

FACULTY OF ARTS AND HUMANITIES SCHOOL OF ENGLISH LANGUAGE

TITLE OF PAPER: VOCABULARY ACQUISITION THROUGH WORD ASSOCIATION AS A TOOL TO ENRICH TRANSLATOR'S LEXICAL REPERTOIRE

AUTHOR:

ARCE ARDILA, BOLÍVAR ANDRÉS

SUBMITTED IN REQUIREMENT FOR OBTAINING THE BACHELOR OF ARTS DEGREE IN ENGLISH LANGUAGE WITH A MINOR IN TRANSLATION

PROJECT ADVISOR:

ORDÓÑEZ, FÁTIMA

Guayaquil, Ecuador

2015



CERTIFICATION

We certify that this research project was presented by **Bolívar Andrés Arce Ardila**, as a partial fulfillment for the requirements for a **Bachelor of Arts Degree in English Language with a Minor in Translation**.

PROJECT ADVISOR

Fátima Ordóñez, MSc.

DIRECTOR OF ACADEMIC PROGRAM

Stanley John González, MSc.

Guayaquil, 2015



STATEMENT OF RESPONSIBILITY

I, Bolívar Andrés Arce Ardila,

HEREBY DECLARE THAT:

The Senior Project: vocabulary acquisition through word association as a tool to enrich translator's lexical repertoire prior to obtain the Bachelor of Arts Degree in English language with a Minor in Translation, has been developed based on thorough investigation, respecting the intellectual property rights of third parties regarding citations within the corresponding pages whose sources are included in the bibliography. Consequently, this work is of my full responsibility.

Under this statement, I am responsible for the content, truthfulness and scientific scope of the aforementioned paper.

Guayaquil, 2015

AUTHOR

Bolívar Andrés Arce Ardila



AUTORIZACIÓN

I, Bolívar Andrés Arce Ardila,

Authorize the Catholic University of Santiago de Guayaquil to publish this Senior Project: Vocabulary acquisition through word association as a tool to enrich translator's lexical repertoire in the institution's library. The contents, ideas, and criteria in this paper are of my full responsibility and authorship.

Guayaquil, 2015

AUTHOR

Bolívar Andrés Arce Ardila

ACKNOWLEDGEMENT

First and foremost, I would like to express my profound gratitude to Jesus Christ, my strength and power. I would also like to acknowledge the support provided by my family during all my academic years of study. My grateful thanks are also extended to all my professors at Catholic University of Santiago de Guayaquil.

Andrés Arce

DEDICATION

This thesis is lovingly dedicated to Kenya Pacheco. Her tremendous support, active encouragement, and constant love have sustained me throughout this graduation work.

Andrés Arce



FINAL GRADE

FÁTIMA ORDÓÑEZ Project Advisor

TABLE OF CONTENTS

Table of Contents viii
Index of Tablesxi
Tables of Figures xii
ABSTRACT xiii
INTRODUCTION1
JUSTIFICATION
Statement of the Problem4
General Objective5
Specific Objectives5
Research Questions5
CHAPTER 1 – THEORETICAL FRAMEWORK6
REFERENCIAL FRAMEWORK6
The Notion of the Word6
The Word Defined7
The Word and Its Associative Field8
Word Association Test9
Mental Dictionaries11
Syntagmatic and Paradigmatic Associations; Clang Associates13
Vocabulary Relationships14
Word Association Networks; Translation Problems15
CONCEPTUAL FRAMEWORK16
Constructivism16
Associationism16
Connectionism16

	Tool	17
	Mnemotechnic	17
	Ambiguity	17
	Mismatch	18
	Parts of Speech	18
	Polysemy	18
	Homonymy	18
	Denotation and Connotation	19
	Inflection and Derivation	19
	Collocation	19
	Compound	20
	Conversion	20
	Blend and Shortening	20
	Syntax and Semantics	21
	Syntagmatic Associations	21
	Paradigmatic Associations	21
	Clang Associates	22
	Vocabulary Breadth and Vocabulary Depth	22
	Receptive Vocabulary	22
	Productive Vocabulary	23
CH	APTER 2 – METHODOLOGICAL FRAMEWORK	24
	Economy Principle	24
	Power Principle	24
	Categorization	25
	Concept Formation	26

Concept Attainment	26
Learning Modes	26
Aspects of the Learning Process	27
Discovery Learning Process	27
CHAPTER 3 – RESEARCH INSTRUMENTS	29
Subjects	29
Strategy of Inquiry	29
Survey	29
The Feasibility Survey	30
The Vocabulary Knowledge Surveys	30
Interview	30
Interview No.1	35
Interview No. 2	36
CHAPTER 4 – DATA ANALYSIS AND RESULTS	37
Analysis of Results of the Feasibility Survey	37
Findings	42
Analysis of Results of the Vocabulary Knowledge Survey	42
Findings	44
CONCLUSION	45
RECOMMENDATIONS	45
CHAPTER 5 – DESCRIPTION OF THE PRODUCT	46
Sample	47
REFERENCES	48

INDEX OF TABLES

TABLE 1	
TABLE 2	
TABLE 3	39
TABLE 4	40
TABLE 5	41
TABLE 6	
TABLE 7	43

INDEX OF FIGURES

FIGURE 1	8
FIGURE 2	9
FIGURE 3	10
FIGURE 4	11
FIGURE 5	14
FIGURE 6	15
FIGURE 7	28
FIGURE 8	31
FIGURE 9	32
FIGURE 10	33
FIGURE 11	34
FIGURE 12	47

ABSTRACT

The role of translators is of major importance to bridge the communication gap among the peoples of the world. This profession requires a lot of skill, hard work, and determination to meet the needs of translation users. For this reason, translators must possess a number of professional traits including proficiency in languages in addition to a growing willingness to continue improving their skills. In order to help Proz.com's Ecuadorian translators, the world's largest online translation network, in the pursuit of excellence and after a qualitative analysis of their vocabulary knowledge and their vocabulary learning processes, it is advisable for them to acquire new, functional vocabulary and make drastic changes to their vocabulary acquisition techniques. The purpose of this thesis work is to provide a new, powerful tool of vocabulary learning process in order to help Proz.com's Ecuadorian translators to develop an extensive vocabulary repertoire through word association in an efficient and unconventional manner.

Key words: (communication, determination, proficiency, vocabulary knowledge, learning process, acquisition)

INTRODUCTION

The English language is present in our daily lives: Communication media, information technology, Anglicisms. It is used by thousands and thousands of people and, according to Crystal (2003), "about a quarter of the world's population is already fluent or competent in English, and this figure is steadily growing" (p. 6). As time passes, the English language has become absolutely indispensable to an ever-growing number of people. The importance of the English language is beyond dispute. . "English is now the language most widely taught as a foreign language . . . often displacing another language in the process" (Crystal, 2003, p. 5).

English has become an international language, and "[it] functions [unquestionably] as a global lingua franca" (Seidlhofer, 2005, p. 5). It has opened doors for speakers with different first languages and given them the opportunity to enjoy social, cultural, and professional benefits. *The Cambridge Online Dictionary* defines lingua franca as "a language used for communications between groups of people who speak different languages...". In other words, without a bridge language, a multilateral communication process would be almost unfeasible to attain.

Communication, a process of exchanging thoughts, ideas, feelings or views, is fundamental in our lives – vitally necessary. Daniel Goleman (2007), in his book *Social Intelligence: The New Science of Human Relationships*, states that "we are wired to connect" (p. 4). And communication connects us to each other no matter race, religion, social status – nationality. However, the possibility of achieving effective communication is almost none when proper words are not part of the lexical repertoire or when the learning processes are conducted inappropriately or in a disorderly manner.

Vocabulary, the key to understanding others and make them understand, plays an essential role in communication, giving the speaker the ability to be explicit and not vague when sharing their ideas in any conversation, improving their academic and social confidence and developing not only their speaking skills, but also their listening, reading and writing ones. The importance of vocabulary in communication is evident; it is similar to watching a 3D movie without glasses: everything looks blur and unclear producing a strong feeling of discomfort. "Lexis is the core or heart of language" (Lewis, 1993, p. 89).

Despite the fact that vocabulary is a necessary element of communication, it cannot be acquired effectively without an appropriate learning process. It becomes uninspiring for learners to open a dull vocabulary book and read repetitive, boring pages to learn a word that will not remain in their memory for very long, but instead, eventually, will suddenly disappear. "Vocabulary acquisition is about meaning, it is an explicit learning process" (Ellis, 1995, p.16). Ellis is insisting that the vocabulary acquisition process is about semantic associations, connections of words – long-term retention, and that vocabulary learning should not be taken lightly, rather conducted in a procedural manner in the same way as the other language skills (listening, speaking, reading, and writing) due to the fact that a limited vocabulary learning process equals effective vocabulary acquisition.

The proposal of this dissertation is to establish a new, powerful tool of vocabulary acquisition through word association – when translators meet the word in the future, it will readily recall its other meanings – facilitating traditional learning methods and enriching Proz.com's Ecuadorian translators lexical repertoire.

2

JUSTIFICATION

As professionals, translators require extensive vocabulary knowledge to accomplish complicated tasks more quickly, confidently, and accurately meeting deadlines and ensuring reliability. Surprisingly, a certain number of Ecuadorian translators from the web site Proz.com do not have a rich vocabulary: they know plenty of advanced words, but have lack of very basic ones. They had spent their time focusing on specialized and technical vocabulary and not paying attention to the very basics. What could be the solution for this? The key word, association. *The Cambridge Online Dictionary* defines association as "the fact of being involved with or connect to... something." And indeed association is what most of translators disregard: they learn a word, but they do not make the connections to expand their vocabulary knowledge. And, for this reason, the development of an association tool was crucial.

This vocabulary association tool follows Piaget's developmental theory on constructivism and focuses on Bruner's cognitive development theory. This tool boosts the ability to acquire new information and subsequently to remember it without any difficulty. For instance, if translators use the vocabulary association tool for the word "hair," they will know that hair is an homophone of "hare" and thus learn two words simultaneously; likewise, if they use "trunk," they will notice that it has several meanings in the same part of speech, and similarly, in the case of meaning, when translators use the word "hammer," they will be aware of the existence of other hammer-like tools that possess different spellings and definitions.

This tool will help Proz.com's Ecuadorian translators to expand their vocabulary through word association – sounds, spelling patterns or visuals – by the use of mnemotechnics.

Statement of the Problem

After a qualitative analysis of the vocabulary knowledge and the vocabulary learning processes of fifty Proz.com's Ecuadorian translators, one key issue that was evidenced was the lack of a rich lexicon among them. Three possible causes of this lexical deficiency have been posited in this analysis. The first cause is the fact that people devoted to the field of translation seem to neglect reading, one of the most important ways of learning vocabulary. As stated by Randall S. Hansen (EmpoweringSites, 2008), "The more you read especially novels and literary works, but also magazines and newspapers - the more words you'll be exposed to ..." The second cause is the fact that most translators show a complete lack of memorization techniques; they are not able to associate words with others in an effective manner - link a word in the meaning networks of other works - making the vocabulary acquisition process a complicated task to accomplish. As claimed by Kenneth L. Higbee (2001), "Many techniques and systems can serve as tools to build an effective memory and enable us to do amazing things that cannot be done with the unaided memory" (p. 3). And the last possible factor that causes a lexical deficiency is that many translators possess a non-native status. The focus of this thesis work is on memorization tools, a determining factor for the lack of a rich vocabulary repertoire.

General Objective

 To analyze vocabulary needs and learning styles of Proz.com's Ecuadorian translators in order to enrich their lexical repertoire through word association by developing a new vocabulary acquisition tool.

Specific Objectives

- To present information about fifty Proz.com Ecuadorian translators' viewpoint about the effectiveness of memorization tools.
- To present information about the main problems when rendering translations out of the translator's L1.
- To present information about the new vocabulary learning strategy.

Research Questions

- What are the most effective and viable strategies regarding the vocabulary learning process?
- What are the preferred vocabulary learning strategies for translators?
- What are the predominant vocabulary problems when rendering translations out of the translator's L1?
- How effective is the use of mnemotechniques for learning purposes?

CHAPTER 1: THEORETICAL FRAMEWORK

REFERENTIAL FRAMEWORK

The Notion of the Word

Some translators have a notion of what a word is, and some others are capable of identifying them clearly – they use them on a daily basis – however they do not know how to provide an adequate definition. What does it mean to know a word? How important is to know a word? How many words does a translator need to know? – These are some fundamental questions that are going to be answered subsequently.

Keith S. Folse (2004), in his book *Vocabulary Myths*, explains that in order to know a word it is necessary to recognize it: know how and when to use it correctly. He mentions seven aspects of language: polysemy, denotation and connotation, spelling and pronunciation, part of speech, frequency, usage and collocation. Nevertheless, this is not an exhaustive list. Jackson and Amvela (1999), in their book *Words, Meaning, and Vocabulary,* suggest other additional words: homonymy, inflection and derivation, compounds, conversion, blends, and shortenings as other important features to take into consideration. As shown above, the word meets different aspects; it is never sufficient to "know" the word, but to identify it in their different forms – linguistic sings.

Undoubtedly, vocabulary knowledge is requisite for communication. Knowing meaning and relation of words help translators create networks of knowledge so that they can establish connections between words, develop a rich vocabulary repertoire, and express their own ideas when translating; therefore, the number of words a translator should know is of great significance; the more words, the better. In fact, despite large or small amounts, this process should seem effortless since "one of the things translators share is a love of language … In other word, language itself is generally one of a translator's passion" (Tassini, 2011, p. 27).

The Word Defined

What does the term "word" mean? Scholars define "word" in a variety of ways depending on its representation. According to Jackson and Amvela (1999), the term "word" has three different definitions. The first deals with writing: the space between each word. They state that the space between each word determines each and every one of them so that the structure of letters can be considered as a word. However, "these separations do not always correspond to functional realities." What they really mean is that in the case of "semantic units," the words create a bond to each other; they cannot be separated and must be counted as one. For example, in 'an useful ice cube dispenser', the last three words are counted as one because they represent – a "semantic unit". The second definition involves "indivisible unit of thought." And this is divided into three categories: "unit," "block," and "complex unit". Unit refers to the word in writing (chair, book, love); block refers to words that comprise two "units of thought" (refund, rebuild, colorful); and "complex unit" deals with a gathering of words that consist of just one "unit of thought". For instance, just in case, on purpose, even though. And the third definition "relies only on purely formal criteria." However, in this case, the only problem is that the term "word" must be defined in different points of view - phonological, lexical, and grammatical.

The Word and Its Associative Field

Words are meant to connect; they bear great similarity among each other. These connections can be established by meaning, formation, or both (Jackson and Amvela, 1999). In order to represent connection, Saussure created diagrams in which he associated verbs, noun, adjectives, adverbs, etc. to a common stem word. For instance, in figure number 1, 'lecturer' is the core; this word connects to other similar words suggesting other words consecutively.





Word Association Test

Word association tests reveal important information about people's behavior. They are used in psychoanalysis; however, their usage can be readily extended to a second language acquisition. These tests are based on the Kent-Rosanoff list. This list consists of 100 familiar, everyday words (Paul Meara, 2009).

1	table	2	dark	3	music	4	sickness
5	man	6	deep	7	soft	8	eating
9	mountain	10	house	11	black	12	mutton
13	comfort	14	hand	15	short	16	fruit
17	butterfly	18	smooth	19	command	20	chair
21	sweet	22	whistle	23	woman	24	cold
25	slow	26	wish	27	river	28	white
29	beautiful	30	window	31	rough	32	citizen
33	foot	34	spider	35	needle	36	red
37	sleep	38	anger	39	carpet	40	girl
41	high	42	working	43	sour	44	earth
45	trouble	46	soldier	47	cabbage	48	hard
49	eagle	50	stomach	51	stem	52	lamp
53	dream	54	yellow	55	bread	56	justice
57	boy	58	light	59	health	60	bible
61	memory	62	sheep	63	bath	64	cottage
65	swift	66	blue	67	hungry	68	priest
69	ocean	70	head	71	stove	72	long
73	religion	74	whiskey	75	child	76	bitter
77	hammer	78	thirsty	79	city	80	square
81	butter	82	doctor	83	loud	84	thief
85	lion	86	joy	87	bed	88	heavy
89	tobacco	90	baby	91	moon	92	scissors
93	quiet	94	green	95	salt	96	street
97	king	98	cheese	99	blossom	100	afraid

Figure 2: The Kent-Rosanoff list

(G.H. Kent and A.J. Rosanoff, 1910, p. 67:37-96 & 317-390)

The responses to the words above are almost always the same, for instance, as claimed by Paul Meara (1999), "78% of respondents reply with **chair**; given MAN, 78% respond with **woman**; BLACK produces **white** 70% of the time; BREAD gives **butter** 56% of the time, and so on (p. 5).

1: TABLE	chair	cloth	talk	desk
2: MAN	woman	dog	boy	child
3: SOFT	hard	cushion	light	bed
4: BLACK	white	night	cat	dark
5: HAND	foot	finger	glove	arm
6: SHORT	long	tall	fat	small
7: SLOW	fast	quick	train	snail
8: NEEDLE	thread	cotton	pin	eye
9: BREAD	butter	jam	cheese	food
10: BITTER	sweet	lemon	beer	sour

Figure 3: Ten most common responses by English learners to the Kent-Rosanoff list (Paul Meara, 2009, p. 6)

Additionally, in two London Schools, several moderately proficient students learning French, but who have no degree of fluency were taken the association test; they had to write the first word that came into their mind to complete the Kent-Rosanoff list. These tests revealed some predictable differences between one language and the other. These differences not only exist among languages, but also among groups in the same language. One of the possible reasons is that vocabulary teaching focuses more on syntactic aspects rather than semantic ones (Paul Meara, 2009). Translators just identify the word, but do not make connections to remember the word later. In figure 4, a comparison of ten responses to the Kent-Rosanoff list among English and French learners is shown.

DEEP	shallow	sea	water
PROFOND	creux	mer	puits
MOUNTAIN	hill	valley	snow
Montagne	neige	plaine	mer
HOUSE	home	garden	door
MAISON	toit	foyer	porte
BUTTERFLY	moth	wing	net
PAPILLON	fleur	aile	couleur
SWEET	sour	sugar	bitter
DOUX	dur	mou	agréable
EARTH	soil	sky	ground
TERRE	mer	ciel	ronde
SOLDIER	sailor	army	uniform
SOLDAT	guerre	plomb	armée
STOMACH	food	ache	pain
Estomac	digestion	ventre	faim
YELLOW	blue	red	green
JAUNE	vert	citron	serin
BREAD	butter	jam	cheese
Pain	vin	blanc	manger
HEALTH	sickness	wealth	happiness
SANTE	maladie	fragile	bonne
MEMORY	mind	thought	forgetfulness
MEMOIRE	souvenir	intelligence	leçon

Figure 4: Comparison among English and French learners' responses to the Kent-Rosanoff list (Paul Meara, 2009, p. 8)

Mental Dictionaries

Paul Meara (2009) believes association provides information about mental dictionary organizations, and that vocabulary is "structured" or "stored" in the brain in different ways. He states that the difference lies in word organization whether it is syntactic or semantic: words, phrases, sentences rather than comprehension of words. "This lack of a proper semantic organization for foreign language words may explain a large part of the difficulty that learners experience in processing both written and spoken foreign language material" (Paul Meara, 1009, p. 17).

The benefits of having semantic connections will boost the number of alternatives to choose. On the contrary, a "non-semantic" organization would be detrimental to association methods due to the fact that "cluster of words" would be inappropriate for the utterance or text in question. I concur when Paul Meara (1999) notes, "[W]e ought to put a considerable research effort into developing learning methods which could lead learners to develop mental lexicons that are properly structured and as closely as possible like those of native speakers" (p. 17). Meara is insisting that more emphasis should be drawn to semantic learning methods regarding vocabulary acquisition so that learners can resemble native speakers in the way they organize the information received during the course of their lives.

Nonetheless, the semantic association process cannot occur if no words are added to the translator's lexical repertoire; it would be like being willing to fly without wings. The author mentions three main causes concerning the lack of a wide lexical repertoire among leaners of a foreign language. The first cause is that scholars in "applied linguistics" focus their attention to the development of syntactic books; likewise teachers concentrate more on the study of syntax rather than vocabulary. "Syntax is not a serious source of difficulty for more advanced learners, and vocabulary problems are probably much more serious once the early phrases of learning are past" (Paul Meara, 1999, p. 18). The second cause is that vocabulary shortcomings are analyzed from the point of view of teachers causing any significant effect since students should be the ones to be examined to determine strengths and weaknesses. And the last cause is that the method employed is not the most appropriate one since vocabulary teachings and learning materials are inadequate and the time spent is unsatisfactory.

Vocabulary is undervalued: it is studied in a superficial manner. "[L]earners acquiring vocabulary usually assumed that learning a foreign word is merely a matter of being able to recognize that [HOMBRE] means MAN" (Paul Meara, 1999, p. 18). For native speakers, vocabulary acquisition is a gradual process: it takes time and effort. It is the strong connection between the individual and the word – the "ability to react [spontaneously] to a word" in any circumstances – and the approval by the "speech community." According to Paul Meara (1999), "... if we could develop learning methods that, as a side effect, produced learners with native-like associations patterns, we would also be producing learners who were better able to communicate in their foreign language" (p. 19).

Syntagmatic and Paradigmatic Associations; Clang Associates

Meara (1999) explains that association is divided into three categories: syntagmatic and paradigmatic associations, and clang associates. And they vary, one from the other, depending on two factors: years of age, and mental or behavioral patterns. Syntagmatic and paradigmatic associations are formed by each and every person; however, a marked distinction between adults and children is drawn: On the one hand, adults "tent to produce" paradigmatic associations, and, on the other hand, children, until the age of seven, "tend to produce" syntagmatic ones. In addition, Meara notes that besides syntagmatic associations, children also produce clang associates: associative responses related more to syntactic rather than semantic interpretations. These responses are not common in adults; however, they can be possible under the influence of drugs or mental illnesses.

Paradigmatic associations							
MAN woman BOY girl FATHER son HOT cold TREE bush	(meaning identical except for sex) (meaning identical except for sex) (different views of the same relationship) (polar opposite adjectives) (both plants of a woody kind)						
Syntagmatic associations BRUSH teeth HOLD hands BLACK mark BANK robber	HUM him (conso LATE light (asson	ing response) onants unchanged)					

Figure 5: The three types of association (Paul Meara, 2009, p. 6-7)

Vocabulary Relationships

One thing is to know a word, and another thing is to know it perfectly well. Meara (1999) mentions that a number of vocabulary tests have been taken to differentiate whether learners possess a vocabulary breadth or a vocabulary depth; he also explains the relationship between receptive and productive vocabulary. These tests and analysis show a broad distinction between passive and active vocabulary, and the close connection an individual might have to a particular word. "L2 learners are avid collectors of words, and tend to measure their own success by the number of words that they know... teaching materials and methodologies exploit and encourage this" (Paul Meara, 1999, p. 33). The basis of Meara's argument is that books and methods turn their attention to quantity rather than quality, and that the amount of vocabulary words a learner might have does not determine neither proficiency nor expertness.

Word Association Networks; Translation Problems

Vocabulary words are very extensive regardless of whether it is first or second language: as time passes, more and more words are added to the dictionary. Vocabulary words are so vast that an individual can express the same idea in different ways or be able to choose from a list of similar-meaning words the most suitable one, and, in order to do this, the words should be previously incorporated as part of the individual's lexicon; nonetheless, the vocabulary acquisition process is time-consuming and, without an effective technique, complicated (Paul Meara, 1999).

In order to facilitate this process so that learners can learn more words simultaneously, expand their vocabulary repertoire, and consequently avoid serious vocabulary translation problems such as lexical ambiguities and lexical mismatches, scholars use semantic maps as part of the learning process.





CONCEPTUAL FRAMEWORK

In order to develop a vocabulary acquisition tool, a number of concepts must be defined to have a better understanding of the relationship between the translator and the word.

Constructivism

Fosnot (2004) explains Piaget's theory on constructivism as "a theory about knowledge and learning ... describes both what "knowing" is and how one "comes to know" ... describes knowledge not as truths to be transmitted or discovered, but as emergent, developmental, nonobjective, viable constructed explanations by humans engage in meaning – making in cultural and social communities of discourse" (p. 3). The basis of Fosnot's argument is that individuals construct their own knowledge through experience or everyday situations.

Associationism

Gluck, Mercado, and Myers (2013) explains Aristotle's view of associationism as "the principle that memory depends on the formation of linkages ("association") between pairs of events, sensations, and ideas, such that recalling or experiencing one member of the pair elicits a memory or anticipation of the other" (p. 4). The basis of Aristotle's view of associationism is that individuals' memorization relies on association of closely related words to organize sensations and ideas and enrich vocabulary.

Connectionism

Saville-Troike (2012) explains Hebb's proposal about connectionism as a "cognitive framework for the focus on learning processes ... not considering language learning to involve either innate knowledge or abstraction of rules and principles, but rather to result from increasing strength of associations (connections) between stimuli and responses" (p. 28). Similar to associationism, connectionism deals with the relationship between the individual and the word and the number of connections an individual is able to establish with them.

Tool

The Online Dictionary.com defines tool as "anything used as a means of accomplishing a task or purpose." The purpose for this research project is to develop a vocabulary acquisition tool to enrich translator's lexical repertoire (Retrieved from http://dictionary.reference.com/browse/tool?s=t).

Mnemotechnic

The Encyclopedia of the Sciences of Learning, Springer, defines mnemotechnics as "the application of mnemonics principles and techniques in order to organize memory impressions and facilitate later recall ... mnemonics techniques involve a broad class of strategies from simple to complex in nature, such as rehearsal, clustering, organizational, and transformation including the keyword, pegword, and letter strategies." This vocabulary acquisition tool utilizes mnemotechnics in order to facilitate the study and memorization of words through word association (Retrieved from http://www.springer.com).

Ambiguity

The Cambridge Online Dictionary defines ambiguity as "the fact of something having more than one possible meaning and therefore possibly causing confusion." The use of proper vocabulary avoids lexical ambiguities ensuring accuracy and reliability. (Retrieved from http://dictionary.cambridge.org).

Mismatch

The Cambridge Online Dictionary defines the verb mismatch as "to put ... things that are unsuitable for each other." The more vocabulary words a translator knows, the better it is. However, it is not the same to know a word than to know a word perfectly well. The use of proper vocabulary avoids lexical mismatches ensuring reliability (Retrieved from http://dictionary.cambridge.org).

Parts of Speech

The Cambridge Online Dictionary defines part of speech as "One of the grammatical groups, such as noun, verb, and adjective, into which words are divided depending on their use." (Retrieved from http://dictionary.cambridge.org) In order to establish a connection with a word in particular, translators must recognize it in its entirety: they must distinguish the part of speech it represents.

Polysemy

According to Jackson and Amvela (1999), "polysemy refers to the situation where the same word has two or more different meanings" (p. 58). In the association method, polysemy is a key element that allows translators to store more information simultaneously expanding their vocabulary repertoire; nonetheless, the more definitions a word meets, the more challenging it would be for leaners.

Homonymy

According to Jackson and Amvela (1999), "homonymy refers to a situation where we have two or more words with the same shape" (p.61). Homonyms or, in other words, spelling and pronunciation, are an essential part for association methods because words can be associated either by its spelling or similar sound. For example, flower and flour: similar spelling, different sound.

Denotation and Connotation

The Cambridge Online Dictionary defines denotation as "the main meaning of a word, not including the feelings or ideas that people may connect with the word," and connotation as "a feeling or idea that is suggested by a particular word although it need not be a part of the word's meaning, or something suggested by an object or situation." These concepts provide a better understanding of the positive or negative implications a word might have in accordance with the individual's perspective; for a particular individual, the same word can be understood in a different way and cause misinterpretations. Translators must be conscious of the fact that denotation and connotation meaning can influence on people, either positively or negatively (Retrieved from http://dictionary.cambridge.org).

Inflection and Derivation

Jackson and Amvela (2009) defined inflection as "a general grammatical process which combines words and affixes ... to produce alternative grammatical forms of words," and derivation as "the lexical process which actually forms a new word out of an existing one by the addition of a derivational affix" (p. 70). With prefixes and suffixes, base words acquire certain new meaning; these new meanings and words must be taken into consideration in the vocabulary acquisition process so that translators can learn not only the root word, but also the word itself and its additional elements.

Collocations

The Cambridge Online Dictionary defines collocation as "a word or phrase that is often used with another word or phrase, in a way that sounds correct to people who have spoken the language all their lives, but might not be expected from the meaning." One of the ways to learn vocabulary is in context. When an individual learns a word in context, he or she not only learns a word in isolation, but also a group of words in sets making the learning process more efficiently (Retrieved from http://dictionary.cambridge.org).

Compound

Jackson and Amvela (2009), defines compound as "stems consisting of more than one root" (p. 79). In the English language there are a large number of compound words: lifetime, upside, airport, grasshopper, peppermint, just to mention a few.

Conversion

Jackson and Amvela (2009), define conversion as "a process by which a word belonging to one word class is transferred to another word class without any concomitant change of form, either in pronunciation or spelling" (p. 86). One example would be the conversion from noun to verb and vice versa; the verb play can be either used as a noun or as a verb depending on the situation. In addition, conversion can also be seen in the combinations adjective-verb, adjective-noun, etc.

Blend and Shortening

Jackson and Amvela (2009), define blend as "a new lexeme built from part of two ... words." For example, "motors + hotel = motel." And shortening as "the type of word-formation device in which only part of the stem is retained." For instance, "The beginning ... as in *lab* (from laboratory), the end as in *plane* ... (from aeroplane), and the middle as in *flu* (influenza)" (p. 88). The English language has a large number of blends and shortenings that translators must take into consideration when translating.

Syntax and Semantics

The Merriam-Webster Online Dictionary defines syntax as "the way in which words are put together to form phrases, clauses, or sentences," and semantics as "the meaning of words and phrases in a particular context." In order to establish a relationship among words it is crucial to think semantically; in this manner, more words – even unexpected ones – will emerge from our mental dictionaries due to the natural association process (Retrieved from http://www.merriam-webster.com).

Syntagmatic Associations

According to Paul Meara (1999), "Syntagmatic associations are associations that complete a phrase (syntagm)." These associations can be seen in words such as "brush – teeth, hold – hands, black – mark, bank – robber" (p. 6). This type of association is commonly used by children. The individual listens to the word and provides a response according to the connection or relationship the word might have with other words belonging to the same construction or sentence.

Paradigmatic Associations

According to Paul Meara (1999), "Paradigmatic associations are ones in which the stimulus word and the response that it evokes both belong to the same part of speech, nouns evoking nouns, verbs evoking verbs, and so on." For example, "man – woman, boy – girl, father – son, hot – cold, tree – bush" (p. 6). This type of association is commonly used by adults. The individual listens to the word and provides a response with an opposite word.

Clang Associates

According to Paul Meara (1999), clang associates are "Associations where the response is heavily influenced by the form of the stimulus word rather than its meaning." For example, "light – bite (rhyming response), hum – him (consonants unchanged), late – light (assonance), go – goat (same initial)" (p. 7). This type of association is not commonly used by normal adults, but rather by people under the influence of drugs or mental illnesses.

Vocabulary Breadth and Vocabulary Depth

Paul Meara (1999) mentions that "vocabulary breadth is interpreted as the number of words that learners know," and that "vocabulary depth is generally taken to mean how well [learners] know these words" (p. 73). In the course of life, individuals encounter thousands of words; words that are used on a daily basis and words that are used sporadically; words used grammatically correct and words that remain distant from syntactic knowledge due to low frequency of usage. This distinction is represented as vocabulary breadth and vocabulary depth, in which depth actually means connection or relationship.

Receptive Vocabulary

Qing Ma (2009), in his book Second Language Acquisition Vocabulary, asserts that "receptive vocabulary is the vocabulary that one can recognize when it is encountered either in reading or listening" (p.39). In other words, receptive vocabulary would be a passive vocabulary owing the fact that it is present but does not participate actively. Translation students should turn their attention to receptive vocabulary since the words here are neither thoroughly studied nor conscientiously practiced.

Productive Vocabulary

Qing Ma (1999) states that "productive vocabulary is the vocabulary that one is able to use correctly either in speaking or writing; productive knowledge of a word includes receptive knowledge and extends it" (p. 39). Translator's vocabulary should be more productive than receptive so that they can use words without restrain and translate like a well-oiled machine – rapidly and efficiently.
CHAPTER 2: METHODOLOGICAL FRAMEWORK

This research follows Piaget's developmental theory on constructivism and focuses on Bruner's cognitive development theory which assumes that new knowledge is constructed based on previous knowledge (a constructivist theory). The general idea of helping translators with their vocabulary developed from Bruner's theory into the enrichment of translator's lexical repertoire through word association owning the fact that Bruner's theory provides valuable and precise information about the cognitive physiology of people and how to approach the problem successfully. A comprehensive analysis is shown below.

Bruner describes two fundamental learning principles with regard to the learning process. These two principles can function in conjunction.

Economy Principle

This principle deals with the amount of information presented. The more text, the more complicated and less effective it would be for learners to assimilate the information – the less, the better – In other words, the same abundant piece of information can be understood more easily, clearly, and effectively if either irrelevant, unnecessary words are omitted from the text or visuals are used in conjunction with words.

Power Principle

This principle deals with the amount of connections an individual is able to establish with words. The more connections, the more knowledge acquired. That is to say, knowledge acquisition will be easier and faster if words are associated to each other. "The only possible way in which individual knowledge can keep proportional pace with the surge of available knowledge is through a grasp of the relatedness of knowledge" (Bruner, 1979, p.108). For instance, the word "trunk" has both principles: economy and power. It has the economy principle because the individual just learns one single word, and the power principal because from that word many other different meanings derive.

Categorization

Bruner believes that the learning process is about organization of ideas or concepts, the association between words – categorization – in order to help an individual to retain the information in the long-term memory. "To categorize is to render discriminably different things equivalent, to group the objects and events and people around us into classes, and to respond to them in terms of their class membership rather than their uniqueness" (Bruner, Goodnow, & Austin, 1986, p 1). According to the author, categorizations can be established by following a number of fundamental rules:

- a. Determine the semantic features of the word.
- b. Determine the components of the word and their relationship with it.
- c. Determine until what extent the semantic features of the word belong to the category.

In his cognitive development theory, Bruner also mentions two processes closely related to categorization: concept formation and concept attainment. This thesis concentrates more on the attainment rather than the formation of words because the main purpose of this work is to acquire/gain more vocabulary.

Concept Formation

This process consists in learning the definition of the word. For example, *the Cambridge Online Dictionary's* definition of car: a (usually privately-owned) motor vehicle on wheels for carrying people; automobile (Retrieved from http://dictionary.cambridge.org).

Concept Attainment

This process consists in determining the semantic features of the word. For example, car [VEHICLE] + [FOUR WHEELS] + [...] + [...] + [...] ..., etc. in order to make effective associations.

Learning Modes

Bruner describes three essential learning modes for the process of learning that function in conjunction; these modes represent mental schemes. That is to say, when a mode is adopted, the other modes can also be adopted simultaneously. The learning process used for this thesis work is iconic.

- a. Enactive: This mode is represented by actions the linkage between action and external experience – and the learning process begins when movements are present. This mode bears close resemblance to Piaget's sensorimotor stage.
- b. Iconic: This mode is represented by images. Visuals describe the word facilitating comprehension and memorization.
- c. Symbolic: This mode is represented by symbols. Symbols have no relation with the word itself. This mode bears close resemblance to Piaget's preoperational stage.

Aspects of the Acquisition Process

Bruner states that any instructional theory should take into consideration a number of aspects. These aspects determine the effectiveness of the acquisition process.

- a. Learner's willingness to learn.
- b. The proper teaching of new knowledge.
- c. Effectiveness of teaching materials.
- d. Reward and punishment.

Discovery Learning Process

Bruner's most significant contribution was his discovery learning method in which the individual receives a new word and makes mental associations reordering concepts and ideas so that it can form part of his or her lexicon and facilitate human-reality interaction. "Discovery... is in its essence a matter of rearranging or transforming evidence in such a way that one is enabled to go beyond the evidence ... to new insights" (Bruner, 1979, p. 82). The "cognitive structure" of an individual has its own, innate mental schemes providing organization to new information. In other words, the individual constructs is own path of knowledge, "permitting ... to put things together for himself, to be his own discoverer" (Bruner, 1979, p. 82). The basis of his argument is that prior knowledge in conjunction with recently acquired knowledge form individual's new knowledge. After analyzing Bruner's theory, the mental process of knowledge acquisition can be illustrated as follows:





Bicknell-Holmes and Hoffman (2000) enlist some essential attributes that characterize the process of discovery learning.

- a. Exploration of knowledge
- b. Interest-based activities
- c. Knowledge-acquisition activities
- d. Learning-focused activities
- e. Positive mental attitude towards failure
- f. Cognitive processing involvement activities
- g. Direct feedback opportunities among participants

CHAPTER 3: RESEARCH INSTRUMENTS

Subjects

The vocabulary association tool was designed to help Proz.com's Ecuadorian translators with their vocabulary acquisition. The data was randomly collected from fifty participants, members of the web site Proz.com, the world's largest online translation network.

Strategy of Inquiry

This thesis work is based on qualitative methodological research. This qualitative analysis focused on the vocabulary needs and learning styles of fifty Proz.com's Ecuadorian translators; its aim is to determine strengths and weaknesses in their conventional vocabulary acquisition techniques and enrich their vocabulary repertoire by the collection of data through closed format questionnaires, surveys.

Survey

One research instrument used in the data collection process was online surveys. These surveys evaluated the level of vocabulary knowledge and the feasibility of developing a word association tool. The four surveys were designed in Google Drive (www.gmail.com) and conducted in the Survey Monkey website (www.surveymokney.com) because this web-based survey application provides several, useful features such as the time spent by individual responses. The selection of closed format questions was favorable for time saving due to the fact that these types of questions are quick and less tedious to respond.

The Feasibility Survey

The feasibility survey covers seven multiple-choice questions and was conducted to establish the feasibility of developing a word association tool for vocabulary acquisition, and determine the vocabulary learning processes as well as the years of experience among translators.

The Vocabulary Knowledge Surveys

These surveys cover eight questions and include several words that represent the degree of relationship between the translator and the word; they were conducted to determine the vocabulary knowledge among translators. It is worth noting that the words here are neither easy nor difficult; they are classified by usage, and some words are more common than others because they are used more frequently.

Interview

Another research instrument used in the data collection process was the interview. This tool provided a quick and favorable response to the pertinent questions asked receiving appropriate feedback to draw satisfactory conclusions that supported this work. The first person interviewed was Wellington Suarez, freelance teacher. The Second person interviewed was Miguel Rodriguez, junior designer.

Feasibility Survey

This survey has been created to establish the feasibility of developing a word association tool for vocabulary acquisition.

Are you
Are vou

~

1.- How many years of experience do you have?

- \bigcirc none
- O between one and five
- between five and ten
- O between ten and fifteen
- O fifteen or more

2.- Do you have a memorization technique?

- () Yes
- O No

3.- Would you like to learn a new vocabulary acquisition technique?

O Yes

O No

4.- Do you think it would be easier to memorize words in isolation?

- ⊖ Yes
- O No
- 5.- Do you think it would be easier to memorize words in sets within a category and with the help of illustrations?
- Yes
- O No

6.- Do you think it would be easier to memorize words presented within a context?

- O Yes
- O No

7.- How many new words have you learned during this week?

- none
- O between one and five
- between five and ten

Figure 8: Feasibility Survey

Vocabulary Knowledge Survey No. 1

This interview was conducted to determine the vocabulary knowledge among translators.

1.- How would you say "guacamayo" in English? Land Birds

2.- How would you say "ombligo" in English? Human Body

3.- How would you say "col" in English? Leaf Vegetables

4.- How would you say "ropero" in English? Storage Furniture

5.- How would you say "pantalones cortos" in English? Clothing

6.- How would you say "grapadora" in English? Stationary

7.- How would you say "una vía" in English? Road Signs

8.- How would you say "Finlandia" in English? Countries

Figure 9: Vocabulary Knowledge Survey No. 1

Vocabulary Knowledge Survey No. 2

This interview was conducted to determine the vocabulary knowledge among translators.

1.- How would you say "buitre" in English? Land Birds

2.- How would you say "axila" in English? Human Body

3.- How would you say "diente de leon" in English? Leaf Vegetables

4.- How would you say "cajón" in English? Storage Furniture

5.- How would you say "medias" in English? Clothing

6.- How would you say "quita grapas" in English? Stationary

7.- How would you say "paso de peatones" in English? Road Signs

8.- How would you say "Costa de Marfil" in English? Countries

Figure 10: Vocabulary Knowledge Survey No. 2

Vocabulary Knowledge Survey No. 3

This interview was conducted to determine the vocabulary knowledge among translators.

1.- How would you say "reuiseñor" in English? Land Birds

2.- How would you say "empeine" in English? Human Body

3.- How would you say "ortiga" in English? Leaf Vegetables

4.- How would you say "tocador" in English? Storage Furniture

5.- How would you say "tirantes" in English? Clothing

6.- How would you say "portasellos" in English? Stationary

7.- How would you say "ceda el paso" in English? Road Signs

8.- How would you say "Letonia" in English? Countries

Figure 11: Vocabulary Knowledge Survey No. 3

INTERVIEW No. 1

Wellington Suarez / Freelance Teacher

1. – Based on your experience, what are the benefits of including pictures in English books?

Pictures encourage students to read and help them comprehend the overall idea of the text. The day after, they probably won't remember all the information, but the pictures will do it for them.

2. - What activities can be performed in class only using pictures?

Students can do different activities like describing an image or writing about it. They can also participate in learning-playing activities and practice their speaking, listening and writing skills.

3. - How effective is the use of pictures to learn vocabulary?

They are highly effective; they can help students to learn faster and memorize words. I usually give homework assignments that involve drawing of vocabulary words.

4. – Do you use a vocabulary book in your class?

No, I don't have those books, but I would like to. When it comes to vocabulary, I just use one English book to give my class. What I do is to take advantage of the words there and give students vocabulary homework assignments with those words.

INTERVIEW No. 2

Miguel Rodríguez / Junior designer

- What type of illustrations do you use in your graphic designs?
 In my graphic designs, I use line art illustrations; I make use of them when I design comic strips. I also use halftones and full color graphics.
 Full color graphics are the most common; clients ask for them a lot.
- 2. Based on your experience, what do you think of this phrase? "A picture is worth a thousand words"

I think this phrase is true. People need more pictures than words. Personally, I love books full of pictures and color. I think that a magazine without pictures is a lifeless magazine.

3. – What is the importance of pictures in books?

A picture helps to better understand the whole idea of what we are reading. For example, as we read a fictional book, we create our own mental image of the story. I don't know why, but human beings behave that way. Another example would be when we are talking by phone; we sometimes move our hands and do different motions as we were having a face-to-face conversation.

4. - What do pictures need to replace words?

This is a hard question. I think words can never be replaced; words go hand in hand with pictures; they are made for each other like man and woman, woman and man. Words describe images giving specific details.

CHAPTER 4: DATA ANALYSIS AND RESULTS

Target group: Proz.com's Ecuadorian translators Sample: fifty translators

Analysis of Results of the Feasibility Survey

Table 1

Source: Proz.com

Sample: Fifteen translators



Prepared by Andrés Arce

The bar chart above shows that 87 percent of translators have a memorization technique, and that 13 percent of translators do not have one.

Source: Proz.com

Sample: Fifteen translators



Prepared by Andrés Arce

The bar chart above shows that translator's preferred memorization technique is 'Words in set within a category with illustrations' showing 93 percent acceptance rate, the second preferred memorization technique is 'Words in associations' with a 85 percent, and 'Words within a context' had the lowest acceptance rate, 82%.

Source: Proz.com Sample: Fifteen translators



Prepared by Andrés Arce

The evidence from this bar chart shows that 65 percent of translators agree on a new vocabulary acquisition technique; meanwhile 45 percent disagree. This shows a difference of 16 percent, a small minority.

Source: Proz.com

Sample: Fifteen translators



Prepared by Andrés Arce

The bar chart shows that seven translators have between one and five years of experience, eleven translators between five to ten, ten translators between ten to fifteen, and twenty-two translators more than fifteen years of experience. According to each individual's experience, it was determined that the more experience, the more vocabulary knowledge.

Source: Proz.com Sample: Fifteen translators





This bar chart shows that thirty-four translators have learned one to five new words, ten translators between five and ten, four translators between ten and fifteen and only two translators more than fifteen new words in a week. According to George Miller, an individual should learn seven (plus or minus two) words at a time. This chart shows that translators' weekly vocabulary acquisition rate is average; however, they should learn more words per week due to the fact that the English vocabulary is extensive.

Findings

The feasibility survey revealed three important factors:

- a. Translator's viewpoint about the effectiveness of a memorization technique.
- b. Translator's interest in learning a new vocabulary acquisition technique.
- c. Translator's years of experience.
- d. Translators' weekly vocabulary acquisition rate.

Analysis of Results of the Vocabulary Knowledge Survey

Table 6

Source: Proz.com

Sample: Fifteen translators



Prepared by Andrés Arce

Source: Proz.com

Sample: Fifteen translators



Prepared by Andrés Arce

The two bar charts above shows that the categories with more correct responses are 'Clothing,' Storage Furniture,' 'Countries,' and 'Road Signs', the categories with less correct responses are 'Stationary,' 'Leaf Vegetables,' 'Land Birds,' and 'Human Body'.

In survey No.1, the category with the highest percentage of correct responses is 'clothing,' and the lowest percentage is 'human body'.

In survey No. 2, the category with the highest percentage of correct responses is 'clothing,' and the lowest percentage is 'Stationary'.

In survey No. 3, the category with the highest percentage of correct responses is 'countries,' and the lowest percentages are 'Leaf Vegetables,' and 'Stationary'.

Findings

The three **vocabulary knowledge surveys** were divided into eight random categories: land birds, human body, leaf vegetables, storage furniture, clothing, stationary, road sings, and countries. Fifty Proz.com's Ecuadorian translators were evaluated in each category and surprisingly, a number of them could not respond to the survey correctly and others did answer, but took more much time than the others – more than fifteen seconds. Nonetheless, on the contrary, a group of translators could respond without any problem and, in particular, four of them gave perfect responses. These surveys revealed three important factors:

- a. Experienced translators answer more accurately.
- b. Experienced translators respond more rapidly.
- c. The less common the word is, the more complicated the translation process becomes.

CONCLUSION AND RECOMMENDATIONS

After a comprehensive analysis of this focus group data, a fair amount of translators reveal gaps of knowledge and a lack of efficient learning processes and powerful techniques. For this reason, translators should learn vocabulary orderly – from basic to advanced – so that gaps of knowledge cannot decrease their translation reliability and speed; they should also employ appropriate learning processes and techniques in order to retain words in the long-term memory. And as part of this continuous learning process, it is expected that the new vocabulary acquisition tool helps them to enrich their lexical repertoire due to the fact that it is always opportune to keep studying and expanding knowledge – one never stops learning.

DESCRIPTION OF THE PRODUCT

The vocabulary association tool is designed to achieve one goal: to enrich translator's lexical repertoire; it will meet the needs of translators who have gaps of knowledge. And to achieve this goal, *the vocabulary association tool* employs a different approach that focuses on the association of words in an efficient and unconventional manner to facilitate the vocabulary learning process and help translators increase their speed when translating: they will not need to look up a word more frequently.

According to the research, 87 percent of translators show a lack of memorization techniques and therefore a lack of vocabulary knowledge; from a category of words, most of the translators could only answer the most common ones revealing their insufficient vocabulary. This lack of knowledge among translators can be caused by different factors: (1) lack of time for learning, (2) inappropriate learning materials, (3) lack of proximity to learning resources, or perhaps (4) superficial studying, among others.

The structure of the graphic organizer can be any geometrical shape: a triangle, a square, a pentagon, etc., depending on the number of definitions or associations a single word might have; the easiest or most common word will be placed at the top of the shape. In case translators know this word, they can continue learning the next words or vice versa, if translators already know advanced words, they will notice that there is something they should have learned before according to the level they are in now. In order to help translators with the memorization process, each word will contain a definition, a phonetic transcription, and a comprehensive picture. It is worth noticing that not all the words can be associated using pictures such as abstract words, a number of verbs, etc., however there are thousands of words and many ways to associate them. The effectiveness of the association tool lies in the number of words that can be learned simultaneously. For example, the common word 'hammer' has been associated with two less common hammer-like tools: mallet and gavel. As hammer is the easiest word, it is placed at the top and the other similar words at the bottom. To better illustrate, here is a sample.

SAMPLE



Figure 12: Vocabulary Acquisition Tool Sample

REFERENCES

Bicknell-Holmes, T. (2000). Engage, Elicit, Experience, Explore: Applying Discovery Learning to Library Instruction. Retrieved February 7, 2015, from http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1029&context=library_talks.

Bruner, J. S. (1979). On Knowing: Essays for the Left Hand, Second Edition. Massachusetts: Belknap Press.

Bruner, J. S., Goodnow, J. J., Austin G. A. (1986). A Study of Thinking. New Jersey: Transaction Publishers, New Brunswick.

Cambridge Online Dictionary. (1999). Retrieved from http://dictionary.cambridge. org/dictionary/british

Crystal, D. (2003). *English as a Global Language.* (2nd edition). New York: Cambridge University Press.

Ellis, C. N. (1995). The psychology of foreign language vocabulary acquisition. *Computer Assisted Language Learning*, 8(2-3), 103-128.

Folse, K. S. (2004). *Vocabulary Myths: Applying Second Language Research to Classroom Teaching*. Michigan: The University of Michigan Press.

Fosnot, C. (2005). *Constructivism: Theory, Perspectives and Practice*. New York: Teachers College Press.

Gluck, M. A., Mercado E., Myers C. E. (2013). *Learning and Memory: From Brain to Behavior*. New York: Worth Publishers.

Goleman, D. (2007). Social Intelligence: The New Science of Human Relationships. New York: Bantam Dell.

Hansen, R. S. (2008). *Easy Ways to Improve and Expand Your Vocabulary: Seven Tips for Learning New Words.* Retrieved November 21, 2014, from http://www.enhancemyvocabulary.com/improve-expand-vocabulary.html

Higbee, K. L. (2001). *Your Memory: How It Works and How to Improve it.* New York: Avalon Publishing Group Incorporated.

Jackson, H., & Amvela E. (1999). Words, Meaning and Vocabulary: An Introduction to Modern English Lexicology. London: Cassell.

Lewis, M. (1993). *The Lexical Approach: The State of ELT and a Way Forward*. Hover: Language Teaching Publications.

Ma, Q. (2009). Second Language Vocabulary Acquisition (Linguistic Insights. Studies in Language and Communication). Switzerland: Peter Lang AG.

Meara, P. (2009). *Connected Words: Word Associations and Second Language Vocabulary Acquisition*. Philadelphia: John Benjamins North America.

Merriam-Webster Online Dictionary. (2011). Online Dictionary. Retrieved from http://www.merriam-webster.com.

Mortimore, P., Watkins C. (1999). Understanding Pedagogy: And Its Impact on Learning. California: Sage.

Saville-Troike, (2012). *Introducing Second Language Acquisition (Cambridge Introductions to Language and Linguistics)*. (2nd edition). M. New York: Cambridge University Press.

Seidlhofer, B. (2005). English as a Lingua Franca. *ELT Journal, 59(4)*, (339-340).

Springer, the Encyclopedia of the Sciences of Learning. (2012). Retrieved from February 5, 2015 from http://www.springer.com/gp/book/9781441914279

Tassini, A. (2011). *The Translator Training Textbook: Translation Best practices, Resources & Expert Interviews.* New York: Createspace.

Webster's New World College Dictionary (4th edition). (1999). Cleveland: Merriam-Webster