



AMERICAN UNIVERSITY OF ARMENIA  
ՀԱՅԱՍՏԱՆԻ ԱՄԵՐԻԿԱՆ ՀԱՄԱԼՍԱՐԱՆ

AUA is a U.S. accredited graduate institution affiliated with the University of California

*Department of English Programs*

A thesis submitted in  
partial fulfillment of the requirements for the degree of Master of Arts in  
Teaching English as a Foreign Languages (TEFL)

*The Impact of Formative Assessment on EFL  
Learners' Vocabulary Enhancement*

**Thesis supervisor:** Catherine Buon, PhD

**Thesis reader:** Rubina Gasparyan, MA

**Statistics Advisor:** Alexan Simonyan, PhD

**By:**

Syuzanna Torosyan

Yerevan, Armenia

2011

*American University of Armenia*

We hereby approve that this thesis

By

Syuzanna Torosyan

*The Impact of Formative Assessment on EFL Learners' Vocabulary  
Enhancement*

be accepted in partial fulfillment for the requirements of the degree of

M.A. in TEFL

Thesis Committee

Catherine Buon, PhD

.....

Rubina Gasparyan, MA

.....

Catherine Buon, PhD: Associate Dean of DEP

.....

**Yerevan, Armenia**

**2011**

**Dedication**

**To My Family**

## **Acknowledgments**

I acknowledge with deepest gratitude many people, who assisted and supported me during my studies and research at AUA.

First, I owe my profound gratitude to Dr. Catherine Buon, the associate dean of DEP and my thesis advisor for her willingness to help me find answers and solutions to the questions encountered while completing my thesis.

I would like to express my profound appreciation to Ms. Rubina Gasparian, my thesis reader, for her valuable advice and support; who always willingly devoted her time and energy for assisting me to carry out my research.

My special thanks go to Dr. Alexan Simonyan who helped me in the most challenging part of my thesis, the statistical part. His insightful directions and guidelines facilitated the process of the statistical analysis of the data obtained for the research.

I would also like to express my gratitude to the DEP faculty members Dr. Irshat Madyarov, Melissa Brown and Liliana Edilian. Motivation, feedback and support provided by them were the key to any success I had while studying at AUA.

And of course I'd like to thank my friends for encouraging and supporting me during my research and my studies at AUA.

Last but not least, my inestimable thanks goes to my family for their patience, love and understanding. I dedicate this thesis to them.

## Table of Contents

<b>Dedication .....</b>	<b>iii</b>
<b>Acknowledgments .....</b>	<b>iv</b>
<b>Table of Contents .....</b>	<b>vii</b>
<b>Abstract .....</b>	<b>vii</b>
<b>Chapter One: Introduction .....</b>	<b>1</b>
1.1 Statement of the Problem.....	3
1.2 Significance of the Study .....	3
1.3 Research Questions.....	4
1.4 The Structure of the Thesis.....	4
<b>Chapter Two: Review of Literature.....</b>	<b>6</b>
Introduction.....	6
2.1 Historical Overview of Teaching and Learning Vocabulary.....	6
2.2 Depth and Breadth of Vocabulary Knowledge .....	9
2.3 Approaches to Vocabulary Learning Process.....	9
2.3.1 Explicit Vocabulary Learning.....	10
2.3.1 Implicit Vocabulary Learning.....	11
2.4 Assessment in Language Teaching and Learning.....	14
2.5 Summative vs. Formative Assessment .....	17
2.6 The Purpose and Benefits of Formative Assessment .....	20
2.7 Elements Involved in Formative Assessment Practice.....	28
2.7 The Application of Formative Assessment in Vocabulary Learning.....	36
<b>Chapter 3: Methodology.....</b>	<b>42</b>
Introduction.....	42
3.1 Research Design.....	42
3.2 Setting and Participants.....	42
3.3 Materials .....	44
3.4 Instrumentation .....	45

3.4.1 Tests .....	45
3.4.2 Questionnaire .....	48
3.4.3 Interview .....	49
3.5 Procedure .....	49
3.5.1 Experiment.....	49
3.5.2 Questionnaire .....	51
3.5.3 Interview .....	51
3.6 Data Analysis .....	52
<b>Chapter 4: Results and Discussions .....</b>	<b>53</b>
Introduction.....	53
4.1 Analysis of the Quantitative Data.....	53
4.1.1 Analysis of the Pre- and Post-test Results .....	54
4.1.2 Analysis of the Students' Questionnaire.....	60
4.2. Analysis of the Qualitative Data .....	66
4.2.1 Analysis of the Interview Data .....	67
4.3 Discussion .....	69
<b>Chapter 5: Conclusions .....</b>	<b>72</b>
Introduction.....	72
5.1 Aims and Procedures of the Study .....	72
5.2 Summary of the Main Findings .....	73
5.3 Limitations .....	74
5.4 Applications and Implications .....	74
5.5 Recommendations for Further Research.....	74
<b>References.....</b>	<b>76</b>
<b>APPENDICES.....</b>	<b>84</b>
Appendix A: Pre-test .....	84
Appendix B: Post-test .....	92
Appendix C: Student Questionnaire .....	100
Appendix D: Interview Questions .....	103
Appendix E: Some Examples of Formative Assessment.....	104

## **Abstract**

The purpose of the current paper is to investigate whether and to what extent formative assessment influenced the EFL learners' vocabulary enhancement. It also aimed at determining the students' attitudes towards using formative assessment in the vocabulary learning process. The study was carried out in the Experimental English Classes (EEC), Department of English Programs (DEP) at the American University of Armenia (AUA). Two groups were involved in the study, the experimental and the comparison. The experimental group practiced the vocabulary with the help of formative assessment, whereas for the comparison group traditional exercises and activities were implemented. The research was quasi-experimental: both qualitative and quantitative data were employed. The instruments used were 1) pre- and post-tests, 2) an attitudinal questionnaire for students, 3) a semi-structured interview with students on formative assessment. The pre- and post-test results were analyzed quantitatively implementing the statistical package for social sciences (SPSS). For the pre- and post-tests' analysis Mann-Whitney and Wilcoxon tests were implemented to compare the scores obtained from the performance of the experimental and comparison groups. The analysis of the pre- and post-tests showed a significant difference between the experimental and comparison groups. The results of the attitudinal questionnaire were analyzed through frequency analyses. For the analysis of the qualitative data collected through the interview, a content analysis was applied that integrated identifying the key topics and categories in the data. The results of the questionnaire and the interview revealed that formative assessment had positive influence on the learners' vocabulary enhancement. The students claimed that formative assessment

techniques helped them to become actively involved in their learning process and motivated them to learn the English vocabulary.



## **Chapter One: Introduction**

Vocabulary teaching is central to language and of critical importance to EFL language learners (Zimmerman, 1997). Many linguists, among them Coady and Huckin (1997), have come to an agreement that the success of communication lies at the heart of good command of vocabulary. According to Laufer (1997), among the components of language, vocabulary learning is a language component that has been the study matter of many linguists for many years. Many research studies reveal that knowledge of vocabulary is of utmost importance for EFL/ESL learners. Learning vocabulary is an ongoing process that takes time and practice. Therefore, different techniques of vocabulary instruction, vocabulary learning strategies and different teaching/learning ‘tools’ that help students learn vocabulary have become the subject of research.

Despite the fact that there is a great deal of research carried out to investigate the techniques of vocabulary instruction and the ways of using learning strategies in vocabulary learning process, there is little research investigating the use of assessment, particularly the application of formative assessment as a ‘tool’ in vocabulary enhancement. As Read (2000) claims, the study of vocabulary is a flourishing area in language teaching which is creating a need for new approaches to vocabulary assessment.

Within the last few decades, a great tendency towards the use of assessment and its incorporation into the curriculum has gained a huge interest. In this regard, the adoption of different ways of assessment in foreign language education has become of crucial importance. In recent years, as Farhady (2006) claims ‘assessment has witnessed a paradigm shift from a discrete-point component-based perspective to a task-based, performance-oriented approach’.

One of the alternative ways of assessing and teaching is the notion of implementing formative assessment in different contexts. Incorporating various techniques, formative assessment can enhance teaching and learning by providing a more focused application for learners. Formative assessment also known as ‘assessment for learning’ is a crucial component of effective instruction. According to Knight (2009), when students explicitly comprehend their learning objectives, and their progress toward those learning objectives, they are more stimulated. Furthermore, when teachers obviously comprehend how well their students are learning content; they can make better decisions about how to distinguish and rate learning experiences in the classroom.

Keeping all this in mind, the purpose of this paper is to find out whether and to what extent formative assessment can contribute to foreign language learning, particularly the vocabulary learning process in the Armenian EFL setting. In the first part of the research paper, a brief description of the issues related to the use of formative assessment in language learning, particularly vocabulary learning, is presented to justify the topic. Further, a research question is posed which is turned into a hypothesis. The second part gives a through overview of the issues under study: it introduces the setting and intended participants of the study, research design and procedure of data collection. Further, interpretation of the findings is illustrated in an attempt to provide a possible answer to the research questions. Finally, conclusion presents the summary of the findings of the study, delimitations, implications, applications as well as recommendations for further research.

## **1.1 Statement of the Problem**

On going through review of literature related to EFL teaching and learning, we decided to focus on vocabulary learning, more specifically on the impact of formative assessment on vocabulary enhancement.

From literature review it became apparent that vocabulary is of crucial importance in EFL; however its learning seems for learners as being both demanding and time-consuming. Many language teachers and linguists now recognize the importance of vocabulary learning and consider ways of promoting it more proficiently. Hence, as Read (2000) claims, from different points of view, vocabulary can be seen as an area in language teaching, needing tests to examine learners' progress in vocabulary learning and to assess how adequate their vocabulary knowledge is in order to meet their communicative needs. Hence, it is appealing to examine whether the use of assessment, namely formative assessment can enhance vocabulary learning process. In our thesis we shall try to shed light on the issue of whether the use of formative assessment can help make the vocabulary learning process more effective in Armenian EFL environment.

## **1.2 Significance of the Study**

The current study is significant for several reasons. First, as a central area in language teaching, vocabulary needs tests to observe learners' progress in (vocabulary) learning and to assess how sufficient their vocabulary knowledge is to meet their communicative needs. Second, we will try to show that students will have the opportunity to become more motivated while implementing ongoing formative assessment in their vocabulary learning process. Third, it will be a great help for EFL instructors to have a

support to apply formative assessment in learning vocabulary to make the learning process effective and comprehensible.

The topic is worth researching as the use of formative assessment needs some further investigation before being included in the teaching process of target vocabulary. Our study aims to examine the above mentioned issues and insights with reference to the Armenian EFL setting, particularly at Experimental English Classes (EEC) classes at the American University of Armenia (AUA).

### **1.3 Research Questions**

The research questions addressed in the current study were as follows:

1. *What is the impact of the use of formative assessment on vocabulary enhancement in the EFL classroom?*
2. *What are the students' attitudes towards using formative assessment in the vocabulary learning process?*

### **1.4 The Structure of the Thesis**

The thesis integrated four more chapters:

Chapter 2 reviews the relevant literature on teaching and learning vocabulary, the approaches to vocabulary learning processes, the theoretical background of assessment, assessment for learning and its implications for EFL vocabulary enhancement.

Chapter 3 describes the process of conducting the current research: presents an overview of the participants and the setting of the study, the instruments of data collection, the procedures employed, and the analysis of the collected data.

Chapter 4 presents and analyses the quantitative and qualitative data collected to provide an answer to the research questions.

Chapter 5 summarizes the findings, illustrates the answers to the research questions and presents the main limitations and implications of the study. It also provides suggestions for further research.

## **Chapter Two: Review of Literature**

The purpose of this study is to investigate the impact of formative assessment on learners' vocabulary enhancement in an EFL (English as a foreign language) setting. This chapter introduces the review of literature related to the present study. First, it will present the historical overview of teaching and learning vocabulary, taking into account the viewpoints of various linguists. It will also describe briefly the approaches to vocabulary learning processes. Then, it will define the concept of assessment and its role in language teaching/learning, leaning on the viewpoints of many pioneers and experts in the field. It will also explore the distinction between formative and summative assessment. Finally, theory and research supporting the use of formative assessment and its implications for EFL vocabulary enhancement will be presented.

### **2.1 Historical Overview of Teaching and Learning Vocabulary**

Reviewing the literature on the history of vocabulary of foreign language teaching, it becomes clear that vocabulary has been treated differently throughout the periods of different approaches. Despite the fact that vocabulary teaching and learning has been central in both teaching and learning processes, there were periods when this vital area of teaching was virtually neglected (Celce-Murcia, 2001).

The proponents of structural linguistics, particularly Charles Fries (1945, cited in Celce-Murcia, 2001), held the view that grammar was the very starting point of the language learning process. Advocating behaviorists' viewpoint, Fries considered language learning as a process of developing a set of habits through drilling. As far as much emphasis was put on grammatical and phonological structures of a language, the introduced vocabulary was rather simple.

In the 1960s, Chomsky, developing a theory called transformational-generative grammar, rejected viewpoints of both behaviorists and structuralists. The proponents of this approach claimed that language learning was a mental process rather than a process of developing habits (Nunan, 2003). In contrast to behaviorism and structural linguistics, generative linguistics paid more attention to vocabulary. However, putting much emphasis on grammar rules, generative linguistics did not consider vocabulary as the starting point of language learning either.

During the 1970s Hymes, one of prominent linguists in the field, looked at a language from another perspective. He did not view a language as a set of grammatical, phonological, lexical rules; rather, he viewed language as the very tool through which meaningful communication could be carried out. In this approach however, as in the previous ones, vocabulary was given secondary importance (Celce-Murcia, 2001).

In the last twenty years, there has been a shift of interest in vocabulary teaching and learning processes. With the emergence of the communicative approach it has become one of the broadly discussed issues in the theories of language learning (Coady & Huckin, 1997, cited in Farhady, 2006). Therefore, different techniques of vocabulary instruction and strategies that help students learn vocabulary have become the subject of research for some time.

Our everyday concept of vocabulary is determined by the dictionary. We are inclined to think of it as an inventory of individual words, with their connected meanings (Read, 2000). Thus, generally defined, 'vocabulary is knowledge of words and word meanings' (Lehr, 2004, p. 1). However, as Kamil and Hiebert (2005) state, vocabulary is more complex than this definition suggests. As Stahl (2005, p. 2) puts it, 'Vocabulary

knowledge is knowledge; the knowledge of a word not only implies a definition, but also implies how that word fits into the world'. Vocabulary knowledge is not something that can ever be completely mastered; it is something that increases and deepens over the course of a lifetime. Instruction in vocabulary includes far more than looking up words in a dictionary and applying the words in a sentence. Vocabulary is acquired incidentally through indirect exposure to words and intentionally through explicit instruction in specific words and word-learning strategies (Stahl, 2005).

Nowadays, vocabulary teaching is central to language and of critical importance to EFL language learners (Zimmerman, 1997). Many linguists, among them Coady and Huckin (1997), have come to an agreement that the success of communication lies at the centre of good command of vocabulary. Thornbury (2002) cites linguist David Wilkins who claims that 'without grammar very little can be conveyed, without vocabulary nothing can be conveyed'. Hence, vocabulary is the flesh of a language whereas grammar is the skeleton. In order to be able to use the language productively, students must know certain amount of vocabulary, not only for communicating orally, but also in writing.

Nation (2005) claims that 'vocabulary knowledge enables language use, language use enables the increase of vocabulary knowledge, knowledge of the world enables the increase of vocabulary knowledge and language use and so on'. This contextualized approach to learning vocabulary can definitely help students increase their vocabulary through authentic interaction.

According to Laufer (1997), among the components of language, vocabulary learning is a language component that has been the study matter of many linguists for many years. Probably, one of the main reasons for this is that many scholars consider that



vocabulary learning is at the heart of language learning and language use. In fact, it is what makes the essence of a language. Hence, as Laufer (1986, cited in Farhady, 2006) claims: ‘without sufficient vocabulary knowledge speakers cannot convey meaning and communicate with each other in a particular language’.

## **2.2 Depth and Breadth of Vocabulary Knowledge**

Vocabulary learning may be viewed in two dimensions, breadth and depth (Qian, 2002; Read, 1988; Wesche & Paribakht, 1996). Breadth of vocabulary knowledge refers to the amount of words one has at least superficial knowledge of (i.e., one’s vocabulary size) and may be computed in terms of recognition, production or recall of vocabulary items. As to depth of vocabulary knowledge, it refers to how well one knows a word. Nation (2001) provides a framework for illustrating aspects of word knowledge connected with vocabulary learning, including form, meaning and use in receptive—reading and listening— as well as productive — writing and speaking—contexts. Although both breadth and depth of vocabulary knowledge are considered to be central to improving reading comprehension, breadth has attracted more attention than depth in L2 empirical studies (Qian, 2002; Read, 1993, cited in Matsuoka & Hirsh, 2010). An aim of the current study is to investigate opportunities for promoting both depth and breadth of vocabulary knowledge.

## **2.3 Approaches to Vocabulary Learning Processes**

Michael Graves (2000) identifies four components of an effective vocabulary program:

- wide or extensive independent reading to expand word knowledge

- instruction in specific words to enhance comprehension of texts containing those words
- instruction in independent word-learning strategies
- word consciousness and word-play activities to motivate and enhance learning

For a long time there was a debate among linguists in terms of whether vocabulary is acquired effectively through implicit or explicit learning (Celce-Murcia, 2001).

### **2.3.1 Explicit Vocabulary Learning**

In explicit vocabulary learning, words are acquired through context. The proponents of this approach suggest that learners need some instructions, which would mainly include strategies that can make the vocabulary learning process more productive. Celce-Mucia (2001) claims that the role of explicit vocabulary learning is of paramount importance, particularly at the beginning level. The reason that she brings to support her viewpoint is that, initially, learners should be given explicit and clear instructions. She claims that after a certain period of time the vocabulary learning process becomes incidental.

There are two approaches within the explicit vocabulary learning: explicit instruction and strategy instruction. The first approach, called explicit instruction, suggests that learners should be taught vocabulary explicitly. In other words, instructions used during the vocabulary teaching process should be clear and precise. (Coady, 1993; Nation, 2001).

The second approach is called strategy instruction. It suggests that the vocabulary learning process can become much more efficient when appropriate strategies are implemented during the vocabulary learning process (Cohen, 1998; Cohen, Weaver, & Li, 1997). Among the strategies that the advocates of this approach suggest we can mention

word grouping, word association, and imagery, all of which are considered to be the subcategories of memory strategies.

### **2.3.2 Implicit Vocabulary Learning**

In implicit vocabulary learning the target words are acquired through repetition in different language contexts. Implicit vocabulary learning aims to develop learners' recognition rather than production abilities (Paribakht & Wesche, 1997). Thus, it becomes obvious that implicit vocabulary learning develops receptive rather than productive knowledge of the learner (Nunan, 2003). The advocates of this approach claim that such communicative activities as reading and listening can serve as a good means of learning vocabulary (Hulstijn, 2003). Krashen (1993) is among the authors who support implicit vocabulary learning. He claims that vocabulary can be acquired through reading when it (reading) is appropriate to the proficiency levels of the learners. Another view that supports implicit vocabulary learning is suggested by Nagy, Herman and Anderson (1985). According to them, vocabulary is best learnt through reading, mentioning that the vocabulary acquired through this skill is learned incidentally. Nagy and Herman (1987) discovered that new words representing known concepts were more easily learned incidentally during independent reading than words that were more theoretically difficult. In another study, Swanburn and de Glopper (1999) found that middle level and secondary readers acquire partial understanding of approximately 15% of the unfamiliar words they encounter while reading. Matsuoka and Hirsh (2010) believe that there is a strong connection between vocabulary knowledge and reading comprehension. Furthermore, Coady, Magoto, Hubbard, Graney and Mokhtari (1993) found that an increase in L2 reading proficiency can be attributed to increased proficiency in vocabulary. These studies

support extensive reading as a significant part in a comprehensive vocabulary program. Thus, reading extensively and regularly is not only correlated to school achievement but also to vocabulary acquisition.

Much of the vocabulary acquisition research has centered on reading as the major measure of success. There have been a number of studies concerning learning vocabulary through reading (e.g., Kim, 2006; Pulido, 2007); on the other hand learning vocabulary through listening is also a promising source of vocabulary acquisition. For instance, some researchers have shown that students learn vocabulary through listening to stories or lectures (Brett, Rothlein & Hurley, 1996; Elley, 1989). The two studies conducted by Brett, Rothlein and Hurley (1996); and Elley (1989) demonstrate that learners studying their foreign language are able, through listening, to acquire target vocabulary with minimal repetition even when teachers do not stop to explain the meanings of words; when teachers stop and explain meanings, acquisition raises noticeably. Moreover, Vidal (2003) reveals that listening to academic lectures in English can be considered central in vocabulary acquisition. Cohen (2008) believes that identifying new words and learning their meaning while listening is a naturally occurring aspect of language acquisition. Thus, it is reasonable to expect that, if vocabulary is taught as a part of listening comprehension, it will significantly improve the vocabulary acquisition of foreign language learners primarily exposed to teaching methods based on reading. It should be noted that listening comprehension activities provide students with the aural component of the target language to help them better hear the intricate sounds, pronunciation, and content, and develop their abilities to communicate with others in a target language (Cohen, 2008).

Taking into consideration the above-mentioned arguments, in this research, the focus will be only on the implicit approach, as an approach that contributes to the vocabulary learning process. Hence, for research purposes, the focus will be on vocabulary teaching/learning through receptive skills, namely reading and listening skills.

Many research studies reveal that knowledge of vocabulary is of utmost importance for EFL/ESL learners. Learning vocabulary is an ongoing process that takes time and practice. Although it seems easy to learn vocabulary, language learners face a serious problem trying to remember a vast amount of vocabulary which is necessary for fluency achievement. Therefore, different techniques of vocabulary instruction, vocabulary learning strategies and different teaching/learning ‘tools’ that help students learn vocabulary have become the subject of research.

Despite the fact that there is a great deal of research carried out to investigate the techniques of vocabulary instruction and the ways of using learning strategies in vocabulary learning process, there is little research investigating the use of assessment, particularly the application of formative assessment as a ‘tool’ in vocabulary enhancement. As Read (2000) claims, the study of vocabulary is a flourishing area in language teaching which is creating a need for new approaches to vocabulary assessment. Hence, there is a need to investigate the use of formative assessment applied to vocabulary and the impact it may have on vocabulary enhancement. This thesis will try to shed light on the issue of whether the use of formative assessment can enhance vocabulary learning in the EFL setting.

Before considering the influence formative assessment may have on vocabulary enhancement, it is necessary to explore the nature of assessment itself: to discuss the history

of assessment, its development through the years as well as the distinction between its two functions.

#### **2.4 Assessment in Language Teaching and Learning**

Traditionally, teachers have used assessment - the final exam, the unannounced pop quiz, and the threat of low or failing report card grades – to stimulate students. To maximize learning, teachers have believed, maximize anxiety. Assessment has served as the great intimidator. Pressure to get high scores and good grades, it has been believed, boosts greater effort and thus more learning (Stiggins, 2005).

The latest change in the mission of teaching has changed this traditional view of the relationship between assessment and motivation (Stiggins, 2005). Within the last few decades, assessment has witnessed a great shift from ‘a discrete-point component-based perspective to a task-based, performance-oriented approach’. Accordingly, the traditional psychometric procedures are no longer as valid as principles of self- and peer-assessment or formative criterion-referenced assessment (Alderson, 2002; Bachman, 2002, cited in Farhady, 2006).

Generally, assessment is considered to be a key element in the overall quality of teaching and learning (Heritage, Kim, Vendlinski, & Herman, 2008). Assessment in education entails the many processes included in order to accomplish educational aims and objectives (Onjewu, 2006).

Different types of language assessments are broadly applied by teachers and educators in the real world to gather information that is used to make decisions about learners. These applications of language assessments and the decisions that are made have consequences for stakeholders - the individuals, programs, institutions and organizations –

that will be influenced by the assessment and the decisions made (Bachman, 2010). In our field, the terms ‘evaluation’, ‘test’, ‘measurement’ and ‘assessment’ are commonly used to refer to more or less the same activity: gathering information (Bachman, 2010). Some clear distinctions, however, should be made among these terms. Evaluation is perhaps the most complex and widest of the terms. Bachman (2004) describes evaluation as ‘one possible use of assessment’: evaluation includes making value judgments and decisions based on the information, and collecting information to inform such decisions in the primary purpose for which language assessments are implemented. We generally use assessment for evaluation in educational programs, where we may use assessment to determine students’ area of strength and weakness to assist them to make decision to improve their learning and to choose individuals into programs. Overton (2010) defines test as an instrument used to identify a student's ability to complete tasks or show mastery of a skill or knowledge of content. Some types would be multiple choice tests, or a weekly spelling test. While it is commonly used interchangeably with assessment, or even evaluation, it can be distinguished by the fact that a test is one form of an assessment. Measurement, beyond its general definition, refers to the set of procedures and the principles for how to implement the procedures in educational tests and assessments. Some of the basic principles of measurement in educational evaluations would be raw scores, percentile ranks, derived scores, standard scores, etc. (Overton, 2010).

From this literature review, it becomes apparent that assessment is a ‘chameleon’ concept that has been given many definitions (Onjewu, 2006). One definition provided is that of Okoye (2005) cited in Onjewu (2006). He states that assessment encompasses all the processes and the products that illustrate the essence and extent of learning, its degree of

correspondence with the aim and objectives of teaching and the relationship with the environment intended to assist learning. Another definition is provided by Urevbu (1991), who claims that ‘Assessment deals with how well a student or group of students have learned a particular set of skills or kind of knowledge’. William and Black (1996) define assessment as a process that attempts to provide evidence concerning students’ performance (achievements), which when interpreted helps the assessors to take measures for further improvements.

The Introduction to the Primary School Curriculum (1999) identifies assessment as being fundamental in the process of teaching and learning and emphasizes the significance of assessing the process of learning as well as the product. It states that assessment is implemented to examine learning processes and to determine achievement in each area of the curriculum. Through assessment the teacher constructs a clear picture of the short-term and long-term needs of the student and thus plans further work. Furthermore, assessment supports communication about students’ progress and development between teacher and student, between teacher and parent and between teacher and teacher (Primary School Curriculum, 1999).

As Garrison and Ehringhaus (2007) claim, assessment is a very large topic that integrates everything from ‘statewide accountability tests to district benchmark or interim tests to everyday classroom tests. ’Well-designed assessment establishes apparent assumptions, sets a sensible workload (one that does not drive students into ‘rote reproductive methods’ to study), and gives students opportunities to self-monitor, review, practice and get feedback (James, McInnis, & Devlin, 2002).



Taking all the above-mentioned into account and supporting the viewpoint of Angelo (1995), it may be stated that assessment is a continuing process intended at comprehending and improving the learning process. Being at the very heart of teaching and learning, assessment enables teachers to make assumptions precise and public; establish suitable criteria and high standards for learning quality; regularly collect, analyze and interpret evidence to identify how well performance goes with those expectations and standards; and apply the resulting information to document, explain, and improve performance (Angelo, 1995).

## **2.5 Summative vs. Formative Assessment**

An important distinction of assessment is how the assessment procedures should be used, i.e. the function of assessment (Brown, 2004). Two terms are frequently used in classifying assessment functions: *summative assessment* in contrast to *formative assessment*.

Mantz Yorke (2003) defines summative assessment as evaluation of the extent to which students meet the course's objectives through a midterm or final examination. Summative assessment has been contrasted with the formative one, which has its roots in the field of program evaluation (Nichols P. et al, 2008). Scriven (1967, p. 7) argues that 'all assessments can be summative (i.e., have the potential to serve a summative function), but only some have the additional capability of serving formative functions.'

Garrison and Ehringhaus (2007) state that summative assessments are given occasionally to identify at a particular point in time what students know and do not know. Yet, summative assessments should not be associated only with standardized tests such as state assessments, but they are also used at and are an important part of district and

classroom programs. Summative assessment at the district and classroom level is an accountability measure that is usually implemented as part of the grading process. The list is long, but here are some examples of summative assessments provided by Garrison and Ehringhaus (2007): state assessments, district benchmark or interim assessments, end-of-unit or chapter tests, end-of-term or semester exams, final projects, scores that are used for accountability of schools (AYP) and students (report card grades), etc.

Summative assessment should be seen as a means to measure, at a particular point in time, student learning relative to content standards. Though the information collected from this type of assessment is essential, it can only help in assessing some aspects of the learning process. As they are spread out and occur after instruction every few weeks, months, or once a year, summative assessments are tools to help evaluate the effectiveness of programs, school improvement goals or alignment of curriculum. Summative assessments happen too far down the learning path to provide information at the classroom level and to make instructional adjustments and interventions during the learning process. It takes formative assessment to accomplish this.

Briefly put, summative assessment gives a summary judgment about the learning achieved after some period of time. It aims to inform external audiences primarily for certification and accountability purposes (see Table 1); nevertheless it has been used to improve teaching and learning (Wood & Schmidt, 2002).

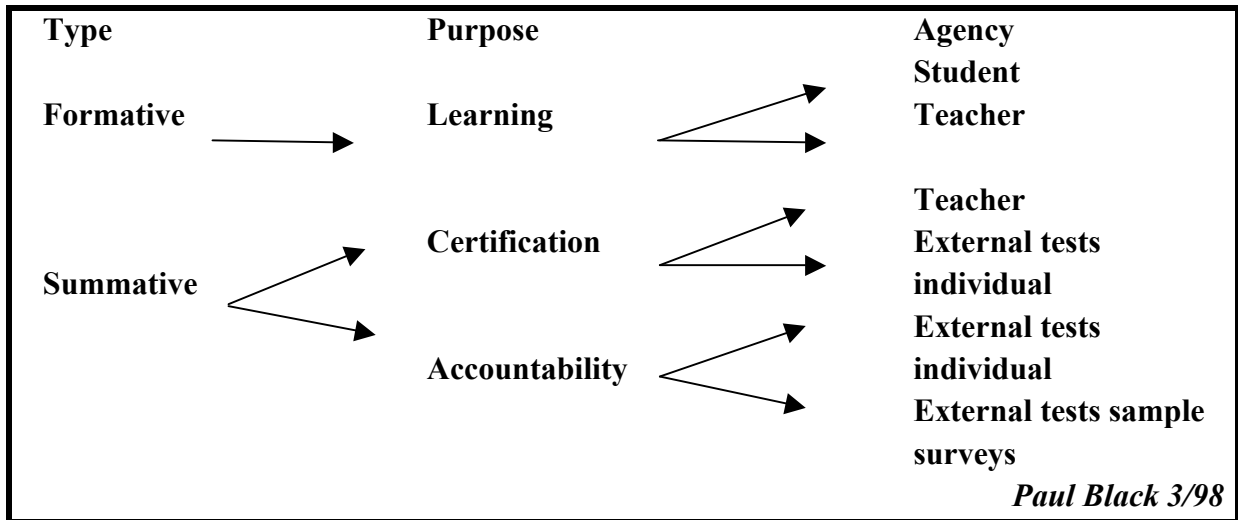
Summative assessment is typically described as ‘assessment of education’ whereas formative assessment is known as ‘assessment for education’. Consequently, many researchers and experts in the field identify ‘assessment of learning’ and ‘assessment for learning’ (Black & William, 1988; Arter, 2003).

As mentioned above, ‘assessment of learning’ implies looking back and identifying to what extent the learner has accomplished objectives, however, it does not necessarily show the way to future progress (Brown, 2004). As to ‘assessment for learning’, it aims to evaluate learners in the process of forming their competences and skills’ in order to assist them to continue that growth process. The key in this kind of assessment is the delivery (provided by the teacher) and internalization (applied by the learners) of relevant feedback on performance, with an intent towards the future progression of learning (Brown, 2004).

Formative assessment has been considered to be an integral part of good teaching for a long time (Shepard, 2005). According to Black, William (1998) and Shavelson (2003), formative assessment collects and utilizes information about students’ knowledge and performance to close the gap between students’ current learning state and the desired state via pedagogical actions. Garrison and Ehringhaus (2007) believe that when implemented into classroom practice, formative assessment provides the information necessary to adjust teaching and learning while they are happening. In this sense, formative assessment informs both teachers and students about student understanding at a point when timely adjustments should be made. These adjustments assist to ensure students achieve targeted standards-based learning goals within a set time frame. Although formative assessment strategies appear in a variety of formats, there are some distinct ways to distinguish them from summative assessments. Overall, it can be stated that formative assessment is part of the instructional process. When applied into classroom practice, it gives the information needed to adjust teaching and learning while they are happening (see Table1). There is a large range of formative assessment methods available. Types of formative assessment involve informal observation, worksheets, pop quizzes, journals, diagnostic tests, analysis of

student work, including tests, quizzes, homework, portfolios and collections of students' work. The above mentioned type of formative assessment enable educators supervise and update classroom instruction, and these types of assessments are not used in the grade point average of the student (Airasin, 2008).

**Table 1.1 Functions of formative and summative assessment**



As Stern (2010) states, both types of assessment have a strong impact on the learning processes. Summative assessment should be absolutely objective, valid and reliable, so as not to be unfair and perhaps discriminatory. Because of its sometimes radical consequences ('high stakes') it is in eternal danger of entailing strategies of 'teaching and learning to the test' instead of better comprehending. On the other hand formative assessment, especially if it is incorporated into the teaching and learning process and thus constantly provides information for feedback, has been proven to be a most influential didactical means to improve learning results (Black & William, 1998).

## **2.6 The Purpose and Benefits of Formative Assessment**

Formative assessment, also known as assessment for learning, has been around for a long time. Educators have used some aspect of formative assessment for decades, however

only over the last 15 years have the true benefits been realized and great emphasis put on its application into classroom. Thus, over the past several years, a growing emphasis on the application of formative assessment has emerged (Black & William, 1998; Leung & Mohan, 2004). The topic of formative assessment has been broadly reviewed by Black and William (1998). Black and William (1998a) conducted a broad research review of 250 journal articles and book chapters winnowed from a much larger pool to find out whether formative assessment raises academic standards in the classroom. Looking across the evolution of the term 'formative assessment', the common thread is that a formative assessment is defined by more than the assessment itself. Definitions given to formative assessment by different scholars abound. Black and William (1998b) define assessment broadly 'to include all those activities undertaken by teachers, and by their students in assessing themselves, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged.' Under this definition, assessment encompasses teacher observation, classroom discussion, and analysis of student work, including homework and tests. Hence, assessments become formative when the information is used to adapt teaching and learning to meet student needs. FAST (Formative Assessment for Students and Teachers) defines formative assessment as a process used during instruction to give feedback for the modification of constant teaching and learning with the aim to improve student achievement related to instructional objectives (Melmer, Burmaster, & James, 2008). According to Sadler (1998, p. 12) 'formative assessment refers to assessment which is specifically intended to provide feedback on performance to improve and accelerate learning.' Boston (2002, p. 12) defines it as 'Diagnostic use of assessment to provide feedback to teachers and students over the course of instruction.' MacCallum (2000)

defines an assessment as formative only when comparison of actual and reference levels yields information which is then used to alter the gap. Brookhart (2004) attempts to answer the question 'what is formative assessment?' in a single sentence when she writes, 'formative classroom assessment provides teachers information for instructional decisions and gives pupils information for improvement.

Department of Education and Skills (2006, p. 5) -2010 Vision: Report of the Teaching and Learning in 2020 Review Group, states:

*... Formative assessment has become a more important and sharper tool. It is not an infrequent activity at the end of a work, but a complex, joint activity between teacher and students. It helps teachers to determine what students have or have not achieved, while students increase their understanding of the standard expected, their progress towards it and what they need to do to reach it. All this, of course, provides information to help teachers adjust their teaching (Department of Education and Skills, 2006).*

Finally, according to Popham (2006, p. 9):

*'Assessment is formative to the extent that information from the assessment is used, during the instructional segment in which the assessment occurred, to adjust instruction with the intent of better meeting the needs of the students assessed'.*

As the definitions suggest, formative assessments are aimed at supporting learning and assist target instruction through feedback that informs teachers about student progress toward valued learning goals. Such assessments can help educators gauge learning outcomes or identify learning gains over short periods of time, rather than just after a year of instruction (Black and William, 1998). They may be applied both to illustrate student learning and to assess instructional methods. As formative assessments intend to improve

instruction, they are inclined to target specific, delicately grained learning goals rather than wide academic standards (Shepard et al., 2005). Based on a seminal article by Black and William (1998), ‘the term formative assessment does not merely signify how data are used, but also refers to a family of related assessment processes.’

Overall, it can be stated that formative assessment is part of the instructional process. When applied into classroom practice, it gives the information needed to adjust teaching and learning while they are happening. For the purposes of the current study, a formative assessment is any assessment that is deliberately and intentionally connected to instruction, can provide diagnostic information about students, and is not aimed at assigning summative or end-of-course grades.

Assessment for learning is any assessment which in its design and practice pursues the goal to encourage pupils’ learning. It, therefore, differs from assessment designed mainly to serve the purposes of accountability, or of ranking, or of certifying competence. An assessment activity can assist learning if it gives information to be used as feedback, by teachers, and by their pupils, in assessing themselves and each other, to adjust the teaching and learning activities in which they are involved (Black and William, 1998).

In order to try to describe the different uses of the term formative assessment, William and Thompson (2007) proposed the typology of formative assessment shown in Table 2. The research base reveals that short- and medium-cycle formative assessments improve student achievement more than long-cycle formative assessments (such as benchmark or interim tests).

**Table 1.2 Typology of Kinds of Formative Assessment**

<i>Type</i>	<i>Focus</i>	<i>Length</i>
Long-cycle	Across marking periods, quarters, semesters, years	4 weeks – 1 year
Medium-cycle	Within and between instructional units	1 - 4 weeks
Short-cycle: day-by-day minute-by-minute	Within and between lessons	24 - 48 hours 5 sec - 2 hours

It is also significant to be clear about what, exactly, comprises formative assessment. Early work put emphasis on the role of feedback and particularly what types of feedback would promote learning. Nevertheless, as researchers and teachers cooperated to apply these ideas in classrooms, it became obvious that effective implementation of formative assessment included much more important changes to the types of information gathered from, and the types of feedback given to, students (Black et al. 2003). As a result of extensive interviews with, and observations of teachers applying formative assessment in their classrooms, Black and William (2005) proposed that productive use of formative assessment demanded changes in the role of the teacher, changes in the role of the student, changes in the nature of student-teacher interaction, and changes in the relationship among the teacher, the student, and the subject discipline.

In order to provide a comprehensive framework for formative assessment, William and Thompson (2007) proposed that three processes were fundamental:

- Determining where learners are in their learning
- Determining where they are going



- Determining how to get there

By considering separately the role of the teacher, the student, and the student's peers, William and Thompson (2007) proposed that formative assessment could be built up of three "key strategies" as shown in Table 3. Each of the three strategies is discussed in an accompanying brief.

**Table 1.3 Aspects of assessment for learning**

	<i>Where the learner is going</i>	<i>Where the learner is right now</i>	<i>How to get there</i>
Teacher	Clarifying and sharing learning intentions and criteria for success	Engineering effective classroom discussions, questions, activities, and tasks that elicit evidence of learning	Providing feedback that moves learners forward
Peer	Understanding and sharing learning intentions and criteria for success	Activating students as instructional resources for one another	Activating students as instructional resources for one another
Learner	Understanding learning intentions and criteria for success	Activating students as the owners of their own learning	Activating students as the owners of their own learning

Reviewing the literature on formative assessment in language teaching/learning and taking into account the viewpoints of the experts in the field (Chappuis & Chappuis, 2007; William and Black, 1998; Izard & Jeffery, 2003; Angelo, 1995), the table (Table 4) below presents the advantages and disadvantages of formative assessment.

**Table 1.4 Advantages and disadvantages of formative Assessment**

<i>Advantages of formative Assessment</i>	<i>Disadvantages of formative Assessment</i>
<p><b>Continuous Improvement.</b> Formative assessment is ongoing - continuous. This allows for incremental feedback to determine problems at their earliest stages (Chappuis&amp;Chappuis, 2007).</p>	<p><b>Labor Intensive.</b> Productive formative assessment may be difficult to attain at scale. It may be unfeasible to give detailed descriptive feedback for each student in a large class (William and Black, 1998).</p>
<p><b>Flexibility.</b> Formative assessments do not have a designated time at which to be implemented. This flexibility lets teachers to modify their lessons and assessments to the needs of their students (Chappuis&amp;Chappuis, 2007).</p>	<p><b>Lack of Motivation.</b> It may be difficult to motivate students' performance on low stake assignments (Izard &amp;Jeffery, 2003).</p>
<p><b>Easy to Implement.</b> Because of their flexibility, formative assessments are quite easy to apply. They can be as large or small, in-depth or general, as needed. This reduces teacher preparation time as well as time spent on grading (William &amp; Black,1998).</p>	<p><b>Time Consuming.</b> Even with a smaller number of students to deal with, formative assessment is time-consuming as it demands important, constant enthusiasm and attempt from the teacher to sustain (Izard &amp;Jeffery, 2003).</p>

<p><b><i>Checks for Understanding.</i></b> Formative assessment can take many forms. Nevertheless, in any form, it is an assessment of understanding. Applying many formative assessments as the class moves through material enables a teacher to grasp and solve any misconceptions the class or individual students may face (Chappuis&amp;Chappuis, 2007).</p>	<p><b><i>Accountability.</i></b> The layered accountability chain in education - student to teacher, teacher to school, school to district, etc. - produces systemic pressure for student performance to be objectively and relatively assessable at each level. Formative assessment, by its definition, does not easily provide that type of accountability (Angelo, 1995).</p>
<p><b><i>Assesses Teacher.</i></b> Formative assessments give teachers opportunities to assess their own performance. The results of the assessments can disclose weaknesses or strengths in the delivery of instruction (Chappuis&amp;Chappuis, 2007).</p>	

Having both advantages and disadvantages, formative assessment is a crucial component of effective instruction (Angelo, 1995; William& Black, 1998; &Knight, 2009). When students explicitly comprehend their learning objectives and their progress toward those learning objectives, they are more stimulated. Furthermore, when teachers clearly comprehend how well their students are learning content; they can make better decisions about how to distinguish and rate learning experiences in the classroom (Knight, 2009).

## **2.7 Elements Involved in Formative Assessment Practice: Formative Assessment Techniques**

Formative assessments provide information that can be utilized to improve course content, methods of teaching and student learning. Assessment for learning can take many different forms in the classroom. There exist a number of ways - elements, strategies and techniques - for effective implementation of formative assessment.

Formative Assessment Classroom Techniques, also known as FACTs, are formative evaluation methods that serve two purposes. They can help you to assess the degree to which your students understand the course content and they can provide you with information about the effectiveness of your teaching methods. Most are designed to be quick and easy to use and each FACT provides different kinds of information (Haugen, 1999).

Formative assessment techniques can be implemented at regular periods throughout the course: after each class or each unit, weekly, daily, etc. Haugen (1999) believes that these techniques are most effective when they are implemented frequently and the information is used to effect immediate adjustments in the day-to-day operations of the course. According to Keeley (2008, p.4), 'FACTs can be used to spark students' interest, surface ideas, initiate an inquiry, and encourage classroom discourse—all assessment strategies that promote learning rather than measure and report learning.' There exist a great number of FACTs for effective application of formative assessment. A rich repertoire of FACTs, as Keenley (2008) claims, enables learners to interact with assessment in multiple ways—through writing, drawing, speaking, listening, reading, physically moving, and designing and carrying out investigations. Angelo and Cross (1993) provide a list of the

various FACTs, which differ in complexity and the time they take to prepare, administer, and analyze. FACTs also differ in usage, based on instructional needs; nevertheless, a few of the most frequently mentioned FACTs (applied during the research) in the literature include:

### ***One- Minute Paper***

A one-minute writing assignment asks students to answer shortly in writing to some variation of the following two questions: What was the most important thing you learned during this class (today)? What important question remains unanswered? (Or, what are you still confused about?) This technique allows the instructors to assess the match between their instructional goals and students' perceptions of these goals and their own learning. Moreover, because the instructor knows what students perceive their own learning problems to be, the likelihood that the students will get answers to those questions during the next class period is enhanced (Angelo & Cross, 1993). The task asks students to assess information and to employ in recall. It is sufficient for the instructor simply to tabulate the responses, making note of any especially useful comments.

### ***One-Sentence Summary***

This technique of formative assessment requires the instructor to ask students to answer the questions about a given topic: *Who does what to whom, when, where, how and why?* (to summarize a story plot, reading or listening passage, an event, etc.) Then the student is asked to transform the responses to those questions into a single sentence. This technique enables the instructor to measure the extent to which students can summarize a large amount of information briefly and totally (including the target vocabulary structures). Students should think creatively about the content learned. Students develop the ability to

concentrate information into smaller, interrelated bits that are more easily processed and recalled.

### ***Participation***

Black and William (1998b) advise teachers to apply questioning and classroom discussion as an opportunity to boost their learners' knowledge and enhance understanding. However, they warn that teachers need to ask thoughtful, reflective questions rather than simple, factual ones and then give students adequate time to answer. Hence, teachers can assess students by monitoring their participation during class activities. Students who answer questions during class discussion, work thoroughly during group activities, volunteer for particular tasks and ask questions during instruction all are displaying their level of comprehending. You can constantly evaluate their answers to find out just how high that level of comprehending is. For students who are not enthusiastically involved in the learning process, you can 'cold call' to see how well they comprehend the material. This type of assessment is informal and should neither pressure students to come up with the correct answer, nor de-motivate them from participating (Boston, 2002).

### ***Observation***

Since the purpose of formative assessment is to achieve an understanding of what students know (and don't know) to make productive changes in teaching and learning, techniques including teacher observations are considered to play an important role alongside with analysis of tests and homework (Boston, 2002). Observational techniques enable instructors to evaluate their students during group or independent work. Boston (2002) states that like participation evaluation, observation assessment is informal and should only serve as a way to measure how well students comprehend course material. The

instructor should circulate the room and observe students' progress. If they are working in groups, the instructor should evaluate which students are participating and understanding the assignment and which groups are confused. If students are working independently, he/she should observe who is working carefully and who has difficulties with the assigned task.

### ***Quizzes and Tests***

Apart from the above-mentioned classroom techniques, tests, quizzes and homework can be used formatively if teachers analyze where students are in their learning and provide specific, focused feedback regarding performance and ways to improve it (Boston, 2002).

Quizzes are more formal evaluations of students' learning. You can quiz students on a reading assignment they were assigned for homework, or at various checkpoints throughout a unit. Quizzes should be given at the end of a particular section of learning to reveal how well students comprehend the material, but they also can be used to identify whether students are ready to move on to new material (Black and William, 1998b).

Tests are usually larger evaluations given at the end of a particular unit. Teachers can choose what form their tests will take: cloze tests, C-tests, multiple-choice, gap-filling, matching, true/false, essay response, performance or project. Tests such as multiple-choice, gap-filling, matching, true/false, cloze tests, C-tests and essay response are individual assessments that show how well students have learned the unit taught. Tests such as performances or projects can be completed individually or in groups and offer a change from the standard question-response exam. Both tests and quizzes can be either from textbooks or developed by the teacher. Used correctly they can become an integral part of

everyday teaching and learning. Black and William (1998b) make the following recommendations:

- Use frequent short tests rather than infrequent long ones
- Check new learning within about a week of first exposure
- Be aware of the quality of test items and cooperate with other teachers and

outside sources to collect good ones.

### ***Self- and Peer-Assessment***

Black and William (1998b) emphasize peer- and self-assessment as central techniques: 'If formative assessment is to be productive, students should be trained in peer- and self-assessment so that they can understand the basic purposes of learning and thereby grasp what is to be achieved.' The basic idea behind self- and peer- assessment is to provide mechanisms which help students to evaluate themselves and their work more critically. An ability to assess one's own strengths and weaknesses is an essential life-skill that facilitates personal development whether in study or in the workplace.

### ***Self-Assessment***

Self-assessment compels students more enthusiastically and properly to assess themselves and may increase self-awareness and better comprehension of learning outcomes (Miller, 2002). Students can become better language learners when they engage in deliberate thought about what they are learning and how they are learning it. In this kind of reflection, students step back from the learning process to think about their language learning strategies and their progress as language learners. Such self-assessment encourages students to become independent learners and can increase their motivation. Oscarsson



(1989), a renowned scholar in the field of self-assessment, provides different reasons why self-assessment can be valuable to language learning:

- It provides students and teachers a high level of awareness of identified levels of abilities
- It encourages student involvement and responsibility
- It focuses on the development of student's judgment skills
- It helps students participate in their own evaluation (Dickinson 1987)
- Effective engagement of students in their own assessment will result in useful post-course effects.

The teacher should apply general questions and prompts in a self-assessment form:

- What did you find easy?
- What did you find hard and what helped you move on?
- What do you think is a fair score or grade for the work you submitted?
- What was the thing you think you did best in this assignment?
- What was the thing that you think you did least well in this assignment?
- What was the most important thing you learned in doing this assignment?
- Do you have any questions?

### *Peer Assessment*

One of the ways in which students reinforce the characteristics of quality work is by evaluating the work of their peers. By overseeing and assessing other students' work, the process of peer assessment develops raised awareness of what is expected of students in their learning (Miller, 2002). The rationale for peer-assessment has been summarized by

Boud (1986): ‘Students have an opportunity to observe their peers throughout the learning process and often have a more detailed knowledge of the work of others than do their teachers.’ According to Race, Brown and Smith (2005), peer-assessment aims at involving students more closely in their learning and its assessment, and helping to enable students really comprehend what is needed of them. Brown and Dove (1991) also argue that well-designed peer-assessment can produce the advantages listed below:

- It encourages student ownership of their personal learning
- It motivates and encourages active participation in learning
- It makes assessment a shared activity, by challenging the proposition that the lecturer is the best person to assess the student’s inputs and outputs
- It promotes a genuine interaction of ideas
- It stimulates more directed and effective learning, at the same time encouraging a more autonomous approach
- It develops transferable personal skills.

For peer-assessment to work productively, the learning environment in the classroom should be encouraging: students must feel free and trust each other to give beneficial and honest feedback.

### ***Feedback***

In most cases, formative assessment is accompanied by feedback. In fact, it is considered the key element in formative assessment. Ramaprasad (1983, p. 4) defines feedback as ‘information about the gap between the actual level and the reference level of a system parameter which is used to alter the gap in some way.’ According to Ramaprasad(1983) what is of supreme importance in this definition is that information

provided to students can be considered feedback only when it aims at filling the existing knowledge gap, and it is of a good quality if it leads to follow-up action. Another definition given for feedback is that of Hattie and Timperley (2007,p. 81): ‘Feedback is conceptualized as information provided by an agent (e.g. teacher, peer, book, parent, self, experience) regarding aspects of one’s performance or understanding.’

Formative assessment plays an essential role in almost all educational settings (Black & William, 1996; Sadler, 1998). Black and William (1996) claim that formative assessment accompanied by purposeful feedback serves as key components of student learning and education. In fact, it can lead to corroboration of learning by boosting students’ motivation and self-esteem.

For the assessment and feedback to be productive, in addition to their type and quality, teachers as well as students can play a central role. According to Black and William (1996) and Boston (2002), the teacher should try to fill the learner’s knowledge gap by assessing student’s knowledge formatively and providing useful feedback. Furthermore, while feedback is given by the teacher, learners’ also can play an important role, if their preferences and attitude towards feedback and assessment are taken into consideration. The importance of investigating students’ attitude and preferences to enhance educational quality can be traced in the notion of learner-centered models, which changed the educational paradigm by mid-1990s (Bender, 2003). Moreover, engaging students in a process, which Carmean and Haefer (2002) call deeper learning(cited in Bender, 2003),through incorporating their thoughts and preferences is considered to be a key factor in promoting learner-centered principles. Thus, this research is designed to find out EEC (Experimental English Classes) students’ attitudes’ towards formative assessment used to

enhance their vocabulary with the hope that it will provide information, which can be used to increase learning quality, particularly vocabulary learning to the benefit of students.

## **2.8 The Application of Formative Assessment in Vocabulary Learning**

Assessing the vocabulary knowledge of EFL learners is both essential and reasonably straightforward. It is essential in the sense that words are considered to be the fundamental blocks of language, the units of meaning from which larger structures, such as phrases, sentences, paragraphs and texts are drawn. Many language teachers and applied researchers now recognize the importance of vocabulary learning and investigate ways of promoting it more efficiently. Hence, from different points of view, vocabulary can be seen as a central area in language teaching, needing testing tools to check learners' progress in vocabulary learning and to assess how sufficient their vocabulary knowledge is in order to meet their communicative needs (Read, 2000).

According to Milton (2009) formative assessment is an important tool in a teacher's kit as it enables her to provide her students feedback throughout the term and help them as they progress toward their goals in any particular unit while learning vocabulary. Formative assessment is anything the teacher does to assess or test her students' levels of understanding about a subject while they are still learning that subject. There is a large range of formative assessment methods and techniques available for being implemented in the vocabulary learning process. It may be a quiz or a test, an oral question-and-answer session or a one-sentence summary, a one-minute paper or a group presentation. Using formative assessment and feedback gives students time to pause and evaluate their performances before they reach major assessments. Haugen (1999) claims that when the

above-mentioned formative assessment classroom techniques (FACTs) are applied regularly in the vocabulary teaching/learning process, they can have the following impacts:

For teachers, FACTs can:

- offer day-to-day feedback that can be implemented immediately in vocabulary teaching
- provide useful information about what students have learned without the amount of time required for preparing tests, reading papers, etc.
- let address student misconceptions or lack of understanding on the vocabulary structures in a timely way
- assist to promote good working relationships with students and boost them to understand that vocabulary teaching and learning are on-going processes that require full participation.

For students, FACTs can:

- help develop self-assessment and learning management skills in vocabulary learning
- diminish feelings of isolation and impotence, especially in large classes
- raise understanding and ability to think critically about the course content, i.e. vocabulary learning
- encourage an attitude that values understanding and long-term retention.

In most cases, formative assessment is accompanied by feedback. In fact, it is considered a central element in assessment. Thus, as Ramaprasad (1983) claims, it is significant to provide some type of feedback at least every other day: the teacher should provide students small opportunities to show what they have learned and allow them to

know whether or not they are on the right track. For the vocabulary teaching/learning process to be effective, the teacher can hold question-and-answer sessions at the beginning of a class period, or give students a quick three-question mini-quiz at the end of a lesson; she can also put students into collaborative groups and have them list what words and expressions they know about the topic they are studying. Brief, frequent feedback provides students the opportunity to speak up if they get lost, alleviating misunderstanding or confusion before it becomes overwhelming to them.

It is also important to assign students small, graded opportunities to show what they have learned and do this on a regular basis. Furthermore, the teacher can give a homework assignment that reviews the day's materials, put a pop vocabulary quiz on the board to start a class or ask students to write a paragraph (one-minute summary) explaining a topic by using the target vocabulary structures. These small formative assessments provide the teacher an opportunity to evaluate the progress of her students' understanding of a topic, and they also add grades to an overall class grade, hence if a student doesn't do well on one assignment it will not solemnly affect his course grade (Marzano, 2003).

As Boston (2002) claims it is also effective to set up time to hold individual student meetings. The teacher can give students a formative assessment, such as a quiz or a small test, and then meet with each pupil to go over the results of that assessment. Giving verbal feedback is often faster than writing out comments for every student, and it provides students a chance to ask questions and talk to the teacher about what they do and do not understand.

While implementing formative assessment in the vocabulary teaching/learning process the use of rubrics is of utmost importance. Marzano (2003) defines a rubric as a

document that summarizes assumptions for an assignment, and it also clarifies to a student the level of comprehension he must have about the topic. A rubric assists the teacher to classify an assignment's requirements, and it assists students rapidly and straightforwardly to identify their strong and weak points on a particular assignment based on the rubric scores they gain.

Formative tests play a vital role in vocabulary enhancement within the field of foreign language learning. Read (2000, p. 115) claims that 'discrete, selective, context-independent vocabulary tests have been an integral part of the educational measurements science for the whole twentieth century.' They possess all the virtues of an objective language test and for a long time were considered to be very productive. Tests such as multiple-choice, gap-filling, matching, true/false items, cloze tests and C-tests are still of great use. Simultaneously, the current view in language testing is that vocabulary knowledge should be assessed indirectly through the test-takers' performance of integrative tasks which indicate how well they can draw on all their language resources to utilize the language for a wide range of communicative purposes (Read, 2000). A formative test serves as an assessment instrument that evaluates a student's current level of understanding about a topic: this provides them with feedback about what they have learned and what they still need to master before the unit is over. Nevertheless, researchers and experts interested in the field of vocabulary learning have a continuing need for assessment tools. The major part of their work may be classified as focusing on vocabulary size (breadth) or quality of vocabulary knowledge (depth). Great emphasis has been put on vocabulary size, since, despite the fact that the tests may seem superficial; they can present a more valid picture of the overall shape of the learners' vocabulary than an in-depth probe of a limited number of

words. Measures of quality of vocabulary knowledge also possess certain value but for quite specific purposes (Read, 2000).

However, the construct validation investigations by Corrigan and Upshur (1982) and Arnaud (1989) challenge the notion that vocabulary may be assessed as something separate from other aspects of language knowledge, even when individual words are tested in relative isolation. This is constant with other evidence of the inseparable part that vocabulary plays in language ability, including the strong relationship between vocabulary tests and measures of reading and listening comprehension (Read, 2000). Taking into account Read's (2000) viewpoint that vocabulary should always be assessed in context, the research focuses chiefly on vocabulary assessment through reading and listening skills.

From all the above-mentioned sources and references, it becomes apparent that the benefits of using formative assessments for vocabulary teaching and learning purposes are multifaceted. In short, it seems to be a powerful tool for language teachers. However, researchers and experts interested in the field of vocabulary learning have a continuing need for assessment tools.

In recent years, much research has been carried out to investigate the importance of formative assessment in FL learning, and the use of formative assessment has been found to be essential in improving learner's language proficiency. However, in Armenia almost no research has been carried out to investigate the use of formative assessment used to enhance vocabulary and the impact it may have on vocabulary learning.

Taking the results of the above-mentioned studies into account and having support for the viewpoints from the literature, the research seeks to find answer for the following questions:



1. *What is the impact of the use of formative assessment on vocabulary enhancement in the EFL classroom?*
2. *What are the students' attitudes towards using formative assessment in the vocabulary learning process?*

The fact that many linguists and experts in the field of language assessment claim that the use of formative assessment can enhance vocabulary knowledge, leads us to go with directional hypothesis:

There is a relationship between using formative assessment and vocabulary enhancement of EFL students. In other words, formative assessment has an impact on EFL learners' vocabulary enhancement.

### **Chapter Three: Methodology**

The purpose of the current study was to investigate whether and to what extent formative assessment influenced the EFL learners' vocabulary achievement. Therefore, this section describes the process of conducting the current research: it presents an overview of

the participants and the setting of the study, the instruments of data collection, the procedures employed, and the analysis of the collected data.

### **3.1 Research Design**

The research questions addressed in the current study were as follows:

- 1. What is the impact of the use of formative assessment on vocabulary enhancement in the EFL classroom?*
- 2. What are the students' attitudes towards using formative assessment in the vocabulary learning process?*

In order to answer the above-mentioned questions, quasi-experimental research methods were implemented. Qualitative and quantitative approaches used in this research were based on reviewed literature, and aimed at gathering facts that would aid in students' learning L2 vocabulary.

### **3.2 Setting and Participants**

The research was conducted in the Experimental English Classes (EEC), Department of English Programs (DEP) at the American University of Armenia (AUA). The EEC program was established in the fall of 2005 by DEP to offer communicative student-centered English classes for children and young adults. One term of the course lasts 10 weeks with two one-hour sessions a week. New students take a placement test before the start of the term and are directed into appropriate instructional classes.

The sample population for this study consisted of 25 elementary level students (Construction level 6) of EEC at AUA. Their level of proficiency (elementary) was defined according to the EEC level division and the criterion applied to place the students in this level was a placement test which determined their proficiency level. The participants'

mother tongue was Armenian. The English language was considered to be the students' foreign language. The age of the participants integrated in the study ranged from 8-11.

There were 11 students (5 boys and 6 girls) in the comparison group and 14 students (6 boys and 8 girls) in the experimental group. The students had two one-hour sessions of English per week and both groups used the same course book. The experimental group practiced the vocabulary with the help of ongoing formative assessment–tests (cloze tests, C-tests, etc.) and quizzes, homework exercises, exercises with short, extended or multiple-choice answers, one-minute papers, one-sentence summaries and other types. All above-mentioned techniques of formative assessment applied during the experiment were evaluated (by the teacher, peer- or self-assessment), provided with feedback and discussed thoroughly. The comparison group practiced the vocabulary with traditional exercises and activities (gap filling, matching, true/false or multiple-choice exercises). The activities implemented in the comparison group were not provided with feedback. The table below presents a brief summary of the research population and treatment applied (see Figure 1).

**Figure 3.1 Summary Table of the Research Population and Treatment**

<b><i>Group</i></b>	<b><i>Level</i></b>	<b><i>N</i></b>	<b><i>Age</i></b>	<b><i>Course book</i></b>	<b><i>Class hours</i></b>	<b><i>Types of treatment</i></b>
Experimental	Elementary	14	8-11	New	2 hours	Vocabulary practice

Group				Parade 3 (Units 1-5)	per week	with formative assessment
Comparison Group	Elementary	11	8-11	New Parade 3 (Units 1-5)	2 hours per week	Vocabulary practice with traditional book exercises/no treatment

### 3.3 Materials

The textbook used for the classes is ‘New Parade 3’ by Herrera M. and Zanetta T. (2000). New Parade is a seven-level, communicative language program, that features Total Physical Response (TPR), rhymes, songs, chants, pair work, cooperative learning, and hands-on projects. Every level of New Parade contains the following components: A Student Book, Workbook, Teacher's Edition, Audio Program, Picture Cards, Posters, and Video with an 8-page Video Guide (Herrera & Zanetta, 2000). The book covers all four language skills (reading, writing, listening and speaking). It encompasses a number of meaningful and productive teaching/learning communicative activities all aiming to help the learners to build a strong foundation for language knowledge from the early stages of language learning. The textbook is comprised of nine units, each focusing on one topic. Within ten weeks of the research, four units of the textbook were covered in class, namely unit 1, 2, 3 and 4. Consequently, the vocabulary topics (‘daily routines and time’, ‘animals and their homes’, ‘weather conditions’, ‘city and country’, ‘occupations’) for the experiment were taken from the above-mentioned four units.

The textbook itself was not used as the main source of treatment. A great number of supplementary sources were implemented in the experimental and comparison groups to

strengthen and practice vocabulary structures. The materials were chosen based on the units of the textbook with their main focus on vocabulary development through receptive skills, namely reading and listening. The short tests, quizzes, exercises and activities were chosen and adopted from different books and sites created by specialists in this field and widely used by a number of English teachers throughout the world (see Appendix E). The activities were examined and analyzed thoroughly by thesis advisers based on the requirements of the study. To apply materials that were appropriate to the students' level, needs and interests as well as to meet the goals of the research, some minor modifications were made in the selected materials, such as adjusting them to the level and interests of the students, changing some of the items integrated in the tests/quizzes/exercises, changing the wording and/or the formulation of the items, etc.

### **3.4 Instrumentation**

The collection of the data was accomplished through the following instruments:

- Pre- and post-tests applied in the experiment
- An attitudinal questionnaire for students
- A semi-structured interview with students

#### **3.4.1 Tests**

The two groups involved in the experiment were selected based on the results of a placement test administered by the EEC. At the beginning of the course, the two groups took a test (pre-test of the experiment) which was an achievement test. Before administering the pre-test, a pilot test was given to the same level of students to identify the applicability of the test. Some minor modifications were made in the test tasks to adjust them to the level and interests of the students. The wording and the formulation of some of

the items integrated in the test were also changed: the items that seemed to be easy for the students were complicated; those seeming difficult were simplified. After making the necessary modifications, the participants were asked to take the tests (see Appendix A).

The same two groups took a post-test (a final achievement test) after 10 weeks of instruction (see Appendix B). The pre- and post-tests were developed entirely for the purpose of the current research bearing in mind the level and the age of the students. It also aimed to check how well the students internalized the materials, and to find out on which issues they still needed to focus their attention. The tests were designed to measure the students vocabulary skills through receptive (reading, listening) skills. The content of the pre-test was based on the materials that the participants had studied in the previous term. The post-test, which was also an achievement test developed as a parallel test to the pre-test, was administered on the basis of the materials covered within ten weeks. Both tests were designed by the researcher/teacher.

The two tests consisted of three sections. These three sections were: Listening, Reading and Production. The time allocation for the tests was 50 minutes and the total possible score for both tests was 50.

Section 1(Listening Skills) encompassed two tasks - Part A with 7 items and Part B with 8 items with 15 points in total. Part A aimed at measuring students' ability to listen and make inferences from the given descriptions/situations. In this part the students listened to the description of animals, their homes and ticked the correct answer in the answer sheet. As to Part B, it aimed at checking students' ability to listen and recognize the basic vocabulary of the units covered during the term. The students listened, chose the correct picture of the daily activity described in the listening section, and wrote its letter in the box.

While choosing the passage, great attention was also paid to the vocabulary items included in the test, so as to avoid lexical overlap in the test.

Section 2 (Reading Skills) consisted of three tasks. In Part A the students read the information in a family tree and marked 'T' for true and 'F' for false sentences. The major advantage of this reading passage was that it provided students with the information and was structured to check comprehension of the given information, i.e. the items were designed in a way that students could not answer them based on their background knowledge of the topic. Part B asked the students to read the given sentences and draw hands on the clocks. This task aimed at testing learners' ability to read and recognize the vocabulary and expressions related to time. In Part C the students read the riddles and tried to find the correct answer to solve them. Nearly 95% of the vocabulary was familiar to them. All three tasks aimed to check students' ability to read and display their comprehension of the main vocabulary and expressions. The total possible score for the reading section was 15 points.

Section 3 (Production Skills) consisted of 3 tasks with 20 points total. This section measured students' ability to produce sentences using basic vocabulary structures that they had covered in class. Part A was designed to measure students' ability to use basic vocabulary of 'occupations'. The learners were to read the definitions of the jobs and circle the job that matched each definition. Parts B and C were picture-cued tasks, in which the students were to produce appropriate vocabulary related to 'weather conditions', 'daily routines' and 'time'. Part B asked the students to look at pictures and produce sentences with the given vocabulary on 'weather conditions'. In Part C the learners were to describe a typical day by using pictures as cues. These tasks aimed at testing students' vocabulary

skills and measuring how appropriately the students could use the correct word in meaningful discourse.

The items in the test were objectively scored: a certain score was given to each mistake. The maximum possible score of the test was 50. One point was given to each item. At the end of the test, an answer key for all tasks is attached except for the production/writing section.

### **3.4.2 Questionnaire**

The aim of the questionnaire designed for this study was to find out students' attitudes towards the use of formative assessment in vocabulary learning. The questionnaire integrated 12 closed-ended items the purpose of which was to collect quantitative data. Most of the statements in the questionnaire were designed based on the relevant literature. The questionnaire items focused mainly on the participants' opinions towards the use of formative assessment and the effect they thought it could have on EFL vocabulary learning. By responding on a Likert scale, participants were to show the extent to which they agreed or disagreed with the content of the items integrated in the questionnaire by circling one of the answers ranging from 'strongly disagree', 'disagree', 'undecided', 'agree' and 'strongly agree'. The reason for applying a Likert scale was to make the items of the questionnaire easy to understand and thus lead to consistent answers. Each item was of equal value and thus the responses were very easy to analyze.

In order to eliminate the possibility of misunderstanding the statements, the questionnaire was bilingual: the statements used in the questionnaire were written both in English and Armenian (see Appendix C). The same questionnaire was designed for both groups. The questionnaire was designed in a way that while reading the term 'vocabulary



practice', the experimental group learners understood it as meaning formative assessment types, whereas the participants of the comparison group understood it as the exercises practiced during the classes.

### **3.4.3 Interview**

As the questionnaire did not give the respondents an opportunity to elaborate or explain their choices, a semi-structured face-to-face interview was conducted. The items included in the attitudinal questionnaire for students were adapted for the interview; the interview was comprised of 12 open-ended questions prepared in advance (see Appendix D). The aim of the interview was clarified to the participants before the interview began and interviewees were recorded. Fourteen participants (the experimental group students) were chosen for the interview. The interview was carried out in Armenian. It took nearly ten minutes to interview each participant. While conducting the interview, the interviewer did her best to create a relaxed and friendly atmosphere for the students to feel free in expressing their opinion.

## **3.5 Procedures**

### **3.5.1 Experiment**

The participants were informed of the study from the beginning. The goals and procedures of the study were presented to them. Two groups were involved in the experiment. Both groups used the same textbook - New Parade 3 and had English classes for the same amount of time. In both groups the same syllabus was used. The teacher of both groups was the researcher herself. The experiment lasted for one term (10 weeks); it started on March 28<sup>th</sup> and finished on June 2<sup>nd</sup>. At the beginning of the term both groups had a pre-test aiming to test their vocabulary proficiency level, and at the end of the term

both groups were given a post-test aiming to test their vocabulary achievement. The latter intended to show whether the use of formative assessment had had any impact on the learners' vocabulary enhancement.

As mentioned above, the experimental group received the treatment – the application of the ongoing formative assessment, particularly in vocabulary learning. Thus, apart from their course materials, the participants in the experimental group were given formative tests (cloze tests, C-tests, etc.) and quizzes, homework exercises, exercises with short, extended or multiple-choice answers, one-minute papers and one-sentence summaries. Throughout the instructional process the teacher/ researcher monitored students' progress and provided feedback on their strengths and weaknesses. Feedback is the key element in formative assessment: this feedback allows students to correct conceptual errors and encourages instructors to modify instructional activities in light of their effectiveness. Hence, all the types of formative assessment applied during the experiment were always provided with feedback (by teacher, peer or self assessment) and discussed thoroughly with the students.

The comparison group was taught the same materials with traditional book exercises and activities (homework exercises, gap filling, matching, true/false or multiple-choice exercises, correct the mistakes, etc.). These types of activities were not provided with feedback.

### **3.5.2 Questionnaire**

The questionnaire of the present study was designed for the students of Communication level 6 at EEC and aimed at revealing students' attitudes towards the use of the formative assessment in vocabulary learning. To make sure that the items in the questionnaires were

appropriate, they were piloted at the American University of Armenia (EEC courses). A pilot questionnaire was given to 5 students. This helped to change the formulation of some questions. To add internal validity to the questionnaire, some questions were cross-referenced, and to add external validity to the questionnaire, it was peer reviewed. After making all the changes, the participants were asked to complete the questionnaire.

The students' questionnaire was administered after their classes. Before administering the questionnaire the teacher/researcher introduced the aim of the research, as well as the purpose of the questionnaire for the research project. Hard copies of the questionnaire were given to the students. The students had enough time to read all the items and give their responses. There were cases when some of the students had questions, which were answered by the teacher. Twenty-five questionnaires were distributed to the students, and twenty-five of them were returned.

### **3.5.3 Interview**

The interview conducted for this research aimed at collecting qualitative data on the application of formative assessment in vocabulary learning. Before conducting the interview, the aim of the research, as well as the purpose of the interview for the research project were introduced to the participants. The students were told to feel free and be as honest as possible in answering the questions. The interview was conducted in Armenian and was recorded. It took nearly ten minutes to interview each participant.

### **3.6 Data Analysis**

The research employed qualitative and quantitative data. The qualitative data were obtained with the help of the semi-structured interview, in which the participants shared their attitudes towards the use of formative assessment in EFL vocabulary enhancement; the

quantitative data was obtained with the help of the pre-test and post-test results as well as the closed-ended items in the questionnaire.

The study integrated two variables: independent and dependent. The independent variable of the study was the use of formative assessment applied to vocabulary learning. The dependent variable was the vocabulary enhancement of the participants measured by pre- and post-test scores, obtained from the differences between the pre-test and post-test scores.

The independent variable was nominal; the dependent variable was numeric. The results of the pre- and post-tests were analyzed and tabulated with the help of the SPSS program to answer the research questions. The results of the attitudinal questionnaire were analyzed through frequency analyses. Finally, for the analysis of the interview, a content analysis was implemented which integrated identifying the key topics and categories in the data.

#### **Chapter 4: Results and Discussion**

The current study was carried out to investigate whether and to what extent formative assessment influenced the EFL learners' vocabulary achievement. It also aimed at determining the students' attitudes towards using formative assessment in the vocabulary

learning process. For the present study, both qualitative and quantitative data were employed. The quantitative data were collected through the pre-test and post-test results, and the attitudinal questionnaire. The qualitative data were obtained with the help of the semi-structured interview, in which the participants shared their attitudes towards the use of formative assessment in EFL vocabulary enhancement. Thus, this section presents the results and discussion of the data analyzed both quantitatively and qualitatively.

The results obtained through quantitative and qualitative data aimed to answer the following research questions guiding the study:

1. *What is the impact of the use of formative assessment and vocabulary enhancement in the EFL classroom?*
2. *What are the students' attitudes towards using formative assessment in the vocabulary learning process?*

#### **4.1 Analysis of the Quantitative Data**

The quantitative data employed for the current study involved pre- and post-achievement tests and an attitudinal questionnaire for students. The pre- and post-test results were analyzed quantitatively implementing the statistical package for social sciences (SPSS). For the pre- and post-tests' analysis Mann-Whitney and Wilcoxon tests were applied to compare the scores obtained from the performance of the experimental and comparison groups. The results of the attitudinal questionnaire were analyzed through frequency analyses.

##### **4.1.1 Analysis of the Pre- and Post-test Results**

To reveal whether there had been progress in students' performance, the first set of data was collected through pre- and post-test results, which were administered to both

experimental and comparison groups before and after the treatment, i.e. both groups took the pre-test at the beginning of the study and then at the end both of them took the post-test. Since the number of the students was small (11 students in the comparison group and 14 students in the experimental group) and the distribution of the scores was not normal, the non-parametric Mann-Whitney and Wilcoxon tests were implemented for between and within group comparison of the two sets of scores.

For the comparison of the pre-test and post-test results for both groups, the Mann-Whitney U test was used. The Mann-Whitney *U* test (also called the Mann-Whitney-Wilcoxon (MWW) or Wilcoxon rank-sum test) is a non-parametric statistical hypothesis test for assessing whether two independent samples of observations have equally large values. It is one of the most well-known non-parametric significance tests and is the non-parametric equivalent of the t-test for independent samples. This test converts the scores on the continuous variable to ranks, across the two groups (Pallant, 2007; Gerber, 2005).

***Table 4.1 Mean ranks of the groups for the vocabulary checking pre- and post-tests***

	<b>Group</b>	<b>N</b>	<b>Mean Rank</b>	<b>Sum of Ranks</b>
Pre-test	Comparison	11	12.68	139.50
	Experimental	14	13.25	185.50
	Total	25		
Post-test	Comparison	11	8.55	94.00
	Experimental	14	16.50	231.00
	Total	25		

To answer the research question asking whether the use of formative assessment influenced the EFL learners' vocabulary achievement, several comparisons were made.

*Comparison 1.* Were the experimental and comparison groups similar at the beginning of the study? In other words, was there any significant difference between the performance of the experimental and comparison groups on the pre-test, before the experiment?

In order to answer the above-mentioned question, the Mann Whitney U test was applied on the mean scores of the experimental and comparison groups on the pre-test to compare average ranks of the students' scores. The results are summarized in Table 2.

**Table 4.2 Mann-Whitney test of pre-test scores**

	<b>Pre-test</b>
Mann-Whitney U	73.500
Wilcoxon W	139.500
R	0.04
Z	-0.194
Asymp. Sig. (2-tailed)	0.846
Exact Sig. [2*(1-tailed Sig.)]	0.851 <sup>a</sup>

As Table 2 displays, the Z value is -0,194 with a significant level of  $p=0,851$ . The probability value is not less than 0.05. This means that there was no significant difference between pre-test results. Thus, it can be stated that regarding language ability, particularly vocabulary knowledge, the two groups were similar at the beginning of the study.

To reaffirm the results obtained through the Mann Whitney U test for the pre-tests,  $r$  - the effect size – was also calculated (see Table 2). In statistics, an effect size is a measure of the strength of the relationship between two variables in a statistical population, or a sample-based estimate of that quantity. An effect size measures the magnitude of a

treatment effect and is calculated according to the following formula:  $r=z/\sqrt{n}$ , where n is the total number of the cases (Kelley, (2007). As seen in Table 2,  $r = 0.04$ . This number is less than the critical point 0.5 and thus shows a small effect size between the groups' pre-test results. This once again proves the fact that there was no significant difference in both groups.

### **Wilcoxon Signed Ranks Tests**

For within group comparison (pre-test results with post-test results) we implemented the Wilcoxon Signed ranks test for both groups. This is a non-parametric statistical hypothesis test used when comparing two related samples or repeated measurements on a single sample to assess whether their population means differ (i.e. it's a paired difference test). It may be applied as an equivalent of the repeated measures t-test; however instead of comparing means the Wilcoxon test converts scores to ranks and compares them.

*Comparison 2.* Did the comparison group students significantly improve their language ability, particularly vocabulary knowledge, due to the instruction?

To answer this question, the Wilcoxon Signed ranks test was applied to compare the pre-test and post-test results of the comparison group (see Table 3.b). For the comparison group, the Z value is -2.812 with a significance level of  $p=0.005$ . The probability value is less than 0.05, which means that there was a significant difference between pre- and post-test results in favor of the post-test (see Table 3. b). Table 3.b also shows that  $r = 0.9$ , which is more than the critical point 0.5. Thus, it shows large effect size, once again supporting the fact that there was a significant difference between pre- and post-tests results in favor of the post-test: the comparison group students showed significant progress in vocabulary learning.



**Table 4.3 a. Wilcoxon Signed Ranks for the comparison group**

		<b>N</b>	<b>Mean Rank</b>	<b>Sum of Ranks</b>
Pre-test – Post-test	Negative Ranks	0 <sup>a</sup>	0.00	0.00
	Positive Ranks	10 <sup>b</sup>	5.50	55.00
	Ties	1 <sup>c</sup>		
	Total	11		

**Table 4.3 b. Test statistics**

	<b>Pre-test – Post-test</b>
R	0.9
Z	-2.812 <sup>a</sup>
Asymp. Sig. (2-tailed)	0.005

*Comparison 3.* Did the experimental group students significantly improve their language ability, particularly vocabulary knowledge due to instruction?

**Table 4.4 a. Wilcoxon Signed Ranks for the experimental group**

		<b>N</b>	<b>Mean Rank</b>	<b>Sum of Ranks</b>
Pre-test – Post-test	Negative Ranks	0 <sup>a</sup>	0.00	0.00
	Positive Ranks	14 <sup>b</sup>	7.50	105.00
	Ties	0 <sup>c</sup>		
	Total	14		

**Table 4.4 a. Wilcoxon Signed Ranks for the experimental group**

		<b>N</b>	<b>Mean Rank</b>	<b>Sum of Ranks</b>
Pre-test – Post-test	Negative Ranks	0 <sup>a</sup>	0.00	0.00
	Positive Ranks	14 <sup>b</sup>	7.50	105.00
	Ties	0 <sup>c</sup>		
	Total	14		

**Table 4.4 b. Test statistics**

	<b>Pre-test – Post-test</b>
R	0.9
Z	-3.322 <sup>a</sup>
Asymp. Sig. (2-tailed)	0.001

As Table 4.b displays, Z value is -3.322 with a significance level of  $p=0.001$ , which is less than 0.05. From this, it can be deduced that there was a significant difference between the experimental group students' pre-and post-test results in favor of the post-test. The effect size  $r=0.9$ , which is more than the critical point 0.5. This shows large effect size, once again reaffirming the fact that the students had progress.

The results of the Wilcoxon Signed Rank test showed the outcomes of the experimental and control group separately, i.e. there was significant improvement in the vocabulary learning of both groups. From this, we can interpret that instruction had an effect on the learners and they improved their vocabulary knowledge. However, in order to see whether formative assessment, the main variable in this study, had any influence on the vocabulary achievement of the experimental group and whether there was a significant difference between the comparison and experimental groups, the Mann Whitney U test was

applied on the mean scores of the experimental and comparison groups on the post-test results to compare the average ranks of the students' scores. Thus, the last analysis aimed to answer the following question:

*Comparison 4.* Were the experimental and comparison group students similar at the end of the study? In other words, was there a significant difference between the performance of the experimental and comparison groups after the experiment?

Results are presented in Table 5.

**Table 4.5 Mann-Whitney Test of pre-test scores**

	Post-test
Mann-Whitney U	28.000
Wilcoxon W	94.000
R	0.5
Z	-2.710
Asymp. Sig. (2-tailed)	0.007
Exact Sig. [2*(1-tailed Sig.)]	0.006 <sup>a</sup>

For the comparison of the post-test results, the Z value is -2.710 with a significant level of  $p = 0.006$ . The probability value is less than 0.05. This means that there was a significant difference between post-test results of the experimental and comparison groups in favor of the experimental group. The table also shows that  $r = 0.5$ , which is equal to the crucial point 0.5 and thus shows a large effect size, confirming once again that there was a significant difference in the post-test results of the groups in favor of the experimental group.

#### **4.1.2 Analysis of the Students' Questionnaire**

The second set of quantitative data was collected through an attitudinal questionnaire, which was administered to both experimental and comparison group students after the post-test. The aim of this questionnaire was to determine the students' attitudes towards the methods applied in practicing vocabulary structures in both group. The questionnaire consisted of eleven closed-ended items falling into two main categories (see Appendix C). The items of the first category of the questionnaire (items 1, 2, 4, 5, 6, 9, 10 and 11) addressed questions pertaining to the students' attitudes in favor of the type of the vocabulary practice applied. The second category with its three items (items 3, 7 and 8) aimed at showing students' attitudes against the vocabulary practices applied during the learning process.

As noted earlier, the students' questionnaire was administered at the end of their classes. Hard copies of the questionnaire were given to the students. Twenty-five questionnaires were distributed to the students, and twenty-five of them were returned. By responding on a Likert scale, participants were to show the extent to which they agreed or disagreed with the content of the items integrated in the questionnaire by circling one of the answers ranging from 'strongly disagree', 'disagree', 'indecisive', 'agree' and 'strongly agree' (a five-point scale). To facilitate the analysis of the data obtained through the questionnaire as well as to simplify the comparison between the two groups, the five-point scale was condensed into a three-point scale (agree/ strongly, 'indecisive', disagree /strongly), The questionnaire was analyzed quantitatively using the SPSS program through frequency analysis. The table below (see Table 6) presents the statistical analysis of the results of the items integrated in the questionnaire for both groups.

**Table 4.6 The Results of the Attitudinal Questionnaire for Students (I Category)**

		Strongly disagree		Disagree		Indecisive		Agree		Strongly agree	
		Experi- mental	Compa- rison	Experi- mental	Comp- arison	Experi- mental	Compa- rison	Experi- mental	Compa- rison	Experi- mental	Compa- rison
Q1	The vocabulary practice used during EEC classes was a useful and beneficial learning experience for me.	0%	0%	0%	9%	7%	0%	43%	46%	50%	45%
Q2	The vocabulary practice used during EEC classes encouraged my learning.	0%	0%	0%	9%	0%	0%	29%	36%	71%	55%
Q4	This practice helped me to identify my vocabulary knowledge and realize what I need to do for further improvement.	7%	0%	0%	18%	0%	27%	22%	18%	71%	37%
Q5	The vocabulary practice used in EEC classes enabled me to acquire words and phrases in easier and better ways.	0%	0%	0%	9%	7%	18%	43%	46%	50%	27%
Q6	I remembered vocabulary better and easier when the teacher asked me to write down words/phrases and provided examples.	0%	0%	0%	9%	0%	27%	21%	37%	79%	27%
Q9	I think frequent short tests were more effective in helping to remember words and phrases than infrequent long ones.	0%	9%	7%	37%	36%	18%	36%	18%	21%	18%
Q10	With the help of this practice I was able to identify accurately my strong and weak points in learning words and phrases.	7%	0%	0%	18%	0%	55%	29%	18%	64%	9%
Q 11	I would like my teacher to continue using the applied vocabulary practice in class for teaching vocabulary.	0%	0%	0%	20%	7%	28%	36%	27%	57%	25%

As mentioned above, the first item category of the questionnaire integrated nine statements. As Table 6 shows, for statement 1, the majority of the students, i.e. 93% of the experimental group and 91% of the comparison group students, agreed or strongly agreed that the vocabulary practices used during the learning process were useful and beneficial for them. Only 7% of the experimental group students were indecisive in their answer. A small number, i.e. 9% of the comparison group students disagreed with the usefulness and benefit of the vocabulary practices implemented in learning vocabulary structures. Thus, it can be claimed that both comparison and experimental group students were of the opinion that the

vocabulary practices (formative assessment techniques and exercises) applied were useful and beneficial to them.

The interpretation of the second statement revealed that almost all the students (100% of the experimental and 91% of the comparison group students) strongly/agreed that formative assessment techniques/ traditional exercises were motivating and encouraged their vocabulary learning. Only 9% of the comparison group students disagreed that vocabulary practice, namely traditional activities and exercises, encouraged their learning. Hence, the majority of the comparison and experimental group students shared the opinion that they were motivated while they were practicing vocabulary with formative assessment techniques and traditional activities/exercises.

According to the results, for the fourth statement, 93% of the experimental and 55% of the comparison group participants agreed or strongly agreed that 'they were able to identify accurately their strong and weak points in learning words and phrases'. The majority of the students (nearly 55%) in the comparison group were not clear if they were able to determine their strong and weak points in vocabulary learning. Only 7% of the experimental and 18% of the comparison group students strongly/ disagreed that the vocabulary practice applied helped them to identify their strengths and weaknesses in vocabulary learning.

For statement five of the questionnaire, as Table 6 displays, the majority of the students, i.e. 93% of the experimental and 73% of the comparison group students strongly/agreed that the vocabulary practice applied during their classes served as an easier and better way for them to acquire words and phrases; however, a small number of students in both groups - 7% of the experimental and 18 % of the comparison group respondents -

were not clear in answering the question. Finally, only 9% of the comparison group students disagreed with the statement that the applied vocabulary practice facilitated the learning process. Thus, it may be concluded that both the experimental and the comparison group students considered their formative assessment-based and exercise-based practice as an easier and better way to acquire words and phrases.

The results of the sixth statement revealed that all the students of the experimental group and the majority of the comparison (64%) group students agreed that they remembered vocabulary better and easier when the teacher asked them to write down words/phrases and provided examples. No student disagreed or strongly disagreed with the statement. Thus, it can be claimed that this method of vocabulary teaching was effective for students as they confirmed that they remembered vocabulary better when they were asked to write them down and give examples.

There was a significant difference between the responses of the two groups while answering the ninth statement of the questionnaire: nearly 57% of the experimental and 36% of the comparison group learners strongly/agreed with the statement, whereas nearly half of the comparison group students (46%) did not perceive frequent short tests to be effective in helping them remember words and phrases. About 35% of the experimental and 18% of the comparison group students were not clear whether they considered frequent short tests an effective tool in helping to remember vocabulary structures. Thus, as can be seen, the results were quite different: the majority of experimental group students agreed that frequent short tests were effective in learning vocabulary structures; whereas nearly half of the comparison group students were of opposite opinion.

The interpretation of the tenth statement integrated in Table 6 showed that more than 93% of the experimental and 55% of the comparison group students agreed or strongly agreed that, with the help of the vocabulary practice used, they easily identified their vocabulary knowledge and realized what they needed for further improvement. Only 27% of the comparison group learners were indecisive in their answer and 7% of the experimental group respondents strongly disagreed that traditional vocabulary exercises helped them to identify their vocabulary knowledge and realized what they needed to do for further improvement. Thus, the majority of experimental and nearly half of the comparison group students perceived their formative assessment-based and exercise-based practice as effective ways to identify their vocabulary knowledge and realize what they need to do for further improvement.

For the last statement (statement 11) involved in the first category (see Table 6), the majority of the students in the experimental group, i.e. 93%, supported the idea of using the current vocabulary practice in class to learn English vocabulary; simultaneously, 68% of the comparison group students strongly/agreed with that statement. Only 28% of the comparison and 7% of the experimental group students were not clear if they wanted to have vocabulary exercises in their classes. Finally, 20% of the comparison group students did not want to have vocabulary exercises in their classes. The interpretation of the results revealed that the experimental group students felt more strongly and positively about having formative assessment-based vocabulary practice than did the comparison group students about their exercise-based vocabulary practice.



**Table 4.7 Results of the Attitudinal Questionnaire for Students (II Category)**

		Strongly disagree		Disagree		Indecisive		Agree		Strongly agree	
		Experi- mental	Compa- rison	Experi- mental	Comp- arison	Experi- mental	Compa- rison	Experi- mental	Compa- rison	Experi- mental	Compa- rison
Q3	The vocabulary practice used in EEC classes decreased my interest in learning English vocabulary.	46%	25%	41%	30%	0%	0%	7%	19%	6%	6%
Q7	I find the time and efforts I spent on vocabulary learning not effective.	43%	26%	57%	34%	0%	20%	0%	20%	0%	0%
Q8	The vocabulary practice used during EEC classes reduced my learning productivity.	72%	28%	14%	38%	7%	18%	0%	8%	7%	8%

Category 2 integrated three statements, aiming to reveal the students' attitude against the vocabulary practice applied during the learning process.

The interpretation of the results of statement 3 integrated in the second category of the questionnaire revealed that 87% of the experimental group students strongly/agreed that the formative assessment techniques applied by the teacher increased their interest in learning English vocabulary, whereas only 55% of the comparison group learners thought that the traditional activities and exercises were motivating. Finally, 13% of the comparison and 25% of the experimental group students did not consider the vocabulary practices as a means to increase their interest in learning vocabulary.

Two statements (statement 7 and 8) integrated in category 2 referred to the respondents' attitudes towards the ineffectiveness of learning vocabulary structures with the vocabulary practice applied (formative assessment in the experimental group and traditional activities/exercises in the comparison group). For statement 7, all the students of the experimental group (100%), versus 50% of the comparison group learners strongly/agreed that the time and efforts they spent on vocabulary learning was effective. Only 25% of the comparison group students disagreed with the effectiveness of the vocabulary practice applied. For statement 8, nearly 86 % of the experimental group versus 61% of the comparison group students strongly/agreed with the effectiveness of the vocabulary

practices implemented during the classes. Only 7% of experimental and 23% of comparison group students were indecisive in answering this question, and 8% of experimental and 15% of comparison group students disagreed or strongly disagreed that the practice applied while learning the English vocabulary was an effective way of learning. Hence, it can be claimed that comparison group students considered their traditional vocabulary activities/exercise less effective, than the experimental group students who all perceived that their formative assessment-based practice was a very productive way to learn English vocabulary.

Summarizing the results of the questionnaire, it can be claimed that the students of the experimental group enjoyed their formative assessment-based learning. It involved them in the learning process and motivated them to learn the English vocabulary. The comparison group students also had positive attitudes towards the vocabulary practice (traditional exercises) implemented in their classes. Though their perception was statistically less enthusiastic than the experimental group students'.

#### **4.2 Analysis of the Qualitative Data**

As the questionnaire did not give the respondents an opportunity to elaborate on or explain their choices, a semi-structured face-to-face interview was conducted. The interview was conducted with fourteen students of the experimental group after the treatment. It was carried out in Armenian, was recorded, and the transcriptions were translated into Armenian. For the analysis of the qualitative data collected through the interview, a content analysis was applied that integrated determining the key topics and categories in the data.

#### **4.2.1 Analysis of the Interview Data**

The aim of this interview was to give a more thorough picture of the students' attitudes towards the application of formative assessment techniques in practicing vocabulary structures in the experimental group. A cross-case analysis was applied to analyze interview data. This technique includes organizing the responses of several interviewees according to the topics raised in the interview (McKay, 2006). As McKay (2006) claims, this approach is suitable to highlight particular aspects of the research topic. The interview encompassed eleven closed-ended items (prepared in advance) falling into two main categories or topics (see Appendix D). The items of the first category of the interview (items 1, 2, 4, 5, 6, 9, 10 and 11) addressed the responses pertaining to reveal the students' attitudes in favor of the type of vocabulary practices applied. The second category (items 3, 7, and 8) aimed at showing the students' attitudes against the vocabulary practice applied during the learning process. Each category was analyzed separately in order to collect the most common answers related to the topics.

The opening question of the first category aimed at revealing whether formative assessment was a useful and beneficial learning experience for the students. Almost all the students gave a positive answer to this question. Three of the students emphasized the fact that formative assessment techniques helped them to feel responsible for their learning. They claimed that formative assessment encouraged their involvement in the learning process and thus helped them to learn in a better and easier way. The majority of the students found the time and the efforts they spent on vocabulary learning through formative assessment effective and reasonable. They believed that being assessed formatively helped them to identify their vocabulary knowledge and realize what they needed to do for further

improvement. Two of the students highlighted the role of self- and peer- assessment in EFL vocabulary learning stating that self- and peer- reflections facilitated their learning process and made it more effective.

Some of the interviewed students claimed that they remembered vocabulary better and easier when the teacher asked them to write down words/phrases and provided examples. According to them this was an effective technique for vocabulary learning. There was a significant difference between the responses of the students in responding the question about the students' preference for frequent short tests over infrequent long ones. Nearly half of the learners perceived frequent short tests as effective in helping them to remember words and phrases, whereas the second half did not share the same opinion, stating that frequent short tests made them feel stressed and thus reduced the effectiveness of the learning.

In answering the question about their preference of formative assessment over traditional vocabulary teaching, only two students answered 'definitely yes'. The other twelve students thought that formative assessment may serve as a supplement to their traditional vocabulary learning. They believed that formative assessment techniques could help them to accurately identify their strengths and weaknesses in learning words and phrases.

The second category integrated three questions, aiming to reveal the students' attitude against the vocabulary practice applied during the learning process. Question 3 integrated in the second category of the interview revealed that almost all the students believed that the formative assessment techniques applied by the teacher increased their interest in learning English vocabulary. In responding the question asking if formative assessment reduced

their learning productivity, the great majority of students stated that their formative assessment-based practice was a very productive way to learn English vocabulary. They responded that formative assessment provided a good picture of their vocabulary achievement and enabled them to identify what they needed to do for further improvement. Only two students out of fourteen did not share this opinion: they believed that ongoing formative assessment increased their stress and thus hindered their learning.

The results obtained through the interview on the use of formative assessment in EFL vocabulary learning indicated that the majority of the students seemed to have positive attitudes towards the implementation of formative assessment.

#### **4.3 Discussion**

One of the main purposes of the current study was to compare the traditional exercise-based practice with the practice implementing formative assessment and also to determine whether formative assessment affected students' vocabulary enhancement. Accordingly the first research question was '*What is the impact of the use of formative assessment and vocabulary enhancement in the EFL classroom?*' In order to find a satisfactory answer to the following research question guiding the study, the data was obtained through the pre- and post-test results which were analyzed in between-group and within group comparison by applying Mann-Whitney and Wilcoxon tests.

The results of the pre- and post-test analysis revealed that the two groups were similar at the beginning of the experiment, regarding language ability, namely vocabulary knowledge because they showed similar results on the pre-test. There was a significant difference between pre- and post-tests for both groups: both the experimental and comparison group students improved their vocabulary knowledge during the course. The

difference in the post-test scores can be attributed to the effect of instruction. Both types of instruction applied in the comparison and experimental groups led to significant improvement in the students' vocabulary knowledge. However, the treatment implemented in the experimental group (the use of formative assessment) gave much more effective results, as shown by the better results the experimental group students achieved on the post-test.

Therefore, the analysis of the pre- and post-tests supported the directional hypothesis of the study and showed that formative assessment had a positive effect on the students' vocabulary learning.

The research also aimed at determining the students' attitudes towards using formative assessment in the vocabulary learning process. Thus, the second research question guiding the study was '*What are the students' attitudes towards using formative assessment in the vocabulary learning process?*' To answer this research question, the data was obtained through an attitudinal questionnaire and a semi-structured interview.

The analysis of the results of the questionnaire revealed that the students in both groups enjoyed learning English. The students of the experimental group enjoyed formative assessment-based practice and they considered that kind of practice to be very productive and useful. The comparison group students also showed positive attitudes towards the traditional vocabulary practice (exercises/activities), though the percentage of positive responses was much smaller in the comparison than in the experimental group. Thus, the students of both groups were motivated to learn EFL vocabulary and liked the style of teaching, though the students of the experimental group indicated more positive attitudes

towards the use of formative assessment than comparison group students did towards the use of traditional activities.

The interview results revealed that the majority of the students seemed to have positive attitudes towards the implementation of formative assessment. They liked almost all the formative assessment techniques and thought it may serve as a good tool in identifying their vocabulary knowledge and helping them to remember words/phrases better and easier.

Summarizing the above-mentioned, it can be claimed that formative assessment noticeably affected the students' vocabulary enhancement as well as their attitudes towards traditional vocabulary practice. It involved the learners in their learning process and helped them to develop an ability to realize what they learnt and how they learnt. The students became more conscious of the progress they made and were able to identify their strong and weak points in their learning vocabulary. Hence, as Milton (2009) claims formative assessment can serve as an important tool in a teacher's kit as it enables her to provide her students feedback throughout the term and help them as they progress toward their goals in any particular unit while learning vocabulary.

## Chapter 5 Conclusion

This chapter presents the summary of the findings, answers the research questions and points out the limitations encountered while conducting the current study. It also discusses the implications and applications as well as provides suggestions for further research.

The research aimed to answer the following research questions guiding the study:

1. *What is the impact of the use of formative assessment and vocabulary enhancement in the EFL classroom?*
2. *What are the students' attitudes towards using formative assessment in the vocabulary learning process?*

### 5.1 Aims and Procedures of the Study

The study was carried out to investigate whether and to what extent the implementation of formative assessment influenced the EFL learners' vocabulary achievement. It also intended at determining the students' attitudes towards using formative assessment in the vocabulary learning process. The study was carried out in the Experimental English Classes (EEC). Two groups were involved in the study, the experimental and the comparison. For both groups the researcher used the same teaching program with one difference: the experimental group practiced the vocabulary with the help of formative assessment, while in the comparison group traditional exercises and activities were implemented to practice the vocabulary. The research was quasi-experimental: both qualitative and quantitative data were employed. The quantitative data were collected through the pre-test and post-test results and the attitudinal questionnaire. The qualitative data were obtained with the help of the semi-structured interview. The data were analyzed in relation to the research questions and the hypotheses of the present study.



## 5.2 Summary of the Main Findings

The analysis of the quantitative data (pre- and post-tests) revealed that there was a significant difference between pre- and post-tests for both groups: both the experimental and comparison group students improved their vocabulary knowledge during the course. Hence, the types of instruction implemented in the comparison and experimental groups caused significant improvement in the students' vocabulary knowledge. The treatment implemented in the experimental group (the use of formative assessment), however, gave much more effective results, suggesting that there was a positive relationship between formative assessment and students' vocabulary enhancement. The data analysis and results of the study also showed an interesting point that the students of both groups were motivated to learn EFL vocabulary and liked the style of teaching, though the students of the experimental group showed more positive attitudes towards the implication of formative assessment than did the comparison group students towards the use of traditional activities. The findings further indicated that formative assessment contributed to learners' vocabulary enhancement and helped them to become actively involved in their learning process. They liked almost all the techniques of formative assessment and thought it helped them to develop a sense of responsibility towards monitoring their learning process.

To conclude, it may be claimed that formative assessment enhances students' achievement in EFL vocabulary learning as it engages students in their learning process and helps them to develop an ability to realize what they learnt and how they learnt. The students become more conscious of the progress they make and are able to identify their strong and weak points in their learning vocabulary.

### **5.3 Limitations**

There were several problems that were encountered while conducting this research. First, the number of the participants was small (25 students) and the findings of the study were too limited, that is why no generalization can be made. Second, the time allotted to this research was restricted (one term). Further, the limitation of small numbers did not allow the researcher to go too deep into the question and investigate the topic more deeply. Third, the teacher and the researcher was the same person. Thus, the teacher's awareness of the objectives of the research may have affected the research results.

### **5.4 Applications and Implications**

This study can provide some applications for the future:

- EEC teachers (as well as university or school teachers throughout Armenia) can integrate formative assessment techniques when teaching vocabulary to make the learning process more productive and purposeful.
- Acknowledging an ongoing formative assessment, EEC learners (as well as university or school learners throughout Armenia) will take the maximum benefit when learning, particularly when vocabulary learning.
- An ongoing formative assessment can also serve as indicators both for teachers and learners to identify the learners' strong and weak points, and to help them work on the weak ones.

### **5.5 Recommendations for Further Research**

When carrying out this study, some questions arose for further research. The participants were elementary level students and had the same level of proficiency. A similar

study could be carried out with students of different levels of proficiency, for a longer period of time, in different institutions (schools, colleges, etc.).

## References

- Anderson, L. W. (2003). *Classroom assessment: Enhancing the quality of teacher decision making*. New Jersey: Lawrence Erlbaum Associates, Inc.
- Airasin, P. W. & Russel M. K. (2008). *Classroom assessment*. New York, NY: McGraw-Hill.
- Angelo, T. A. & Cross, P. K. (1993). *Classroom assessment techniques*. San Francisco: Jossey-Bass Inc., Publishers.
- Angelo, T.A. (1995). Improving Classroom Assessment to Improve Learning: Guidelines from Research and Practice. *Assessment Update*, 7(6):1-2, 12-13.
- Arter, A. (2003). *Assessment for learning: classroom assessment to improve student achievement and well being*. Retrieved February 21, 2011 from <http://www.eric.ed.gov/PDFS/ED480068.pdf>
- Bachman, L., & Palmer, A. (2010). *Language assessment in practice*. Oxford, UK: Oxford University Press.
- Black, P. & William, D. (1996). Meanings and consequences: A basis for distinguishing formative and summative functions of assessment. *British Educational Research Journal*, 22(5), 537-548.
- Black, P. & William, D. (1998a). Assessment and classroom learning. *Assessment in Education*, 5 (1), 7-74.
- Black, P., & William, D. (1998b). Inside the black box: Raising standards through classroom assessment. *Phi Delta Kappan*, 80(2), 139 -148.
- Bloom, B. S., Hastings, J.T., & Madaus, G.F. (Eds) (1971). *Handbook on the formative and summative evaluation of student learning*. New York: McGraw-Hill.

- Boston, C. (2002). The concept of formative assessment. *Practical Assessment, Research & Evaluation*, 8(9). Retrieved January 28, 2011 from <http://PAREonline.net/getvn.asp?v=8&n=9>
- Boud, D. (1989). The role of self-assessment in student grading. *Assessment and Evaluation in Higher Education*, 14(1), 20-30.
- Brett, A., Rothlein, L., & Hurley, M. (1996). Vocabulary acquisition from listening to Stories and explanations of target words. *The Elementary School Journal*, 96(4), 415-422.
- Brookheart, S. (2004). *Assessment theory for college classrooms*. New Directions for Teaching and Learning: No 100.
- Brown, D. H. (2004). *Language assessment: principles and classroom practices*. New York: Pearson Education, Inc.
- Brown, S., & Dove, P. (eds) (1991). *Self and peer assessment, standing conference on educational development*. Birmingham.
- Carter, R., & McCarthy, M. (1988). *Vocabulary and Language Teaching*. London: Longman.
- Celce-Murcia, M. (2001). *Teaching English as a second or foreign language* (3rd ed.). Boston: Heinle & Heinle Publishers.
- Chappuis, J. (2009). *Seven strategies of assessment for learning*. Portland, OR: ETS Assessment Training Institute.
- Chappuis, S., & Chappuis, J. (2007). The Best Value in Formative Assessment. *Educational Leadership*, 65(1), 14-19. Retrieved June 24, 2008, from <http://www.ascd.org>

- Coady, J., & Huckin, T. (eds.) (1997). *Second language vocabulary acquisition*. Cambridge: CUP.
- Coady, J., Magoto, J., Hubbard, P., Graney, J., & Mokhtari, K. (1993). *High frequency vocabulary and reading proficiency in ESL readers*. Norwood, NJ: Ablex
- Cohen, A.D. (1998). *Strategies in learning and using a second language*. New York: Addison Wesley Longman.
- Cohen, A.D., Weaver, S. J., & Li, T. Y. (1997). *The impact on strategies-based instruction on speaking a foreign language*. Minneapolis, MN: Center for Advanced Research on Language Acquisition (CARLA), University of Minnesota.
- Dickinson, L. (1987). *Self-Instruction in Language Learning*. Cambridge: CUP.
- Elley, W. (1989). Vocabulary acquisition from listening to stories. *Reading Research Quarterly*, 24 (1), 174-187.
- Farhady, H. (2006). *Twenty-five years of living with applied linguistics*. Collections of articles. Iran: Rahnama Press.
- Garrison, C., & Ehringhaus, M. (2007). Formative and summative assessments in the classroom. Retrieved from <http://www.amle.org>
- Graves, M.F. (2006). *The vocabulary book: Learning and instruction*. New York: Teachers College Press.
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81-112.
- Haugen, L. (1999). *What are CATs?* Center for Excellence in Learning and Teaching.

- Heritage, M., Kim, J., Vendlinski, T., & Herman, J. (2009). From evidence to action: A seamless process in formative assessment? *Educational Measurement: Issues and Practice*, 28(3), 24–31.
- Hulstijn, J. (1992). *Retention of inferred and given word meanings: Experiments in incidental vocabulary learning*. Basingstoke: Macmillan.
- Izard, J., & Jeffery, P. (2003). *Testing for Teaching: A longitudinal formative assessment project*. Melbourne: Australian Association for Research in Education.
- James, R., McInnis, C., & Devlin, M. (2002). *Assessing Learning in Australian Universities* Victoria: Centre for the Study of Higher Education University of Melbourne.
- Kamil, M. L., & Hiebert, E. H. (2005). *Teaching and learning vocabulary: Perspectives and persistent issues*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Keeley, P. (2008). *Science formative assessment: 75 practical strategies for linking assessment, instruction, and learning*. The United States of America: Library of Congress Cataloging-in-Publication Data.
- Kim, H., & Krashen, S. (1997). Why don't language acquirers take advantage of the power of reading? *TESOL Journal*, 6(1), 26-29.
- Knight, J. (2009). *Assessment for Learning: Motivating students, monitoring progress, and ensuring mastery of content*. The Kansas Coaching Project.
- Krashen, S. (1993). *The Power of Reading*. Englewood, CO: Libraries Unlimited.
- Laufer, B. (1997). *The lexical plight in second language reading: Words you don't know, words you think you know, and words you can't guess*. Cambridge: Cambridge University Press.

- Lehr, C. (2004). Alternative schools and students with disabilities: Identifying and understanding the issues. *Information Brief*, 3(6). Minneapolis, MN: University of Minnesota, Institute on Community Integration.
- Matsuoka, W. & Hirsh, D. (2010). Vocabulary learning through reading: Does an ELT course book provide good opportunities?. *Reading in a Foreign Language*, 22(1), 56–70.
- McCallum, B. (2000). *Formative assessment: Implications for classroom practice*. London: Institute of Education.
- Melmer, R., Burmaster, E., & James, T. K. (2008). *Attributes of effective formative assessment*. Washington, DC: Council of Chief State School Officers.
- Mohan, B. (2001). *The Second Language as a Medium of Learning*. London: Longman
- Nagy, W.E., & Herman, P.A. (1987). *Breadth and depth of vocabulary knowledge: Implications for acquisition and instruction*. In M. McKeown and M. Curtis (Eds.), *The Nature of Vocabulary Acquisition*, (pp. 19-35). Hillsdale, NJ: Erlbaum Associates.
- Nagy, W., Herman, P., and Anderson, R. (1985) Learning words from context. *Reading Research Quarterly* 20 (1), 233-253.
- Nation, P. (2005). Teaching vocabulary. *Asian EFL Journal*, 7(3), 47-54. Retrieved from <http://www.asian-efl-journal.com>
- Nichols, P. D., Meyers, J., & Burling, K. (2008). What is formative assessment? *Educational*
- Nunan, D. (2003). *Practical English language teaching*. McGraw-Hill/Contemporary.
- Measurement Research Bulletin*. Retrieved January 28, 2011 from [www.PearsonEdMeasurement.com](http://www.PearsonEdMeasurement.com)



- Onjewu, M. A. (2006). *The role of assessment in improving teacher quality*. Azerbaijan: Baku. Retrieved March 2, 2011 from [http://www.iaea.info/documents/paper\\_1162d3a5c.pdf](http://www.iaea.info/documents/paper_1162d3a5c.pdf)
- Oscarson, M 1989. Self-assessment of language proficiency. *Rationale and Applications in Language Testing*, 6, 1-13.
- Paribakht, T.S., & Wesche, M. (1997). *Vocabulary Enhancement Activities and Reading for Meaning in Second Language Vocabulary Development*. Cambridge: Cambridge University Press, 174-200.
- Peat, M., Franklin, S., Devlin, M., & Charles, M. (2007). Revisiting the impact of formative assessment opportunities on student learning. *Australasian Journal of Educational Technology*, 21(1), 102-117.
- Popham, J. (2006). *Assessment for learning; an endangered species*. Educational Leadership, 82-83.
- Pulido, D. (2007). The effects of topic familiarity and passage sight vocabulary on L2 lexical inferencing and retention through reading. *Applied Linguistics*, 28, 66–86.
- Qian, D.D. (2002). Investigating the relationship between vocabulary knowledge and academic reading performance: an assessment perspective. *Language Learning* 52(3), 513–536.
- Race, P., Brown, S. & Smith, B. (2005). (2nd ed). *500 tips on assessment*. London: Routledge Falmer.
- Ramaprasad, A. (1983). On the definition of feedback. *Behavioural Science*, 28(1), 4-13.

- Read, J. (1988). Measuring the vocabulary knowledge of second language learners. *RELC Journal*, 19(2), 12–25.
- Read, J. (2000). *Assessing vocabulary*. Cambridge: Cambridge University Press.
- Sadler, D.R. (1998) Formative assessment: revisiting the territory. *Assessment in Education*, 5(1), 77-84.
- Scriven, M. (1967). The methodology of evaluation. In R. W. Tyler, R. M. Gagne, & M. Scriven (Eds.), *Perspectives of curriculum evaluation*, 39-83. Chicago, IL: Rand McNally.
- Shavelson, R.J. (January 2003). Bridging the Gap between Formative and Summative Assessment. Washington, DC: National Academies Building.
- Shepard, L. A. (2005). Formative assessment: Caveat emperor. *The Future of Assessment: Shaping Teaching and Learning*.
- Shute, V. J. (2008). Focus on formative feedback. *Review of Educational Research*, 78(1), 159-189.
- Stahl, S.A. (2005). *Four problems with teaching word meanings (and what to do to make vocabulary an integral part of instruction)*. Mahwah, NJ: Erlbaum.
- Stiggins, R. (2005). From formative assessment to assessment for learning: A path to success in standards- based schools. *The Phi Delta Kappan*, 87(4), 324-328.
- Swanburn, M. S. L., & de Glopper, K. (1999). Incidental word learning while reading: A meta-analysis. *Review of Educational Research*, 69, 261–285.
- Thornbury, S. (2002). *How to teach vocabulary?* Essex: Longman. Retrieved from <http://www.amazon.co.uk>
- Urevbu, A. (1991). *Curriculum studies*. Lagos –Nigeria: Longman Group Ltd.

- Wesche, M., & Paribakht, T. S. (1996). Assessing second language vocabulary knowledge: Depth versus breadth. *Canadian Modern Language Review*, 53(1), 13–40.
- Wiggins, G. (1998). *Educative assessment: Designing assessments to inform and improve student performance*. San Francisco: Jossey-Bass.
- William, D., & Thompson, M. (2007). Integrating Assessment with Instruction: What Will It Take to Make It Work? In *The Future of Assessment: Shaping Teaching and Learning*.
- Wood, R., & Schmidt, J. (2002). *History of the development of Delaware Comprehensive Assessment Program in Science*. Washington, DC. National Academies Building.
- Yorke, M. (2003) Formative assessment in higher education: moves towards theory and the enhancement of pedagogic practice. *Higher Education* 43(4), pp.477-501.
- Zacharias, N. T. (2007). Teacher and student attitudes toward teacher feedback. *RELC Journal*, 38(1), 38-52.
- Zimmerman, C. (1997). Do reading and interactive vocabulary instruction make a difference? *An Empirical Study TESOL Quarterly*, 31(1), 121- 140. Retrieved from <http://www.jstor.org>

# Appendices

## Appendix A: Pre-test

American University of Armenia  
Department of English Programs  
Experimental English Classes

Class: C6








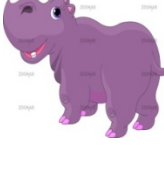

Time: 50 min.


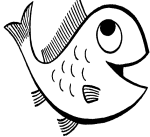










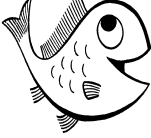
Name: .....

Date: .....

### Section I. Listening Comprehension (15 points)

*Part A. Listen to the description of the animals and tick the correct answer. Number one is done as an example. (7 points)*

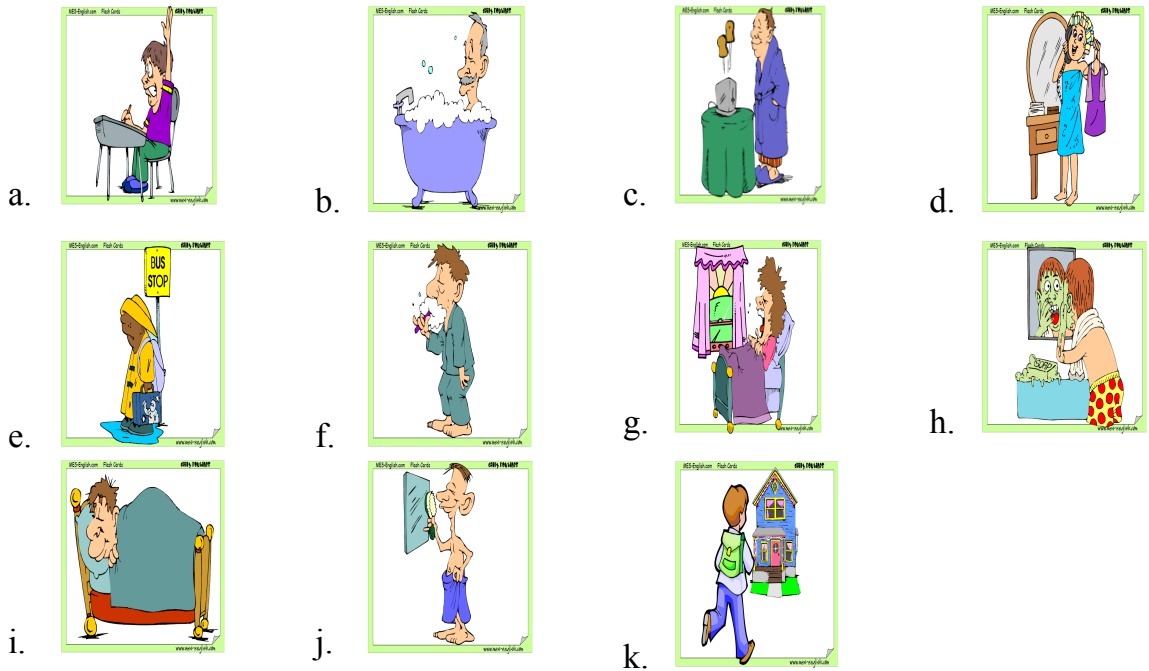
1.	 v		
2.			
3.			

4.			
5.			
6.			
7.			
8.			

**Part B. Listen, choose the correct picture and write its letter in the box. There are two extra pictures. Number one is done as an example. (8 points)**

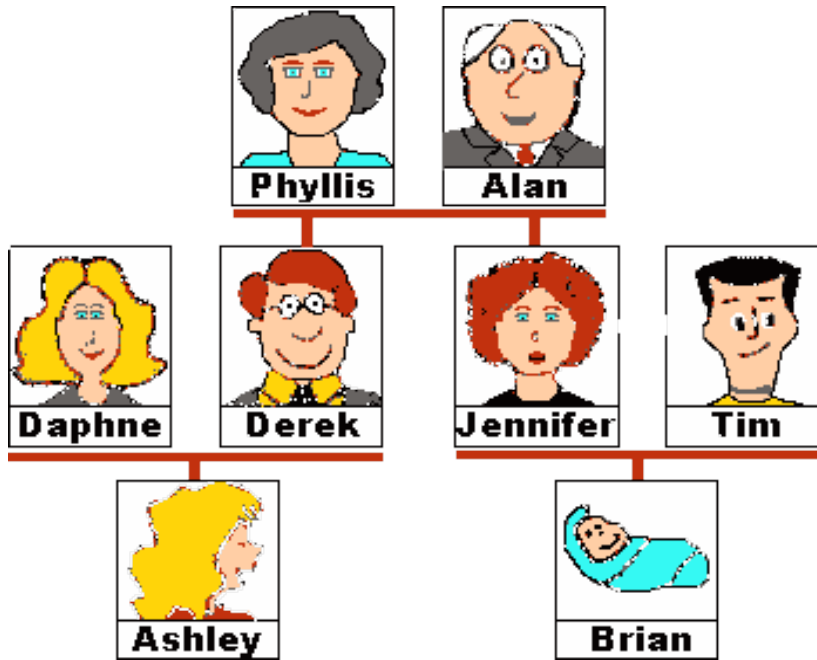
1.	E
2.	
3.	
4.	
5.	
6.	
7.	

8.	
9.	



**Section II. Reading Comprehension (15 points)**

*Part A. Look at the family tree and circle 'T' for true and 'F' for false sentences. Number one is done as an example. (5 points)*



- |  |   |                                    |
|--|---|------------------------------------|
| 1. Derek is Phyllis father.              | T | <input checked="" type="radio"/> F |
| 2. Ashley is Daphne's daughter.          | T | <input type="radio"/> F            |
| 3. Phyllis and Alan have three children. | T | <input type="radio"/> F            |
| 4. Brian is Ashley's cousin.             | T | <input type="radio"/> F            |
| 5. Jennifer is Ashley's aunt.            | T | <input type="radio"/> F            |
| 6. Tim is Brian's uncle.                 | T | <input type="radio"/> F            |

**Part B. Read and draw hands on the clocks. Number one is done as an example. (5 points)**

1. He gets up at eight o'clock.



2. She eats breakfast at half past eight.



3. She goes to school at a quarter to nine.



4. He watches TV at three o'clock.



5. He takes a bath at half past six.



6. He eats dinner at a quarter past seven.



*Part C. Read the riddles and find answers to them. Number one is done as an example. (5 points)*

**Word Bank**

Bookcase sink

Chair sofa

Curtains table

1. You can sit and read on it. What is it? chair
2. It's big. You and your mother and father can sit on it. What is it? \_\_\_\_\_
3. You can eat on this. What is it? \_\_\_\_\_
4. It's big. It has books in it. What is it? \_\_\_\_\_



5. There can be one in the bathroom. There can be one in the kitchen. What's it?

\_\_\_\_\_

6. There can be two in a window. What are they? \_\_\_\_\_

**Section III. Production (20 points)**

**Part A. Circle the job that matches the definition. (8 points)**

\_\_\_\_\_ 1) "Teaches students in a school"

- |            |               |
|------------|---------------|
| A. student | C. teacher    |
| B. dentist | D. bus driver |

\_\_\_\_\_ 2) "Cuts men's hair, shaves their beards"

- |                   |            |
|-------------------|------------|
| A. barber         | C. student |
| B. police officer | D. teacher |

\_\_\_\_\_ 3) "Works at the police station and fights crime"

- |                   |                  |
|-------------------|------------------|
| A. police officer | C. singer        |
| B. student        | D. postal worker |

\_\_\_\_\_ 4) "Serves food in a restaurant"

- |            |           |
|------------|-----------|
| A. waiter  | C. singer |
| B. student | D. chef   |

\_\_\_\_\_ 5) "Flies planes"

- |                 |            |
|-----------------|------------|
| A. truck driver | C. student |
| B. pilot        | D. dentist |

\_\_\_\_\_ 6) "Sings songs"

- |           |              |
|-----------|--------------|
| A. actor  | C. waiter    |
| B. singer | D. carpenter |

\_\_\_\_\_ 7) "Works in a hospital and treats sick people"

- A. doctor
- B. student
- C. teacher
- D. truck driver

\_\_\_\_\_ 8) "Fights fires and drives a fire engine"

- A. postal worker
- B. chef
- C. firefighter
- D. nurse

**Part B. Look at the pictures and make up sentences by using the words from the box. Number one is done as an example. (6 points)**

snowy	sunny
windy	icy
cloudy	rainy
hot	



2. \_\_\_\_\_



1. It is rainy.

3. \_\_\_\_\_



4. \_\_\_\_\_





5. \_\_\_\_\_

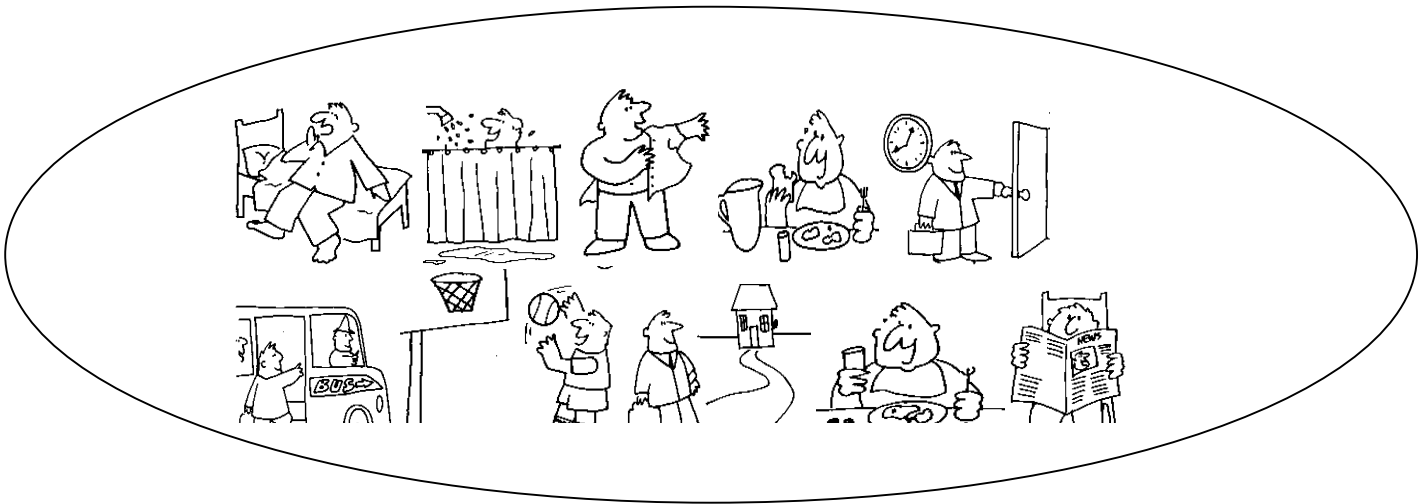


6. \_\_\_\_\_



7. \_\_\_\_\_

**Part C. Write about your day. Pictures can help you. (6 points)**



---

---

---

---

---

---

---

**Good Luck! ☺**

<b>Total:</b> ...../50
---------------------------

**Appendix B: Post-test**

**American University of Armenia  
Department of English Programs  
Experimental English Classes**

Class: C6









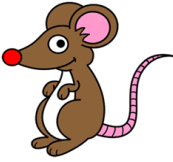



Time: 50 min.

Name: .....

Date: .....

**Section I. Listening Comprehension (15 points)**

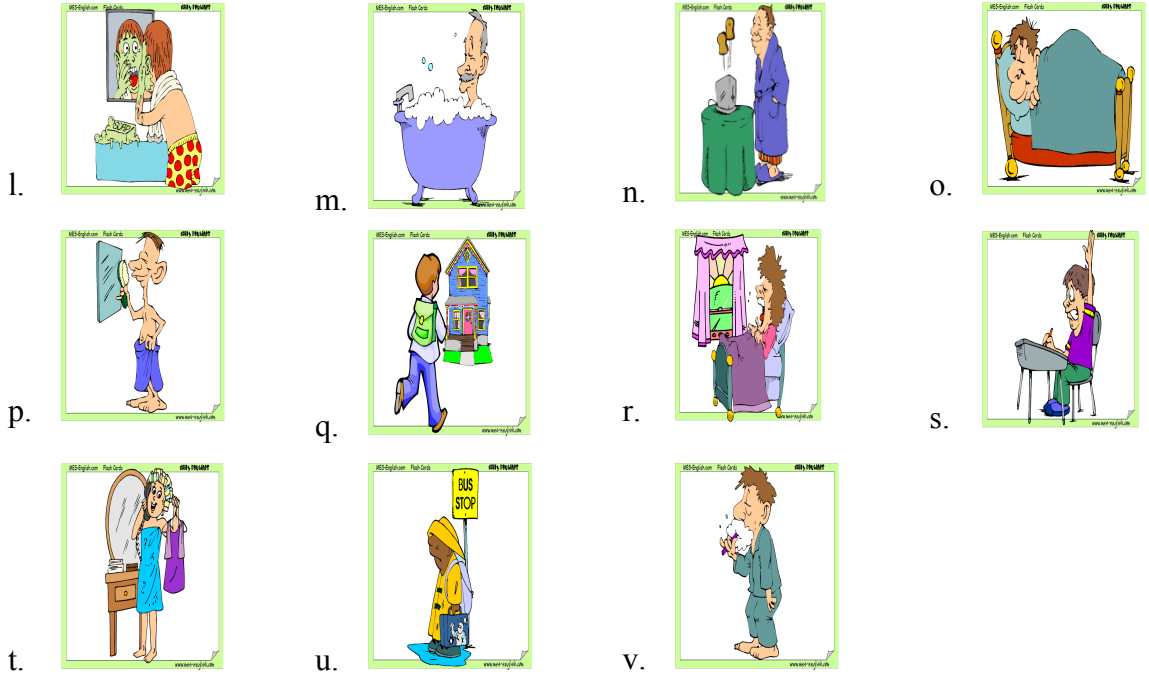
*Part A. Listen to the description of the animals and tick the correct answer. Number one is done as an example. (7 points)*

1.	 V		
2.			
3.			
4.			



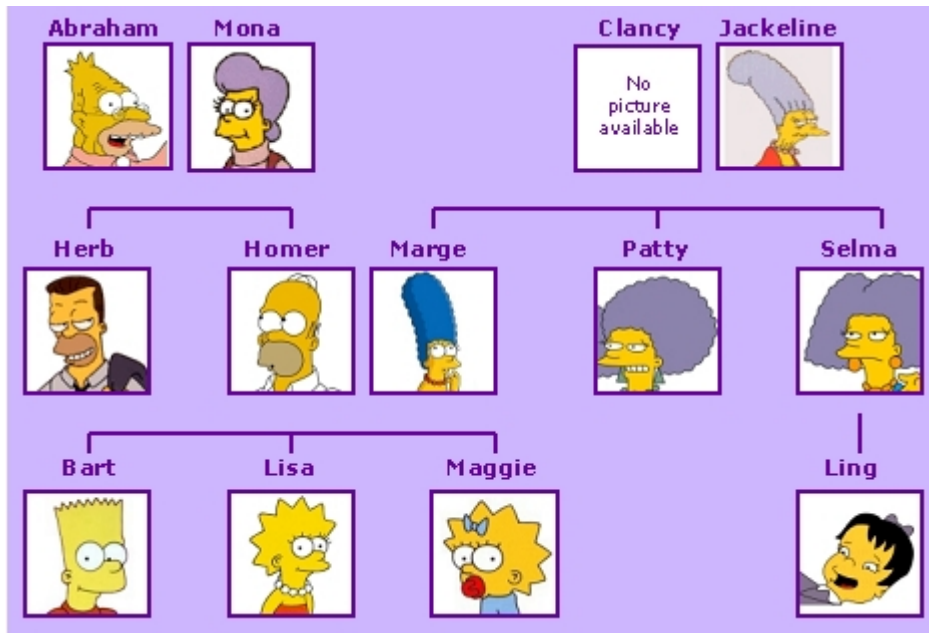
**Part B. Listen to the short dialogues, choose the correct picture and write its letter in the box. There are two extra pictures. Number one is done as an example. (8 points)**

1.	E
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	



**Section II. Reading Comprehension (15 points)**

*Part A. Look at the family tree and circle 'T' for true and 'F' for false sentences. Number one is done as an example. (5 points)*



F

- |  |   |   |
|--|---|---|
| 7. Abraham is Marge's mother-in-law.       | T |   |
| 8. Lisa is Mona's granddaughter.           | T | F |
| 9. Selma has two sisters and two brothers. | T | F |
| 10. Homer is Jackeline's son-in-law.       | T | F |
| 11. Bart is Patty's nephew.                | T | F |
| 12. Ling is Jackeline's niece.             | T | F |

**Part B. Read and draw hands on the clocks. Number one is done as an example. (5 points)**

1. He wakes up at eight o'clock.



shutterstock - 35399653

2. She goes to school at twenty-five minutes past nine.



3. She eats lunch at twenty minutes to twelve.



4. He plays football at half past three.



5. He has a shower at ten minutes past five.



6. He eats supper at a quarter to seven.



**Part C. Read the riddles and find answers to them. Number one is done as an example. (5 points)**

<b>Word Bank</b>	
Comb	sink
Key	bathtub
Mirror	toothbrush

7. We use it to brush our teeth. What is it? toothbrush
8. Usually in the toilet or bathroom. We can look at our face in it. What is it?  
\_\_\_\_\_
9. We use it to comb our hair. What is it? \_\_\_\_\_
10. We can take a bath in it. What is it? \_\_\_\_\_
11. There can be one in the bathroom. There can be one in the kitchen. What's it?  
\_\_\_\_\_
12. We use it to open doors. What is it? \_\_\_\_\_

**Section III. Recognition (14 points)**

**Part A. Circle the job that matches the definition. (8 points)**

\_\_\_\_\_ 1) "One who answers phone calls and does office work for her boss."

- E. secretary                      G. businessman  
F. carpenter                      H. spaceman

\_\_\_\_\_ 2) "A person who manages the affairs of a company or business."

- A. doctor                          C. salesperson  
B. manager                      D. mail carrier



\_\_\_\_\_ 3) "One who does the cooking in a restaurant or hotel."

- |                |               |
|----------------|---------------|
| E. tailor      | G. chef       |
| F. hairdresser | H. accountant |

\_\_\_\_\_ 4) "A person who reports news on TV, radio or Newspaper."

- |              |                 |
|--------------|-----------------|
| E. architect | G. reporter     |
| F. dancer    | H. truck driver |

\_\_\_\_\_ 5) "One who does business."

- |                |                 |
|----------------|-----------------|
| E. businessman | G. photographer |
| F. hairdresser | H. worker       |

\_\_\_\_\_ 6) "One who defends people's rights in court."

- |           |              |
|-----------|--------------|
| E. actor  | G. builder   |
| F. lawyer | H. carpenter |

\_\_\_\_\_ 7) "A woman who plays a role in a movie."




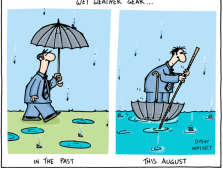


- |               |                |
|---------------|----------------|
| E. chef       | G. actress     |
| F. journalist | H. taxi driver |

\_\_\_\_\_ 8) "A person who works in a bank and keeps records of money."

- |              |               |
|--------------|---------------|
| E. waiter    | G. accountant |
| F. architect | H. mechanic   |

***Part B. Look at the pictures and make sentences by using the words from the box. Number one is done as an example. (6 points)***

Hot	wet
foggy	stormy
sunny	icy
windy	

<p>1. It's windy.</p>	<p>1. </p>
<p>2.</p>	<p>2. </p>
<p>3.</p>	<p>3. </p>
<p>4.</p>	<p>4. </p>
<p>5.</p>	<p>5. </p>
<p>6.</p>	<p>6. </p>

7.



7.

**Section IV. Production (6 points)**

**Part A. Ann usually does a lot of things during a day. Look at the pictures and make 6 connected sentences to describe her day. (6 points)**



---

---

---

---

---

---

---

---

**Good Luck! ☺**

**Total:**  
...../50





## **Appendix 4: Interview Questions**

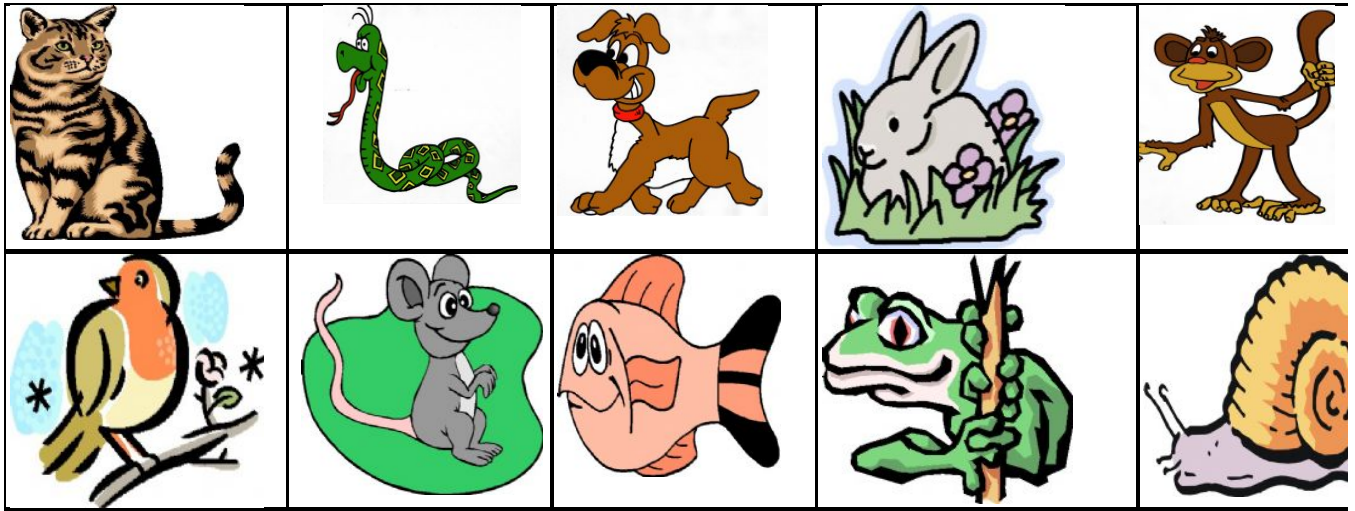
### **Interview Questions**

1. Was the vocabulary practice used during EEC classes a useful and beneficial learning experience for you?
2. Did the vocabulary practice used during EEC classes encourage your learning?
3. Did the vocabulary practice used in EEC classes decrease your interest in learning English vocabulary?
4. Did this practice help you to identify your vocabulary knowledge and realize what you need to do for further improvement?
5. Did the vocabulary practice used in EEC classes enable you to acquire words and phrases in easier and better ways?
6. Did you remember vocabulary better and easier when the teacher asked you to write down words/phrases and provided examples?
7. Do you I find the time and efforts you spent on vocabulary learning not effective?
8. Did the vocabulary practice used during EEC classes reduce your learning productiveness?
9. Do you think frequent short tests were more effective in helping to remember words and phrases than infrequent long ones?
10. Were you able to identify accurately your strong and weak points in learning words and phrases?

11. Would you like your teacher to continue using the applied vocabulary practice in class for teaching vocabulary?

**Appendix 5: Some Examples of Formative Assessment Implemented in the Experiment**

**Example 1**



**Part I. Who am I? Write the name of the animal.**

1. I am long and dangerous \_\_\_\_\_.
2. I am small and I like cheese \_\_\_\_\_.
3. I swim in the water \_\_\_\_\_.
4. I like bananas and I can climb trees \_\_\_\_\_.
5. I am friendly and I like bones \_\_\_\_\_.

**Part II.A Read the story. Choose the correct number.**

1. ....boy has a snake.
2. ....girls have cats.
3. ....pupils have dogs.
4. ....pupils have birds.
5. ....children have fish.

We have many animals in our class and at home. Let me tell you about some of them.

One boy, Ben, has a snake. It is long and thin and green. It is not very nice, but it isn't dangerous. It is in a cage. Two girls have cats. One cat is brown and white. The other cat is all black. Five pupils have dogs. Every dog is different in size and color. But they are all good pets. Seven pupils have small birds. One boy has three canaries. The other six have parakeets. Three children have fish. Rachel has an aquarium outside her garden, not inside her house. It is full of goldfish, snails and frogs. It is really very nice. We also have animals in our classroom. We have little white mice and brown hamsters. But they are in a cage – not all over the floor. The very best thing we have is a soft, brown and white rabbit. It's my favorite animal. Its name is Rab Rabbit and I love to touch and pet it. Our teacher has animals in her house, too. She has a small dog, three birds and six monkeys. Monkeys? Oh! There aren't monkeys in her house! She has six children. But her children are "wild animals" so she says she has "monkeys". Our teacher is funny. She has a sense of humor.

**Part II. B Tick True or False**

		True	False
1.	Ben has a cat.		
2.	The snake is dangerous.		
3.	The dogs are different in size and color.		
4.	Rachel has fish.		
5.	The animals in class are on the floor.		
6.	Rab is a green frog.		
7.	The teacher has animals in her house.		
8.	The teacher has monkeys in her house.		



--	--	--	--

*Part II. C Describe the snake, the cats and the rabbit.*

*Example 2*

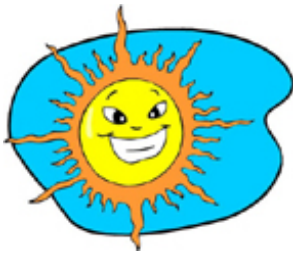
# How's the Weather?

*Listen to the description of the weather conditions, look at the pictures and write the correct weather condition.*

---

---

---



---

---

---



---

---

---



---

---

---



---

---

---



---

---

---

**Example 3**

*Look at the pictures and briefly describe what Paul does every day. (6 points)*

			
1. _____	2. _____	3. _____	4. _____
			
5. _____	6. _____	7. _____	8. _____
			
9. _____	10. _____	11. _____	12. _____

---

---

---

---

---

---

---

---

**Example 4**

*Listen to the description of 10 jobs, choose from the list and circle them.*

**paver**

**secretary**

**fisherman**

**grocer**

**mechanic**

**electrician**

**bus driver**

**baker**

**politician**

**architect**

**archaeologist**

**reporter**

**photographer**

**musician**

**singer**

**farmer**

**dressmaker**

**carpenter**

**hairdresser**

**teacher**