurs when the students are familiar with 95-98% of the vocabulary covered in the text (Hirsh & Nation, 1992; Laufer, 1989; Nation, 2006 & 2009; Schmitt, Jiang & Grabe, 2011). Thus, measuring students' knowledge of vocabulary enables language teachers to decide what to emphasize and how to adapt the materials.

As previously mentioned, VST and VLCPT productive A version are widely used for vocabulary size measurement. Their extensive use is based on their significant validity,

reliability and practicability (Beglar, 2009; Laufer and Nation, 1999; Laufer and Nation, 1995; Schmitt et.al 2001). Validity of a test is the extent to which the test tests what it is suppose to test (Henning, 1987). Strong evidence can be found from related literature to support the validity of VST. Beglar (2010) reported that the test was created based on a single construct, the frequency level and difficulty, which was meaningful. Research also suggests that it is adequately reliable. Furthermore, Beglar (2010) stated that the test gauged learners' lexical knowledge supporting a variety vocabulary sizes. The order of the items was carefully organized with highly functional distracters (Beglar, 2010). Regarding VLCPT validity, Laufer and Nation (1999), conducted two studies. Based on the results of the studies, they claimed that the participants' results indicated gradual increase in frequency level as the general proficiency increased. They claimed that the VLCPT test is a valid measurement of vocabulary growth. The Productive VLCPT is a practical tool, simple to administer with-in a short time and since there is one possible answer for each item, it is easy to mark (Laufer and Nation, 1999).

Similarly, Vocabulary Levels Test (Productive) version A is also used for measuring productive vocabulary knowledge. This test is created by Laufer and Nation (1999) and they state that the focus of the test is controlled production measures of vocabulary knowledge. The test has questions from five frequency levels (2000 words level, 3000 words level, 5000 words level, University words list and 10000 word level). This test is very practical in terms of time, scoring and interpreting the results (Nation, 1999). Additionally, to know whether a learner has mastery of a specific frequency level, varies among levels, for example for 2000-word level the percentage is 85% to 90%, which means that the learner only cannot use 150 words productively from this level (Laufer and Nation, 1999). The satisfactory mastery for other levels is 80% (Laufer and Nation, 1995). Vocabulary levels Test is used by vocabulary researchers

(Hazenberge, 1996; Mera, 1996; Milton & Dallar, 2013; Laufer & Goldstein, 2004; Schmitt et al, 2007) who obtained similar results.

The discussed vocabulary tests can be found on Lextutor website (Lextutor.ca). Lextutor is a website which is developed by Thomas Michael Cobb (2002) based on Laufer and Nation (1995) off-line program version known as "Range" (Nation, 2006; Nur, 2015). On this website, we can find VST and VLCPT test along other vocabulary measurement tools. The aim behind developing lextutor was the improvement of knowledge of the academic vocabulary not the learning purposes (Nur, 2015). The website is "consulted by 1500+ learners, teachers, and researchers every weekday and night worldwide and is cited regularly in research publications and presentations at major conferences" (Cobb, 2016. p.1).

Furthermore, rich lexical context plays a vital role in learners' vocabulary development. Folse (2004), Nation (2013), Schmitt (2000) and Thornbury (2002) advocate the significance of presenting learners with numerous exposures to new words. As a result, the vocabulary can shift from short-term to long-term memory. According to Thurnbury (2002) short-term memory is the brains' capacity to hold short information for few seconds and long-term memory can store large amount of information for longer period. Context can provide this exposure as Sternberg (1987) claims that most vocabulary is learnt from the context. In view of the fact that the Afghan context of language teaching and learning has not been studied yet, and the results of studies carried out in other learning contexts can partially be applied in Afghan context. By learning context we mean the learning environment (Gu, 2003a). The instructors, the classmates, the classroom climate, the tradition of leaning, the syllabus/curriculum and the available opportunities for input and output are elements of learning context (Gu, 2003a). The learning context is different from a words' linguistics context (Webb, 2008). "The overriding principle for

maximizing vocabulary learning is to increase the amount of engagement learners have with lexical items" (Schmitt, 2008, P.329).

Based on the discussed review of literature, this study used VST and VLCPT Control productive tests to measure the size and SPSS (statistical package for social sciences) for investigating the difference of receptive and productive vocabulary of Afghan students. This was done in order, to find out whether the participants have the prerequisite vocabulary threshold for English language comprehension and production needs at the academic level. Moreover, the study explored the vocabulary learning context through interviewing three instructors. The results of this qualitative study portrayed the context, where the content is delivered and learnt. For these reasons the current study tried to answer the questions below.

2.1 Research Questions

Based on the statement of problem, this quantitative and qualitative research tried to answer the following questions.

1. What is the size of participants' receptive and productive vocabulary?
2. What is the difference between participants' receptive and productive vocabularies?
3. What is the relationship between the students' vocabulary learning context and vocabulary Sizes?

CHAPTER THREE: METHODOLOGY

This research applied quantitative and qualitative methods to investigate the receptive and productive vocabulary size and the difference between receptive and productive vocabulary of Afghan EFL Learners.

3.1 Participants

The participants in this research are 54 senior students of English major (EFL) department of Nangarhar University, which is a state University in Afghanistan with 13 different schools. The English department is among six other departments in the college of Languages and Literature. The other departments of this college are Pashto language, Dari Language, Arabic language and German language. English is the instructional language in the English department. Moreover, Nangarhar University is located in Jalalabad, which is the capital city of the eastern province of Nangarahar. Nangrahar is the second most populated province after Kabul province. The study is limited to the senior class students. Almost 18000 students are studying in the 13 colleges of Nanagrhar University, who are taught by 650 instructors, among them 21 instructors are teaching at the English department. Five instructors of the English department are teaching the senior students and three of them are interviewed for investigating the vocabulary learning context.

This BA (Bachelor of Arts) fourth year class consists of 85 students and the current study tried to gather data from as many students as possible. The participants were selected based on purposive sampling because the study was designed to gauge the vocabulary size of this population. Furthermore, the second reason behind this selection was that, the proficiency levels of three other classes of this department were regarded as lower, which could have made collecting viable data impossible due to the presumably insufficient vocabulary knowledge.

3.2 Instruments

In order to collect the data, vocabulary size test (VST) and Vocabulary Level Control Productive Test (VLCPT) A version was used. Furthermore, three instructors were interviewed through structure interview.

3.2.1 Vocabulary Size Test. Vocabulary size test was used for measuring written receptive vocabulary size of L1 and L2 students. It assesses the written form of the word, the form and meaning relationships and students' partial conceptual knowledge. This test contains 140 multiple-choice items, ten for every one thousand of a total of 14 levels (Beglar & Nation, 2007). The current study measured the first 10K levels and excluded the last four levels because it was not deemed compatible with the participants' proficiency level.

VST Link: https://www.lextutor.ca/tests/levels/recognition/1_14k/

3.2.2 Vocabulary Levels Control Productive Test. Created by Laufer and Nation (1999), the test is focused on controlled production measures of vocabulary knowledge. It has questions from five frequency levels (2000 words level, 3000 words level, 5000 words level, University words list and 10000 word level). In this test every level has 18 items. Test takers need to fill in a blank in each sentence where several initial letters of the missing words are provided. This test is not designed to find the overall productive vocabulary size (Schmitt, 2010). Therefore, the current study adopted it with some adjustments to the formula by calculating (2xK2) + K3 + (2xK5) + (4xK10) = overall productive vocabulary. This formula is based on the profiling of 18 words used at each of the levels and adapted to compensate for the gaps between levels. The result is however only an estimate of the productive vocabulary size.

VLCPT Link: https://www.lextutor.ca/tests/levels/productive/

3.2.3 Structured Interview: Of the total of five instructors who are teaching in this program, three instructors were interviewed in order to explore the context for vocabulary teaching and learning. The questions were related to implicit and explicit vocabulary learning opportunities provided to learners, the designing of lesson plan with embedded vocabulary focus and opportunities for production. The interview protocol is found in Appendix 1.

3.3 Data Collection

A written permission has been received from the University administration for conducting the research. Then a general announcement was issued to the senior students' class in order to receive their verbal agreement.

Although they exist in on-line form, both VST and VLCPT tests were printed out prior to administering them. Pencil and paper test was preferred because the University's computer lab was not available at that time. Hence, on two separate days both mentioned test were administered from 54 participants, 49 male and 5 female. Their age ranges from 24 to 28 years. The three instructors were interviewed separately after the tests were administrated.

3.4 Data Analysis

Once the data was collected, the results of VST and VLCPT were analyzed through descriptive statistics to find the means, frequency and standard deviation using the Statistical Package for the Social Sciences (SPSS). The overall receptive and productive vocabulary sizes of participants were also analyzed to indicate the difference between them. T-Test was performed on the results of VST and VLCPT to find out how significant the difference between them is. The qualitative interview data was analyzed to examine the context of vocabulary learning of Afghan students.

3.5 Timeline

Table 1

Tasks	January	February	March	April	May
Data collection (Test and Essay writing)					
Data analysis					
Writing the report					

3.6 Limitations and Delimitations

The following are limitations to the study. This was the first attempt of conducting a research project with the participants, so they may not have taken it seriously, as the level of motivation was low because the tests for this study were administrated when participants were taking their exams. Furthermore, the specificity of the context will not allow generalizing from the results, due to the specific learning context in Afghan ELT.

Moreover, the Vocabulary Level Control Productive Test (VLCPT) is a level test, which does spot check from 1K to 10K and is not designed to measure the overall productive vocabulary size (Schmitt, 2010). With some adjustments to the formula this study calculated an estimate of the participants' overall productive vocabulary size. Therefore, the results should be interpreted with caution.

One of the delimitation of this study is that, it measured receptive vocabulary from 1K to 10K level and excluded the next four levels because it was not compatible due to the participants' lower proficiency level. And last but not least, this study measured the vocabulary

of Afghan students from only one University and was not able to address other similar Universities.

CHAPTER FOUR: RESULTS

4.1 Question 1: What is the size of participants' receptive and productive vocabulary?

The receptive vocabulary size of the participants' was tested through VST (Vocabulary Size Test). The total receptive vocabulary size of participants' fluctuates from 2300 to 7400 with the overall mean of (M=4278). Among 54 participants just 4 were able to achieve the total receptive vocabulary scores above 6000. The percentile was calculated to know the percentages of participants' scores below or above certain scores. The calculation shows that 90% of the participants scored below 5600, 75% scored below 4700, 50% of participants scored below 4200 and 25% participants scored below 3700. The complete table of receptive vocabulary test results is available in appendix 2.

At the start, the VST sores results (Receptive Vocabulary) were calculated by measuring the mean score based on every words frequency levels and they are reported in the table 1.

Table. 2

Results of the Receptive Vocabulary Means

Frequency Levels	Mean Score	Frequency Levels	Mean Score
1K	80	6K	31
2K	57	7K	34
3K	48	8K	37
4K	54	9K	28
5K	36	10K	24

Table 1 shows that the participants did well on the 1K level with obtaining the mean score of (M=80). Then the mean scores drops drastically from (M=80) for 1K to (M=57) for 2K, which is unusual because 1K and 2K word levels are mostly similar and a closer score might be expected. The same decrease is manifested in the comparison of 2K and 3K as well, precisely from the mean score of (M=57) to (M=48). At the level of 4K the pattern of mean score changes by an increment of 6 percentage points, from (M=48) for 3K to (M=54) for 4K. Later, at the level of 5K the same drastic pattern of decline is repeated, this time with a decrease of 18 points from the mean score of (M=54) at 4K to (M=36) at 5K. The mean score of receptive vocabulary increased at the word levels of 6K and 7K, (M=31) and (M=34) respectively. An increase in the mean score is illustrated again at the level of 8K comparing to 7K by 3 points, from (M=34) to (M=37) specifically, which is also unexpected because 8K level is difficult compared to 7K. The last two word levels (9K and 10K) show the mean score of (M=28) and (M=24) respectively. The difference between the 1K and 10K levels is 52 points in the mean score of receptive vocabulary. It is worth mentioning that, the satisfactory mastery for each level is 80% (Laufer and Nation, 1995). Hence, score below this percentage means no command of vocabulary for that level.

The standard deviations of mean scores were calculated at all ten word frequency levels to know the differences of score from the mean at every level for receptive vocabulary. The standard deviations (SD) for receptive vocabulary are reported in figure 1.

Figure.1

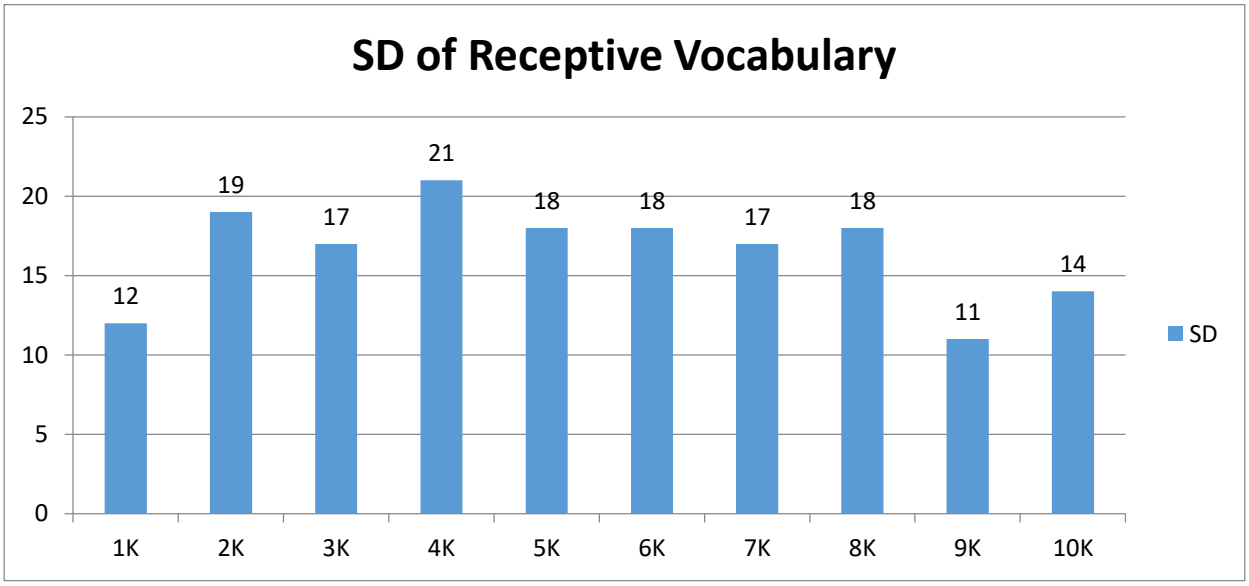


Figure 1 shows that SD fluctuates from (SD=11) to (SD=21) points at different levels. The participants mean score was closer to the overall mean score at the 1K and 9K word frequency levels with (SD=11) and (SD=12) points respectively, comparing to other word frequency levels. The significant difference of means is shown at 4K, 2K, 5K, 6K and 8K levels. These results indicate that the participants scores were similar to some extend to each other at the level of 1K and 9K most frequent words lists and were different to some extend at 2K, 3K, 4K, 5K, 6K, 7K, 8K and 10K words levels.

The productive vocabulary size of the participants was tested through VLCPT, A version. The total productive vocabulary size scores of participants fluctuate from 1700 to 4360 with an overall mean of (M=3075). The percentiles were calculated to know the percentages of participants achieving higher and lower productive scores. It was evident that 90% of the participants scored below 3820, 75% participants scored below 3610, 50% participants scored below 3110 and 25% participants scored below 3820. The complete list of productive vocabulary test score is available in Appendix 3.

Later, the VLCPT scores results (Productive vocabulary) were calculated by measuring the mean score at five words frequency levels and they are reported in the table 2.

Table. 3

Results of the Productive Vocabulary

Frequency Levels	Mean Score
2K	70
3K	37
5K	25
UWL	39
10K	20

Table 2 shows that the participants did well at the level of 2K words list by achieving the mean score of (M=70). The mean score of productive vocabulary drops significantly from 2K level to 3K by the difference of 33 points. At the 3K level the participants scored with the mean of (M=37). The same significant drop is shown from the words levels of 3K to 5K with the mean score of (M=25) at 5K level and the difference of 12 points, which could be accepted because of the difference between the two levels. Next, at the level of University word list (UWL) the mean score significantly increases by 14 points compared to 5K level, which is obvious because UWL band is consist of 3K level. Moreover, the difference between 3K and UWL is 2 points with the score of (M=37) and (M=39) respectively. 10K level shows the lowest mean score of (M=20), which is acceptable because the use of 10K level words is very rare for the participants. The results of table 2 show that none of the participants have satisfactory productive mastery of any productive band because Laufer and Nation (1995) suggested 80% of score for each word band.

The percentages of every word level show that the participants scored higher on 2K and UWL list and lower on 5K and 10K word frequency levels. At the earlier level the mean of 70 was achieved and at later level the mean of 20 was accomplished.

The standard deviations of mean scores were also calculated at all five word frequency levels for productive vocabulary to know the differences of mean score from the mean at every level. The standard deviations (SD) for productive vocabulary are reported in figure 2.

Figure. 2

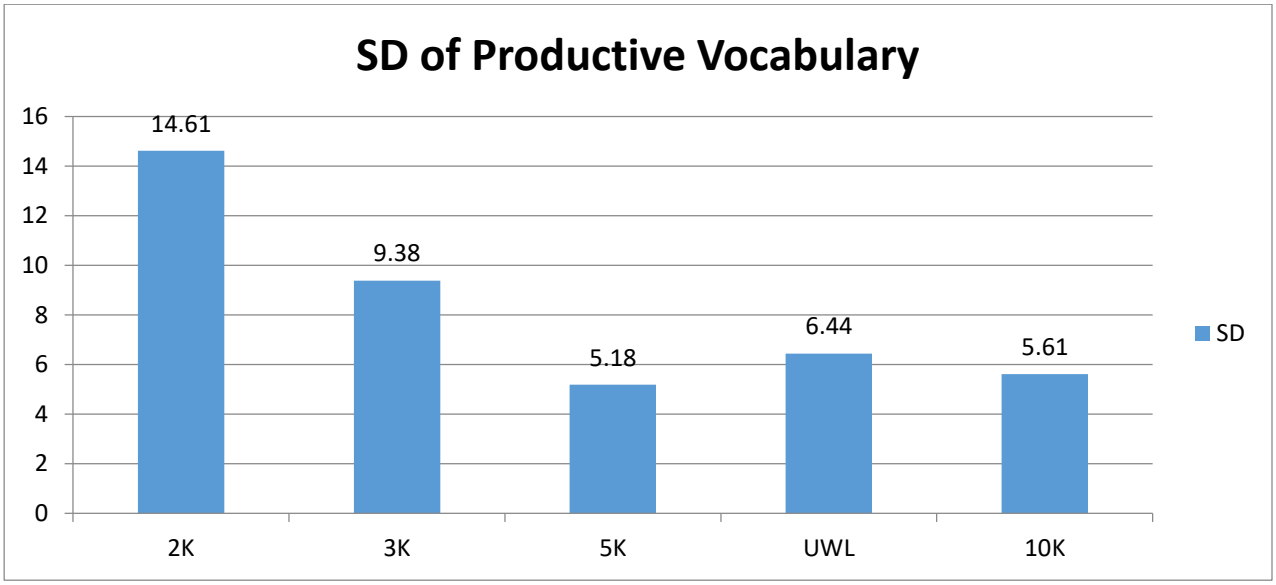
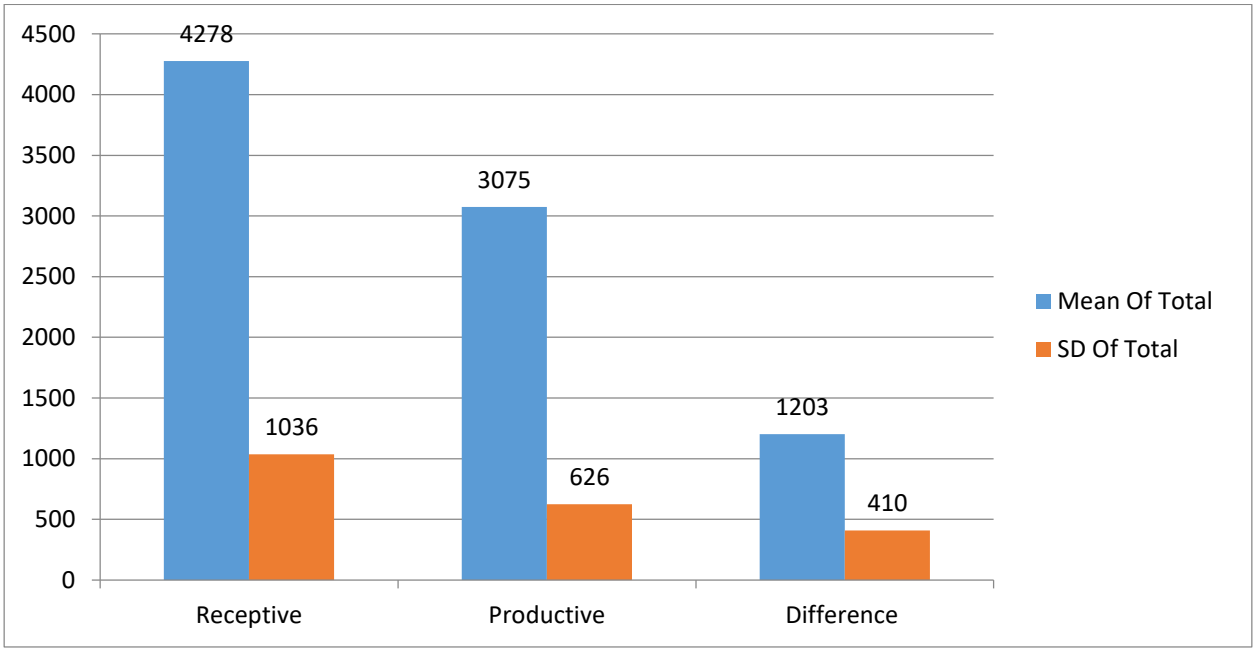


Figure 2 presents the SD of the five word frequency levels. The participants' mean score is significantly different from the overall mean at 2K level compared to other levels. The difference is also large to some extend at 3K level (SD=9.38). The remaining three levels show less important distinction of SD results from (SD=5.18) to (SD=6.44). These results indicate that the participants' scores were different from each other at the level of 2K most frequent words list and were similar to some extend at 3K, 5K, UWL and 10K words levels.

4.2 Question 2: What is the difference between participants' receptive and productive vocabularies?

Descriptive statistical analysis was done on the scores of receptive and productive vocabulary. The mean of receptive vocabulary size is (M=4278) comparing to the mean size of productive vocabulary (M=3075). The difference between these two vocabulary sizes mean is (M=1203). The SD for receptive vocabulary test score is (SD=1036) and the SD for productive is (SD=626). The difference between the SD of receptive and productive vocabulary is (SD=410). These results are reported in figure 3.

Figure. 3



In order to find the precise difference between participants' receptive and productive vocabulary sizes based on the word frequency levels, the means of those words frequency levels were measured and compared. Figure 4 illustrates these comparisons.

Figure. 4

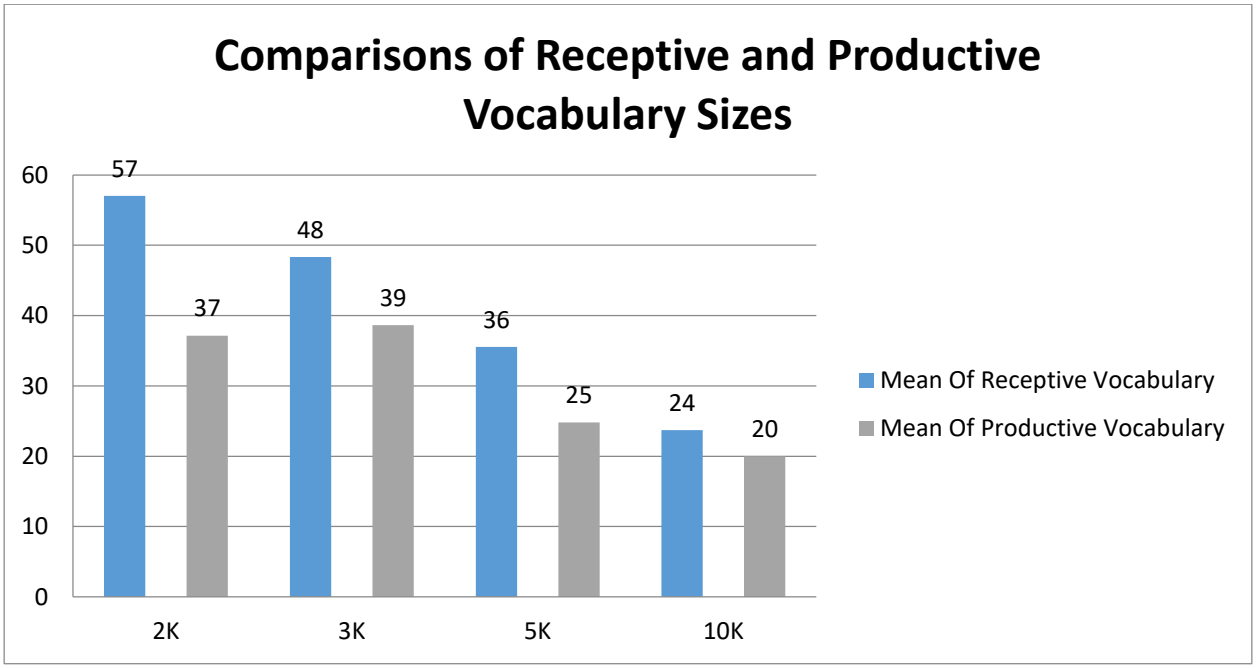


Figure 4 shows that the participants did well at the level of 2K compared to other levels, even though no one reached the 80% score. On this level the means for receptive is (M=57) and for productive is (M=37) with the difference of 20 points. Additionally, at the level of 3K the mean difference decreases to 9 points with the means of (M=48) for receptive and (M=39) for productive. The same pattern of differences is evident in the comparison at the 5K level by 9 points with the (M=36) for receptive and (M=25) for productive. The next level at 10K shows the minimum difference of just 4 points with (M=24) for receptive and (M=20) for productive, which is surprising.

Furthermore, two-tailed paired samples t-test was conducted to find out the difference between the test scores of participants' receptive and productive vocabulary. Table 3 shows the findings.

Table. 4

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Receptive_Vocabulary	4277.78	54	1035.897	140.968
	Productive_Vocabulary	3075.37	54	625.824	85.164

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Receptive_Vocabulary - Productive_Vocabulary	1.202E3	680.596	92.617	1016.640	1388.174	12.983	53	.000

A two-tailed paired samples t-test results revealed that the participants' receptive vocabulary is larger (M=4278, SD= 1036) compared to their productive vocabulary (M=3075, SD= 626), t (53) =12.983, p<.000. Moreover, in order to investigate the relationship between the receptive and productive scores of participants the two tailed Pearson Product-Moment Correlation test was conducted using the scores. The results show significant correlation, r = .772, p<.000 between the two types of vocabulary. The correlation result is shown in Table 4.

Table. 5

Correlations

		ReceptiveVocab	ProductiveVocab
ReceptiveVocab	Pearson Correlation	1	.772**
	Sig. (2-tailed)		.000
	N	54	54
ProductiveVocab	Pearson Correlation	.772**	1
	Sig. (2-tailed)	.000	
	N	54	54

**. Correlation is significant at the 0.01 level (2-tailed).

Additionally, in order to find the difference between the participants' receptive and productive vocabulary, the ratio of scores for receptive and productive vocabulary was calculated, the complete table of ratio can be found in Appendix 4. The statistics results revealed that most of the participants have the ratio of (2:.75), (2:.50) and (3:2), which means that they have significantly larger receptive vocabulary than the productive one. This ratio of (2:.75), (2:.50) and (3:2), was found for 57 participants. Although, the ratio of (3:2) was found for six participants, the ratio of (4:1) was found for three participants and ratio of (5:2) was found for four participants. The ratio difference was significant for the participants who received high scores for both the tests. These results show that more than 80% of participants have near twice larger receptive vocabulary than productive vocabulary. Through calculating the overall receptive and productive means the ratio was (2.33:1.66). It can be concluded that the participants' productive vocabulary sizes bear more similarity than their receptive vocabulary sizes. Moreover, the participants were able to produce 72% of their receptive vocabulary.

4.3 Question 3: What is the relationship between the students' vocabulary learning context and vocabulary sizes?

Three instructors provided the data related to the context of the participants' vocabulary learning. The interviews were taken using a semi-structure format, the protocol for which can be found in Appendix 1. The instructors mostly mentioned adequate strategies and activities for vocabulary teaching but in reality the question still remains whether they proactively encourage vocabulary leaning strategies and activities or not.

All three instructors pointed out that they mostly have a list of difficult or new words for students to learn prior to the lessons. They said that they introduce the list at the beginning of the lessons and check which words are already known to students and which require time to acquire. Moreover, the instructors make word cards to teach new words; new words are provided at one side of the card and its English meaning at the other side. Through group work these word cards are utilized for learning new vocabulary. Finally, the instructors ask students to make sentences using these new words and share them with their pairs for correction.

Additionally, they mentioned the strategies of making the words bold in the text, the textbooks already have the difficult words in bold, to let students notice the new vocabulary. They also talked about using the strategy of writing the new vocabulary on the board when students are reading the text. After reading, the instructor checks the students' knowledge of the written words through comprehension questions and then let them find the meaning of the new words using the dictionary. Once the students are done with finding the meaning in the dictionary they are asked to write their own word cards for most difficult words and try to learn them prior to filling in the blanks or matching exercises.

Besides that, they talked about using the guessing strategy while reading the text. They said that when students are taking turns to read some portion of the text from the textbook out loud, they try to guess the meaning of the new words from context. If the student, who is reading, was not able to guess the correct meaning, other students are asked to help him/her. The instructor comes as the last resource if the whole class was not able to guess the meaning of new words in the text. The students are asked at the end of this strategy to transfer this new vocabulary to their word cards.

The discussed vocabulary learning context is mostly useful for enhancing receptive vocabulary knowledge. For productive vocabulary the instructors mentioned discrete sentence writing, using the new vocabulary, sometimes paragraph writing and just one of them stated that he uses essay writing as well. In order to develop students' speaking skills, one interviewee mentioned the activity of oral performance (group discussions) using the new vocabulary. These productive vocabulary learning strategies can be assumed to be very rare especially paragraph writing, essay writing and speech because of participants lower scores on productive test.

On the other hand, in order to check the comprehension of new vocabulary, the instructors mentioned the strategies of matching, filling in the blanks and writing assignments. They pointed out that these strategies take place in co-operative learning environment where students first try to find the meaning in groups and if they cannot find it, then the teacher comes to help.

CHAPTER FIVE: DISCUSSIONS AND CONCLUSIONS

5.1 Discussions

The results of participants' receptive vocabulary size revealed the mean of (M=4278) and 50% of participants scored below 4200. This result means that the overall receptive vocabulary of the participants is lower than the standard threshold suggested by scholars in the literature. As Laufer (1992) suggested a 5,000 lexical items for comprehension of written authentic prose and Van Zeeland and Schmitt (2012) suggested vocabulary size of 2,000–3,000 word families (5,000 lexical items) for listening comprehension. Moreover, Nation (2006) suggests vocabulary size of 8,000 to 9,000 word-families for reading comprehension. Nation (1990) also anticipates EFL high school graduates to have learnt about 3,500-4000 word families (7000 Lexical items). These figures help explain that the participants in the current study have far lower receptive vocabulary than would be expected of having graduated from BA (Bachelor of Arts) graduates. So, the receptive vocabulary mean (4200 words) is a little over one half of the 7000 words suggested for high school graduates by Nation (1990). Additionally, analyzing the SD of participants' receptive score on each words level shows that the higher the level, the greater the difference, except with really low frequency words. It might mean that the instructors and learners did not focus on high frequency words and randomly selected words for teaching and learning. A solution is suggested by Nation (1995) and to solve this setback, he suggested the cost-benefit perspective to select words for teaching. From this perspective, more focus should be given to the first 2000 words, which are necessary for language use (Nation, 1995).

Additionally, in order to comprehend a text, it is essential to understand 95% or even 98% of its vocabulary (Nation, 2009). This target can be achieved by attaining 2570 most common words, which consist of the first 2000 most common words and 570 words of the

Academic word list (Coxhead, 2000). Unfortunately, academic words are not tested within this study, but since they are mostly derived from the 3K list, it can be assumed that the participants are not familiar with these words, as their 3K score is well below 80 (M=48). Therefore, the participants in this study might be able to understand a simple reading or listening as their receptive vocabulary mostly consists of the first 2000 most common words. They scored the mean of (M=80), (M=57) and (M=48) for 1K, 2K and 3K words lists respectively. However, they would most likely not be able to comprehend an academic text.

On the other hand, the participants' mean of productive vocabulary score is (M=3075) with 50% of them scoring below 3110. This result indicates that the participants can actively participate in everyday conversation, but it would be difficult for them to write. As their overall productive vocabulary size is below the threshold suggested by scholars. Hence, Schmitt (2000) suggests 2000 words for conversational speaking and Schmitt (2000) and Laufer (1992) suggest 3000 words for reading authentic text. Likewise, Nation (2006) suggests vocabulary size 6,000 to 7,000 word-families for speaking and Webb (2008) suggest 5000 words families for speaking and writing. So, the participants' productive vocabulary is also lower than the suggested standards. A large portion of their productive vocabulary is covering the 2K words list as shown in Table.2. If we compare the productive results of this study with the suggested threshold of 6000 to 7000 words suggested by Nation (2006) it will reveal that the participants have two times smaller productive vocabulary. The results from Table.2 show that the participants mostly scored higher on two words frequency lists the 2K and the UWL. This illustrates that their productive vocabulary is relying on these two lists regardless of their higher or lower receptive vocabulary.

The comparison of the participants' receptive and productive vocabulary sizes indicates that they have a larger receptive than productive vocabulary. This result is similar to the results found in the studies of a number of researchers (Fan, 2000; Hajiyeva, 2015; Harji, et al 2015; Pignot-Shahov, 2012; Waring, 1997; Webb, 2008; Wise, J. C et al, 2007; Yamamoto, 2011; Zhou, 2010). The difference between the receptive and productive vocabulary in the current study is larger compared to the difference in the mentioned studies. The current study found larger receptive vocabulary compared to productive one with the mean core of (M=4278) for receptive and (M=3075) for productive vocabulary. The results of t-test indicate that this difference is statistically significant, with larger receptive vocabulary (M=4278, SD = 1036) compared to the productive vocabulary (M=3075, SD = 626), t (53) =12983, p<.000.

To enhance the comparison of the receptive and productive vocabulary size of Afghan students, this study also analyzed the ratio of the above. The results revealed that most of the participants have the ratio of (2:.75), (2:.50) and (3:2), ratio of receptive and productive vocabulary and by calculating the overall receptive and productive means the ratio was (2.33:1.66). This finding is similar to what was suggested by Eringa (1974), who estimated that the receptive vocabulary size of second language learners is double or more the size of their productive vocabulary (cited in Melka, 1997) (Fan, 2000). Furthermore, the ratio result of the current study resembles to the one in Nation (2013), who found a (2:1) ratio of the receptive and productive vocabulary of native speakers. However, this gap between EFL learners' receptive and productive vocabulary appears less significant if we investigate it on a deeper level, as in the current study the participants had 72% productive knowledge of their receptive vocabulary.

On the other hand, Laufer (1998) indicated ratio of 89% (receptive) to 73% (productive) for non-native high school learners and suggests that the gap increases as the learners general

language proficiency increase (cited in Fan, 2000). Consequently, the lower receptive and productive vocabulary sizes of the participants' in the current study are the reasons for the ratio of less than (2:1). The ratio is likely to increase with the increase of the participants' proficiency.

One of the most significant reasons for having a smaller receptive and productive vocabulary in this particular sample might be not having an enriched vocabulary learning context. Although, the results of the qualitative data analysis showed that the instructors mentioned several ways of enhancing the vocabulary learning context, those methods do not seem to have been fruitful. They were providing a list of new words at the beginning of the lesson, the use of word cards strategy, making the words bold in the reading text for noticing, writing the new words on the board while students are reading the text, looking for meaning of new words in dictionaries and guessing the meaning from the context. However, from the measured sizes of learners' vocabulary, it seems that these aspects of vocabulary teaching are not effectively used. These strategies need to be repeated many times and allowed enough class time to become effective for attaining sufficient receptive and productive vocabulary. Moreover, additional strategies, such as vocabulary games (Thornbury, 2002) might have to be employed. Hence, Keith Folse (2004) advocates the significance of presenting learners with numerous exposures to new words to develop their vocabulary, while Nation (2013) emphasizes the value of contextualized vocabulary learning. In short, based on the information provided by the interviewees some input enhancements might be taking place, but the repeated encounters are not. The current study was not able to find how honest the instructors were in their statements and how often these strategies or activities were repeated.

Furthermore, based on the results of the receptive and productive vocabulary scores, it can be concluded that the participants might not be fully exposed to a rich vocabulary learning

context as emphasized by Sternberg (1987), Nation (2013) and Thurnburry (2002), who claimed that most of the vocabulary is learnt from context (Sternberg, 1987). Although, the classroom vocabulary leaning context has its own question marks or in other words not clears whether the learners receive enough input or not, the context outside the classroom also does not seem to be rich with proper input. Additionally, as Gu (2003a) stated, the instructors, the classmates, the classroom climate, the tradition of leaning, the syllabus/curriculum and the available opportunities for input and output inside and outside the classroom are elements of learning context. Based on the vocabulary tests results, it can be assumed that the instructors were not able to model these elements of learning context properly. As a result the participants are not exposed to adequate vocabulary input inside and outside the classroom and were not able to develop their vocabulary size.

Besides, discussing vocabulary input, the instructors mentioned very limited opportunities to practice productive vocabulary such as writing discrete sentences, sometimes paragraph and essay writing and to some extend activities focused on speaking skills. The quantity of these activities seems to be very limited, which significantly affected the scores of productive vocabulary. There should be more opportunities for learners to produce vocabulary, for example, student-student discussions, in-class debate and group presentation assignments could enhance their speaking production, while writing journals, reflections, essays and online writing assignments could help to increase their written vocabulary.

This context of vocabulary learning is very limited and less helpful for developing a strong receptive and productive vocabulary threshold, especially for those students who have limited exposure to target language outside the classroom. Additionally, when asked, the interviewees did not talk about ways of engaging students in learning vocabulary outside the

classroom. Such activities could for example be using the media or internet, which could be good resources for such students to develop their vocabulary knowledge and ultimately their English language proficiency.

5.2 Conclusions

To conclude, the Afghan participants have larger receptive vocabulary than productive vocabulary with mean score of (M=4278) for receptive and (M=3075) for productive. Most of the participants scored higher on the first three frequency bands (1K, 2K and 3K) for the receptive test and similarly for the productive one (2K, 3K), compared to other levels. The difference among the mean scores of receptive and productive vocabulary on 2K and 3K bands were significant.

The participants' receptive and productive vocabulary sizes are below the threshold suggested in the literature for EFL learners by almost half of the proposed size. Because of this, the majority of the participants would not be able to comprehend authentic texts or produce adequate oral or written discourse, as expected in the academia. Hence, these elements would negatively impact their overall English proficiency and they would struggle in academic environment.

The vocabulary learning environment provided by instructors, materials, textbooks and inside and outside the classroom does not appear to be adequate. This might be making it harder for the participants to develop their vocabulary and reach the expected vocabulary threshold for success at university. The amount of input and output is limited, which resulted in low receptive and productive vocabulary scores.

5.3 Implications for Practice and Recommendations

In order to increase the participants' receptive and productive vocabulary, which is a measure of overall English proficiency (Schmitt, 2000), this study will make a few recommendations. The instructors should spend more class time on deliberate vocabulary learning; which is mostly used for learning high-frequency words by paying attention to the target words (Dodigovic, 2005; Nation, 2013; Schmitt, 2000; Thurnbury, 2002). Moreover, homework and assignments should be designed to utilize the outside-classroom time on incidental vocabulary learning; this learning strategy is used with low-frequency words through extensive reading, listening or production (Dodigovic, 2005; Nation, 2013; Schmitt, 2000; Thurnbury, 2002). Grabe and Stoller (2002) defined extensive reading, which exposes learners to "large quantities of material within their linguistic competence" (Grabe and Stoller, 2002: 259). Besides that, Nation (2013) advocated a rich vocabulary learning environment which consists of motivation, noticing, negotiation, definition, textual enhancement, retrieval, creative use and retention. Additionally, the program curriculum might need to integrate teaching vocabulary learning strategies into different courses and ask instructors to teach them and make sure the learners become autonomous and self-directed users of the vocabulary learning strategies.

Schmitt (2000) defines vocabulary learning strategies as effective facilitators of the vocabulary learning process. Memorization, repetition and taking notes on vocabulary are commonly suggested strategies (Schmitt, 2000). Besides, the cognitive vocabulary learning strategies categorized by Waldvogel (2013), which consists of Guessing, Using Dictionaries, Using Study Aids, Taking Notes, Repetition, Word Lists, and Activation could also be effective for these learners.

Instructors might need to focus more on the 2K and 3K words lists in their teaching. The participants' scores are fine at 1K level on both receptive and productive tests. More class time should be spent on explicitly teaching the 2K and 3K words vocabulary. For this purpose, instructors can teach several vocabulary leaning strategies and the use of the profiler to purposely select 2K and 3K words. Profiler is developed by Coxhead (2000), which analyzes texts by word frequencies and divides the text into 1K, 2K, 3K and academic words. These first three levels cover 95% of the text (Nation, 2006). Moreover, the 3K level is mostly consists of academic word list (Coxhead, 2000).

Additionally, every class syllabus should include at least three productive assignments for students to complete during a semester. These assignments can be short or long essay writings, which could be completed individually, in pairs or in groups. Instructors should pay more attention to the production of words in students' writings and focus more on the first three word levels (1K, 2K and 3K). Through these assignments the participants will develop their vocabulary and writing skills. This will require learners to shift their focus from size to depth of vocabulary, which means that just memorizing words is not enough and they need to know the associated meanings, concepts, registers and the context of use for the words as well (Dodigovi et al, 2017). Production assignments can best serve this need.

Finally, the instructors should emphasize the importance of the learning context outside the classroom to the students and make sure that the students know its significance and should manipulate it to develop their vocabulary. The participants can use the internet resources, TV programs, English newspapers and magazines, proficient or native speakers and social media for their vocabulary development. The instructor can design assignments in order to motivate the students to use these resources. In addition, the instructors need to integrate the explicitly taught

vocabulary into the assignments and link them to the learners needs. In this way, the explicitly learned vocabulary can be contextualized and made easy for learners to retrieve (Colovic-Markovic, 2017).

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Appendices

Appendix 1

Questions of structural interview:

1. Is there at least one lesson goal is focused directly on embedding vocabulary instruction into the lesson? If yes, can you elaborate on it?

2. Is there at least one explicit vocabulary strategy is identified in the lesson plan? If yes, can you explain it?

3. Is there a list of new words and other relevant words to be highlighted during the lesson is provided? If yes, can you explain it?

4. Is adequate time allotted to introduce and teach new vocabulary words? If yes, can you explain it?

5. Do you select new words from the text for the lesson? If yes, can you explain it?

6. Do you include relevant words from previous lessons into the new lesson? If yes, can you explain it?

7. Do you provide explicit vocabulary strategies embedded into the content lesson? If yes, can you explain it?

8. Do you provide a list of new words students will encounter in the text? If yes, can you explain it?

9. Do you ask students to share what they already know about the meanings of new words? If yes, can you explain it?

10. Do Teacher uses active and generative activities to embed and support vocabulary development during the content lesson (e.g., word sorts, games, word riddles, art/drawing, sentence challenges, etc.). If yes, can you explain it?

11. Teacher uses informal opportunities as words arise during the lesson to explicitly teach word meaning. If yes, can you explain it?

12. Does the repeated exposure to new words is provided during the lesson? If yes, can you explain it?

13. Does teacher scaffold students in developing strategies to make them independent vocabulary learners? If yes, can you explain it?

14. Does teacher encourages students to demonstrate understanding of word meaning through a variety of oral and written activities embedded into the content lesson? If yes, can you explain it?

15. Does teacher uses formal written assessments to document student understanding? If yes, can you explain it?

Taken and adapted from: https://crmsliteracy.wikispaces.com

Appendix.2

Receptive Vocabulary results

NO	1K	2K	3K	4K	5K	6K	7K	8K	9K	10 K	DIAGNOSTIC VOCAB. SIZE
1	**90**	90	90	90	60	90	60	90	30	40	7300
2	100	90	60	90	50	50	40	70	30	20	6000
3	80	70	60	70	20	30	40	60	30	30	4900
4	**90**	70	50	80	30	60	90	60	50	80	6600
5	80	40	20	30	30	10	0	20	40	20	2900
6	70	20	50	40	10	40	60	0	20	40	3500
7	**80**	50	30	30	20	40	30	40	30	20	3700
8	90	70	80	30	30	10	40	50	30	30	4600
9	90	80	40	70	50	40	50	20	20	10	4700
10	**90**	80	80	80	80	60	20	40	20	30	5800
11	80	50	60	60	20	30	40	40	20	30	4300
12	80	60	80	30	0	20	40	10	30	30	3800
13	**80**	60	50	60	30	30	40	10	20	20	4000
14	80	40	60	60	20	20	30	30	40	10	3900
15	90	80	70	90	50	30	50	40	30	10	5400
16	**80**	80	50	90	50	30	40	40	30	10	5000
17	90	80	50	70	60	50	60	50	30	20	5600
18	80	50	30	60	40	30	40	0	20	30	3800
19	**70**	60	60	80	20	20	50	30	40	30	4600
20	70	50	40	20	30	10	20	30	40	20	3300
21	70	40	30	30	30	20	20	20	40	40	3400
22	**80**	70	40	50	30	40	10	60	30	10	4200
23	80	60	60	40	30	20	40	40	20	0	3900
24	90	50	60	50	60	40	50	40	20	30	4900
25	**90**	70	40	70	40	40	20	50	40	10	4700
26	80	40	70	40	10	30	50	30	50	10	4100
27	60	50	50	60	50	70	10	60	20	30	4600
28	**80**	40	40	40	50	0	20	50	20	50	3900
29	90	70	50	60	50	60	50	40	40	20	5300
30	80	60	40	50	30	30	40	50	10	20	4100
31	90	80	60	50	30	10	40	30	30	10	4300
32	80	70	60	30	30	30	20	50	30	20	4200
33	80	60	40	70	40	20	40	30	50	20	4500
34	80	50	50	50	60	30	50	40	20	10	4400
35	60	50	20	20	40	20	20	20	20	20	2900
36	90	40	30	70	30	20	10	30	40	20	3800
37	60	50	40	20	30	20	10	40	10	20	3000

38	80	60	40	60	30	0	30	30	30	50	4100
39	100	20	30	60	40	30	20	30	20	10	3600
40	80	40	50	70	20	40	40	50	40	20	4500
41	90	70	30	20	20	20	50	10	40	10	3600
42	70	60	30	30	10	20	40	20	20	40	3400
43	100	##	80	90	90	80	40	80	40	40	7400
44	80	70	40	60	20	20	10	50	20	40	4100
45	50	60	40	80	20	40	50	60	40	30	4700
46	70	20	10	60	30	10	20	10	10	20	2600
47	90	60	40	50	50	40	30	40	10	40	4500
48	60	60	50	60	20	20	30	30	20	10	3600
49	80	70	70	40	50	50	0	20	10	10	4000
50	90	50	50	50	80	30	20	30	30	10	4400
51	70	40	60	30	30	40	20	30	40	10	3700
52	50	20	20	30	30	20	40	30	20	30	2900
53	100	50	60	50	10	10	20	10	30	30	3700
54	50	10	20	20	30	20	30	40	0	10	2300

Appendix.3

Productive Vocabulary Results

No	2000	3000	5000	UWL	10000	Total Productive Vocabulary
1	84	46	32	48	26	3820
2	78	42	28	42	24	3500
3	82	43	29	43	22	3530
4	86	46	34	42	28	3980
5	69	36	18	37	18	2820
6	41	28	18	32	6	1700
7	42	30	17	30	11	1920
8	88	46	26	42	28	3860
9	89	48	24	48	29	3900
10	92	58	32	46	26	4100
11	78	42	28	48	26	3580
12	52	26	16	42	16	2260
13	77	38	22	33	16	3000
14	61	28	19	36	12	2360
15	82	41	28	48	25	3610
16	78	44	22	36	21	3280
17	84	42	26	38	26	3660
18	38	32	21	28	18	2220
19	84	46	34	48	24	3780
20	68	36	22	26	20	2960
21	40	26	20	33	10	1860
22	81	45	20	41	20	3270
23	72	34	21	32	18	2920
24	79	42	35	46	25	3700
25	84	48	26	45	26	3720
26	70	42	24	38	18	3020
27	78	41	26	45	23	3410
28	62	35	28	35	18	2870
29	87	42	23	47	25	3620
30	76	45	23	42	21	3270
31	74	41	29	47	16	3110
32	71	35	26	45	25	3290
33	75	43	25	41	18	3150
34	88	31	36	33	16	3430

35	68	39	26	36	16	2910
36	74	31	22	34	18	2950
37	61	37	25	36	14	2650
38	84	27	19	39	15	2930
39	59	38	28	32	18	2840
40	82	33	28	47	28	3650
41	64	32	20	36	13	2520
42	55	28	24	32	17	2540
43	93	68	35	46	28	4360
44	72	54	32	41	25	3620
45	56	34	26	38	23	2900
46	55	27	23	26	18	2550
47	78	28	26	42	19	3120
48	58	24	21	35	18	2540
49	72	35	26	38	24	3270
50	64	23	26	38	23	2950
51	58	31	25	32	26	3010
52	40	26	16	23	15	1980
53	72	23	18	36	12	2510
54	47	21	16	37	8	1790

Appendix.4

The Table of Receptive and Production Vocabulary ratio

NO	Receptive	Productive	Ratio
1	7300	3820	2/1
2	6000	3500	12/7
3	4900	3530	7/5
4	6600	3980	5/3
5	2900	2820	1/1
6	3500	1700	2/1
7	3700	1920	2/1
8	4600	3860	6/5
9	4700	3900	6/5
10	5800	4100	7/5
11	4300	3580	6/5
12	3800	2260	5/3
13	4000	3000	4/3
14	3900	2360	5/3
15	5400	3610	3/2
16	5000	3280	3/2
17	5600	3660	3/2
18	3800	2220	12/7
19	4600	3780	11/9
20	3300	2960	10/9
21	3400	1860	11/6
22	4200	3270	9/7
23	3900	2920	4/3
24	4900	3700	4/3
25	4700	3720	5/4
26	4100	3020	4/3
27	4600	3410	4/3
28	3900	2870	4/3
29	5300	3620	3/2
30	4100	3270	5/4
31	4300	3110	11/8
32	4200	3290	9/7
33	4500	3150	10/7
34	4400	3430	9/7
35	2900	2910	1/1

36	3800	2950	9/7
37	3000	2650	9/8
38	4100	2930	7/5
39	3600	2840	5/4
40	4500	3650	5/4
41	3600	2520	10/7
42	3400	2540	4/3
43	7400	4360	5/3
44	4100	3620	9/8
45	4700	2900	13/8
46	2600	2550	1/1
47	4500	3120	13/9
48	3600	2540	10/7
49	4000	3270	11/9
50	4400	2950	3/2
51	3700	3010	11/9
52	2900	1980	3/2
53	3700	2510	3/2
54	2300	1790	9/7