The role of Literal Translation, L1 Glosses and Context, Applied in Reading Comprehension, on Iranian EFL Learners Vocabulary Learning: The Case of Different Proficiencies

Vahid Ghorbani [*1], Danial shirzadi [2]

1 PhD student of TEFL in Arak University, Official language teacher in education organization of Golestan province
2 PhD student of TEFL in Arak University, Official language teacher in education organization of Mazandaran province
***Corresponding author:** Vahid_ghorbani1366@yahoo.com

ABSTRACT

Many researchers examined the role and importance of vocabulary in language teaching and learning. For example, laufer (2006, 2010), Nation (2001) and Qian (1996) are some of the researchers who work on the role of vocabulary, context and translation. This paper aims at discovering and investigating the effect of L1 translation, L1 gloss and context on vocabulary learning on EFL Iranian learners. A total number of 120 EFL students in private English institutes in Sari participated in the present study. They were divided into two proficiency groups and three learning contexts. In order to make a list of words unknown to the learners the participants were given a list of 40 English words extracted from the passage and they were asked to write their equivalents in L1. As a result of this examination 20 target words were selected to be worked on. The treatment session happened a week after the pretest. According to the results, there is relationship between effectiveness of method and proficiency level of the learners. Based on statistical calculations and our findings, contextual methods of vocabulary learning is best appropriate for high proficiency learners and translation methods best suited low proficiency group. This study can be of high value for language teachers especially in public schools because they can use translation techniques for weak students and contexts along with gloss for students with higher level of English proficiency. This study can be useful for institute and private institutes too because language teachers can also use translation and context to improve the word knowledge of their students.

Keywords: l1 Translation, l1 Gloss, Context, Proficiency, Vocabulary Learning.

1. Introduction

According to Richards and Renandya (2002), vocabulary teaching and learning were of little importance in second language programs, but recently there has been paid a growing attention to vocabulary in learning and teaching. By using large number of techniques for learning new vocabulary, students can gain more ability and may be encouraged to make use of language learning opportunities around them.

Therefore, different researchers have done different experiments and researches regarding vocabulary learning through different strategies and methods. For example, Nation (2001) Laufer (2006, 2010) investigated the relation between translation and vocabulary learning. In 1996, Prince investigated the effect of context and translation, respectively, and Camo (2014) performed a study on the effect of L1 translation in storytelling which conducted on young Spanish learners.

Laufer and Shmueli (1997) investigated the relationship between gloss and vocabulary learning.in another research, the effect of incidental vocabulary learning using marginal glosses and dictionaries were considered by Hulstijn, Hollander, and Greidanus (1996).

Moreover, Pickering (1982) took into account the effect of context on vocabulary learning. In another research study, Qian (1996) made a comparison between acquiring of second language words in both lists and contexts.

To put it in a nut shell, a multitude of researches have done on vocabulary reading from different facets. So, this paper aims at discovering and investigating the effect of l1 translation, l1 gloss and context on vocabulary learning on EFL Iranian learners. The following questions are to be answered in this paper.

Q1: Does the factor of vocabulary teaching method (L1 translation, l1 gloss or context) affect vocabulary learning?

Q2: Does the factor of proficiency affect vocabulary learning?

Q3: Does the interaction between learners' proficiency and teaching methods affect vocabulary learning?

Q4: Which of these three methods (L1 translation, l1 gloss or context) are more effective in vocabulary learning?

2. Review Literature

Different methods and strategies have been used so far in the field of vocabulary learning. In this part; we give a brief review regarding relationship among vocabulary learning and translation, l1gloss and context.

2.1. Vocabulary and Translation

According to Richards and Renandya (2002), vocabulary teaching and learning were of little importance in second language programs, but recently there has been an interest in the nature of vocabulary and its part in learning and teaching. By using extensive vocabulary and strategies for acquiring new vocabulary, learners can gain more ability and may be encouraged to make use of language learning opportunities around them.

Relationships between vocabulary and translation have always been an important matter in second language teaching, from the Grammar Translation Method to more recent suggestions for the use of translation as an obvious way of teaching vocabulary in a communicative framework. These suggestions include Focus on Form —explicit teaching of linguistic forms communicatively (Laufer 2005; Laufer and Girsai 2008, Nation 2001; Webb 2007), and Focus on Forms —explicit teaching of linguistic forms traditionally and structurally (Nation 2001; Laufer 2006, 2010). The use of translation for teaching and learning has taken three main aspects: (a) using glosses (b) word pair's lists, and (c) back translation from an L2 to an L1 or vice versa of sentences or texts.

Rendering of individual sentences from second language to first language or vice versa was used as a language learning practice in many parts of the world (Richards and Rodgers 1985: 5).

Prince (1996) investigated the effect of context and translation respectively. The study performed on 48 foreign language students, a recall test was conducted to find the relative merits and demerits of context and translation. The results revealed the priority of translation in terms of quantity, but lack of ability in weaker learners to transfer their knowledge into l2 contexts.

It is reasonable to suggest that the translation method will be useful in the teaching and learning process of vocabulary for elementary level ESL learners. This is because this method provides an insight into the language system for them (Te 1970). As such, Newmark believes that the 'translation method is a means of expanding language knowledge as well as consolidation' for ESL learners (1991: 63).

The use of L1 translation helps both teachers and learners in L2 classes. Translation is vital for learners to increase learning new vocabularies in various

reading texts. As students translate in their heads anyway, it seems to use this translation process actively.

Translation helps learners to think over the meaning and construction (Harmer, 2007). Use of L1 translation matching technique can be deemed a powerful technique to assist learners to use their L1 background knowledge to improve their L2 vocabulary knowledge and match them together. The use of first language translation stabilizes previous learned vocabularies in the mind and helps learners to enlarge their vocabularies, instead of focusing on a limited syntax (Cunningham, 1997). Barcroft (2002) expressed that L1 translation simplified relation between form and meaning by providing an easy access to meaning which may allow more cognitive sources to be focused on form.

Camo (2014) performed a study on the effect of first language translation in storytelling which conducted on young Spanish learners. Participants were 40 male and female students all between 10-11 years. They were divided in two experimental and control groups respectively.

These two groups were taught by a different instructional practice regarding to teaching vocabulary explicitly. The control group was taught in English only whereas the experimental group was instructed in mother tongue translation in teaching of the selected lexical items. Teaching vocabulary explicitly by using storytelling supposed the practice used in order to find whether the use of mother tongue in vocabulary teaching assists learners memorize and access new words effectively. The pre-test included the twenty important items from the story which were fallen into three sections so that the young learners to be able to decide immediately. The post-test constructed with the same format of pre-test was conducted to both groups to investigate the effect of vocabulary gain with respect to the pre-test. The results of study revealed that providing students with mother tongue equivalents of the lexical items helps learners retain more lexical items, access them more easily and recall them for an extended period of time.

Research has found the importance of linking L2 words to their L1 equivalents, especially at the first steps of the learning process when the first form-meaning connection has to be created (Jiang, 2002; Cook, 2003; Schmitt, 2008; Liu, 2009).

Van Hell and Candia Mahn (1997) offer that experienced learners having a growing experience in foreign language learning, prefer to link the unknown vocabulary with the corresponding first language words to reach the most efficiency.

Chun and Plass (1996) found that second year university students learned L2 vocabulary more successfully when the definition of a glossed word was accompanied by a picture.

2.2. Vocabulary and L1 Gloss

Lomicka (1998) showed that glosses are concise definitions or explanations which are mostly given for "unfamiliar" words in a text. Based on (Jacobs, 1994; Lomicka, 1998; Roby, 1991; Al-Jabri, 2009), the benefit of textual glosses are that they increase overall understanding, reinforce vocabulary retention, and use less students' time and effort in reading second language texts. Significantly, textual glosses permit teachers to provide conditions for students to be exposed to more authentic learning materials which are beyond the learners' linguistic ability, so provoking students to read authentic, unabridged texts (Davis, 1989; Coady & Huckin, 1997). Therefore, teachers can use glossing to create more comprehensible input, a necessary condition of successful L2 acquisition (Krashen, 1989;Yoshii, 2006).

The study of Hebrew speakers who are studying foreign language, Laufer and Shmueli (1997) investigated four aspects of presentation, including lists: (I) words in isolation, (2) words with little context, i.e., in one meaningful sentence, (3) words in text and context, and (4) words in extensive text and context. Results revealed that use of simple vocabulary lists can result in more vocabulary retention than depending on lists with more information. Retention benefits for word recognition were superior in first and second aspect, i.e., when little information or less context was given about the word and lower in third and fourth modes when more information or enough context was given.

Glossing is one type of input modification. Input modification is a process in which a teacher changes a target form to help learners learn the form. For example, listening materials and reading passages in English language teaching (ELT) textbooks are often modified to meet learner learning needs. The structures of text are changed and vocabulary items are controlled to increase comprehension and learning (Larsen-Freeman & Long, 1991). Therefore, glossing can be deemed as modified input to simplify vocabulary learning. By providing more information like definitions or synonyms, glossing helps students deal with little contextual cues in learning new words while reading. Holly and King (1971) investigated different types of glosses in the place where a gloss is given, such as at the side of page, at the bottom of page, or on an attached sheet.

In another research, the effect of incidental vocabulary learning using marginal glosses and dictionaries were considered by Hulstijn, Hollander, and Greidanus (1996).

Taylor (2006) analyzed nineteen studies which compared the efficiency of traditional L1 glosses with that of CALL L1 glosses in L2 reading and found that learners provided with CALL glosses understood significantly more text than those learners with paper-based glosses.

Abraham (2008) surveyed eleven experimental studies to find the effects of L2 learners' access to CALL glosses (L1 or L1 plus L2) to those without such access. Similar to the findings of Taylor (2006), Abraham's results showed that CALL glosses had an overall medium effect on learners' reading comprehension and a large positive effect on incidental vocabulary learning. To confirm the results from Taylor (2006) and Abraham (2008), Taylor (2009) conducted another meta-analysis project with 32 studies which revealed that the overall effect sizes were larger for CALL glossing studies than for non-CALL glossing studies on reading.

Watanabe (1997) and Yoshii (2006) confirmed the advantages of L1 glosses for incidental vocabulary learning.

2.3. Vocabulary and Context

According to Nation (1990, p.178), direct vocabulary learning is a kind of conscious effort to learn words in context or in isolation. Nation explained indirect vocabulary learning as learning new lexis from the surrounding context while reading or listening.

In an experiment performed with Finnish learners of English, Pickering (1982) study the results that learning foreign language words contextually was less beneficial than learning words alongside their mother tongue equivalents of the related items. Qian (1996) made a comparison between acquiring of second language words in both lists and contexts. He used sixty-three Chinese university learners of English learning a set of fifteen English target words. The group without context resulted in much better scores on a test of recall than the group with context did; therefore, he casts doubt on the assumption that contextualized vocabulary learning always leads to better retention.

To learn vocabulary, context can be considered the first reason in which the amount of repetition varies. The meaning of an unfamiliar word might be clear in some sentences but in others it may be confusing. Beck, McKeown, and McCaslin (1983) stated that many contexts can be ambiguous in that learners can't get the correct meaning. In the Rott (1999) study, the texts were provided

with sufficient contextual clues for the learners to get the meaning of the l2 words. While, in the study by Hulstijn et al., they had used an authentic text, and the researchers had determined that it was a difficult job to get the meaning of the target words from the context (p. 330).

3. Method
3.1. Participants
A total number of 120 EFL students in private English institutes in Sari participated in the present study. The participants were at the age range of 19 to 25 and based on the results of an OPT test they were assigned to two homogeneous groups of intermediate and advanced learners (each group contains 60 participants). All participants had more than 30 months experience of learning English and based on Kroll and Curley (1988, cited in Prince, 1996, p.479) that's the sufficient amount of time for learners to shift from translation to context in vocabulary learning.

3.2. Materials
A reading text about empire state building was chosen for the present study. It was tried to choose a topic which was not familiar for the learners and the readability level of the text was about 10 to 12th grade, measured by the Flesch-Kincaid readability scale. A total number of 20 target words which were unknown to the participants based on a test were chosen. The words were mostly from level 1 and 2 words of the General Service List (West, 1953).

The study was conducted using three forms of the reading text:
1. The text with bolded target words which needed to be translated to L1.
2. The text with bolded target words with l1 glosses in the margin.
3. The text with missing target words.

3.3. Procedure
As mentioned earlier 120 EFL learners participated in this study. based on an OPT test these participants were selected and divided to two proficiency levels (high and low), then they were assigned to six groups of 20 by means of random assignment procedure.

In order to make a list of words unknown to the learners the participants were given a list of 40 English words extracted from the passage and they were asked to write their equivalents in l1. As a result of this examination 20 target words were selected to be worked on. The treatment session happened a week after the pretest.

There were two proficiency groups and three learning conditions. Participants in the translation condition received the text and they were told to translate the text using a dictionary if they needed one after that answering some true/false questions. Participants in the gloss condition received the same passage with the L1 glosses and they were told to answer some true/false items after the reading. The context condition was conducted by asking the participant to read the passage with the missing target words and try restoring target words using contextual clues then answering some true/false questions. They were given 30 minutes to do the tasks.

In the next phase the reading papers would be collected and students would be doing other tasks for one hour. After that period a vocabulary test consists of three parts_ providing l1 equivalences of target words, sentences that should be completed with one of the target words and multiple choice items _ would be administered to the participants. They were given 15 minutes to complete the test.

4. Results

In order to answer the research questions, the data was analyzed using Statistical Package of Social Science software (SPSS 23). Since there were two independent variables a 2-factor analysis of variance (ANOVA) was used for the analysis.

Table3.1. descriptive statistics

method	profeciency	Mean	Std.	N
translation	low	18.7500	1.11803	20
	high	16.6500	1.72520	20
	Total	17.7000	1.78599	40
context	low	13.9000	3.02446	20
	high	19.5500	.60481	20
	Total	16.7250	3.58048	40
gloss	low	16.0500	2.06410	20
	high	17.0500	1.23438	20
	Total	16.5500	1.75339	40
Total	low	16.2333	2.95369	60
	high	17.7500	1.80042	60
	Total	16.9917	2.55197	120

As it is shown in table 3.1. the means of vocabulary recall test scores obtained by high proficiency group in contextual vocabulary learning situation were higher than other groups (M= 19.55, std. 0.63), while this method of

teaching leads to the lowest results among low proficiency group (M= 13, std. 3.02). Low proficiency group obtained higher mean score in translation situation (M=18.75, std. 1.11), while high proficiency students did not do as well on the recall test (M=16.65, std. 1.72).

In order to answer the forth research question:

Q4: Which of these three methods (L1 translation, l1 gloss or context) are more effective in vocabulary learning?

The results show that effectiveness of method is related to the proficiency level of learners. The findings of the present study suggest that contextual methods of vocabulary learning is best appropriate for high proficiency learners and translation methods best suited low proficiency group. To see the significance of observed differences a 2-factor analysis of variance (ANOVA) test was and the results would be presented in the following paragraphs.

Table 3.2. 2-factor analysis of variance for proficiency level and method of teaching vocabulary

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
method	30.717	2	15.358	4.720	.011	.076
proficiency	69.008	1	69.008	21.208	.000	.157
method * proficiency	304.317	2	152.158	46.761	.000	.451
Error	370.950	114	3.254			
Total	35421.000	120				
Corrected Total	774.992	119				
a. R Squared = .521 (Adjusted R Squared = .500)						

As it is shown in table 3.2. There was a significant main effect for method of teaching on vocabulary recall, f= 4.72, p< 0.05. Also the effect of students' proficiency level would be significant on vocabulary learning, f= 21.2, p< 0.05. There was a significant interaction between methods of teaching and proficiency level on students vocabulary recall, f= 46.76, p< 0.05.

Based on the above mentioned findings the answer to the following questions would be yes.

Q1: Does the factor of vocabulary teaching method (L1 translation, l1 gloss or context) affect vocabulary learning?

Q2: Does the factor of proficiency affect vocabulary learning?

Q3: Does the interaction between learners' proficiency and teaching methods affect vocabulary learning?

Table 3.2. Post hoc test for three different methods of teaching vocabulary

Dependent Variable: learning

	(I) method	(J) method	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Bonferroni	translation	context	.9750	.40336	.052	-.0051	1.9551
		gloss	1.1500*	.40336	.016	.1699	2.1301
	context	translation	-.9750	.40336	.052	-1.9551	.0051
		gloss	.1750	.40336	1.000	-.8051	1.1551
	gloss	translation	-1.1500*	.40336	.016	-2.1301	-.1699
		context	-.1750	.40336	1.000	-1.1551	.8051

Based on observed means.
 The error term is Mean Square(Error) = 3.254.
*. The mean difference is significant at the .05 level.

Bonferroni post hoc test showed that translation and context methods elicited s slight but not significant difference in the results of vocabulary recall tests (MD= 0.97, sig.> 0.05). As well, observed difference between the results of context and gloss group was not significant (MD= 0.17, sig.> 0.05). However, test results of translation and gloss group was significantly different (MD=1.15, sig. <0.05). in the following paragraphs the above mentioned results would be discussed.

5. Conclusion

This paper aims at investigating the effect of L1 translation, L1 gloss and context on vocabulary learning. Different researchers investigating vocabulary in different conditions. Translation helps learners to think over the meaning and construction (Harmer, 2007). Use of L1 translation matching technique can be deemed a powerful technique to assist learners to use their L1 background knowledge to improve their L2 vocabulary knowledge and match them together. The use of first language translation stabilizes previous learned vocabularies in the mind and helps learners to enlarge their vocabularies, instead of focusing on a limited syntax (Cunningham, 1997). Barcroft (2002) expressed that L1 translation simplified relation between form and meaning by providing an easy access to meaning which may allow more cognitive sources to be focused on form. Teachers can use glossing to create more comprehensible input, a necessary condition for successful L2 acquisition (Krashen, 1989;Yoshii, 2006).

Beck, McKeown, and McCaslin (1983) stated that many contexts can be ambiguous in that learners can't get the correct meaning. In the Rott (1999) study, the texts were provided with sufficient contextual clues for the learners to get the meaning of the l2 words. While, in the study by Hulstijn et al., they had used an authentic text, and the researchers had determined that it was a difficult job to get the meaning of the target words from the context (p. 330). In our study, we choose 120 students and divided them into six groups' of 20 learners. Then after performing OPT test and treatment sessions, we get to these results. According to the results, there is relationship between effectiveness of method and proficiency level of the learners. Based on statistical calculations and our findings, contextual methods of vocabulary learning is best appropriate for high proficiency learners (M= 19.55, std. 0.63), and translation methods best suited low proficiency group (M=18.75, std. 1.11). Results gained from ANOVA indicates that vocabulary teaching methods, learners proficiency and interaction between learner proficiency and teaching methods have an effect on vocabulary learning. Bonferroni post hoc test revealed that there is no significant difference between context and gloss group (MD= 0.17, sig.> 0.05). But there is significant difference between translation and gloss group (MD=1.15, sig. <0.05). This study can be of high value for language teachers especially in public schools because they can use translation techniques for weak students and contexts along with gloss for students with higher level of English proficiency. This study can be useful for institute and private institutes too because language teachers can also use translation and context to improve the word knowledge of their students.

REFERENCES
Abraham, L. B. (2008). *"Computer-mediated glosses in second language reading comprehension and vocabulary learning: A meta-analysis"*. Computer Assisted Language Learning, No. 21(3), pp. 199–226.

Al-Jabri, S. (2009). *"The effects of L1 and L2 glosses on vocabulary retention and recalling ideas by Saudi students. Umm Al-Qura University"*, Journal of Social Sciences, No. 1(1), pp. 11-27.

Barcroft, J. (2002). *"Semantic and structural elaboration in L2 lexical acquisition"*, Language Learning, No. 52(2), pp. 323-363.

Beck, I. L., McKeown, M. G., & McCaslin, E. S. (1983). *"Vocabulary: All contexts are not created equal"*, Elementary School Journal, No. 83, pp. 177–181.

Coady, J., & Huckin, T. (1997). *"Second language vocabulary acquisition: A rationale for pedagog"*, Cambridge: Cambridge University Press.

Camo, A. C. (2014). *"The effects of using L1 translation on young learners` L2 vocabulary learning"* Unpublished MA Dissertation Treball De Fi De Grau. Universitat Autonoma de Barcelona.

Chun, D. M., & Plass, J. L. (1996). *"Effects of multimedia annotations on vocabulary acquisition"*, The Modern Language Journal, No. 80(2), pp.183–198 .

Cook, V. J. (2003). *"Effects of the Second Language on the Firs"*, Clevedon: Multilingual Matters

Cunningham, A.E. (1997). *"Early reading acquisition and its relation to reading experience and ability 10 years later"*. Developmental Psychology, No. 33, pp. 934-945.

Davis, J. (1989). *"Facilitating effects of marginal glosses on foreign language reading."* ModernLanguage Journal, No. 73(1), pp. 41-48.

Harmer, J. (2007). *"How to teach English"*, 2th edition, Edinburgh: Pearson Education.

Holly, F., & King, J. (1971). *"Vocabulary glosses in foreign language reading materials",* Language Learning, No. 21, pp. 213–219 .

Hulstijn, J., Hollander, M., & Greidanus, T. (1996). *"Incidental vocabulary learning by advanced foreign language students: The influence of marginal glosses, dictionary use, and reoccurrence of unknown words".* The Modern Language Journal, No. 80, pp. 327–339.

Jacobs, G. M. (1994). *"What lurks in the margin: Use of vocabulary glosses as a strategy in second language reading"*, Applied Linguistics, No. 5(1), pp. 115-137.

Jiang, N. (2002). *"Form–meaning mapping in vocabulary acquisition in a second language",.* Studies in Second Language Acquisition, No. 24(4), pp. 617-637.

Krashen, S. D. (1989). *"We acquire vocabulary by reading: Additional evidence for the InputHypothesis"*, Modern Language Journal, No. 73, pp. 440-464.

Larsen-Freeman, D., & Long, M. H. (1991). *"An introduction to second language acquisition research"*, New York, NY: Longman.

Laufer, B. (2005). *"Focus on Form in Second Language Vocabulary Learning".* Susan H. Foster- Cohen, Maria Pilar Garcia-Mayo and Jasone Cenoz (eds.), eurosla Yearbook 5(pp. 50-223). Amsterdam: Benjamins.

Laufer, B. (2006). *"Comparing Focus on Form and Focus on Forms in Second Language Vocabulary Learning"*, Canadian Modern Language Review, No. 63(1), pp. 149-66.

Laufer, B. (2010). Form-Focused Instruction in Second Language Vocabulary Learning'. RubénChacn-Beltrn, Christin Abello-Contesse and Maria del Mar Torreblanca-Lopez (eds.), Insights into Non-Native Vocabulary Teaching and Learning (pp15-27). Bristol: Multilingual Matters.

Laufer, B., & Girsai, N. (2008). *"Form-Focused Instruction in Second Language Vocabulary Learning: A Case for Contrastive Analysis and Translation"*, Applied Linguistics, No. 29(4), pp. 694-716.

Laufer, B., & Shmueli, K. (1997). *"Memorizing new words: Does teaching have anything to do with it?"*, RELC Journal, No. 28(1), pp. 89-108 .

Liu, J. (2009). *"L1 Use in L2 Vocabulary Learning: Facilitator or Barrier"*, International Education Studies, Np. 1, pp. 65-69.

Lomicka, L. (1998). *"To gloss or not to gloss: An investigation of reading comprehension online"*, Language Learning & Technology, No. 1(2), pp. 41-50.

Nation, I. S. P. (1990). *"Teaching and learning vocabulary"* Rowley, MA: Newbury House.

Nation, I. S. P. (2001). *"Learning Vocabulary in another Language"*, Cambridge: CUP.

Newmark, P. (1991). *"About Translation"*, Bristol: Longdunn Press.

Pickering, M. (1982). *"Context free and context dependent vocabulary learning"*. System, No. 10, pp. 79-83.

Prince, P. (1996). *"Second vocabulary learning: The role of context versus translations as a function of proficiency"*. Modern Language Journal, No. 80, pp. 478-493.

Qian, D.D. (1996). *"ESL vocabulary acquisition: Contextualizationb and de contextualization"* The Canadian Modern Language Review, No. 53 (1), pp. 120-142.

Richards, J, C. & Renandya, W, A. (2002). *"Methodology in language teaching; An anthropology of current practice"* Cambridge: Cambridge University Press.

Richards, J. C., & Rogers, T. C. (1985) *"Approaches and Methods in Language Teaching"*, Cambridge: CUP.

Roby, W. (1991). *"Glosses and dictionaries in paper and Computer formats as adjunct aids to the reading of Spanish texts by university students. Unpublished Doctoral Dissertation"*, University of Kansas.

Rott, S. (1999). *"The effect of exposure frequency on intermediate language learners' incidental vocabulary acquisition through reading"*, Studies in Second Language Acquisition, No. 21, pp. 589–619.

Schmitt, N. (2008). *"Instructed Second Language Vocabulary Learning"*, Language Teaching Research, No. 12 (3), pp. 329-363.

Taylor, A. M. (2006). *"The effects of CALL versus traditional L1 glosses on L2 reading comprehension"*, CALICO Journal, No. 23(2), pp. 309–318.

Taylor, A. M. (2009). *"CALL-based versus Paper-based glosses: Is there a difference in reading comprehension?"*, CALICO Journal, No. 27(1), pp. 147–160.

Te, H. D. (1970). *"Translation in Language Testing"*,. RELC Fifth Regional Seminar (Bangkok): pp.141-44.

Van Hell, J.G., & Candia Mahn, A.C. (1997). *"Keyword mnemonics versus rote rehearsal: Learning concrete and abstract foreign words by experienced and inexperienced learners"*,. Language Learning, No. 47(3), pp. 507-546.

Watanabe, Y. (1997). *"Effects of single and multiple-choice closes on incidental vocabulary learning"*, JACET Bulletin, No. 27, pp. 177–191.

Webb, S. (2007). *"Learning Word Pairs and Glossed Sentences: The effects of a Single Context on Vocabulary Knowledge"*, Language Teaching Research, No. 11(1), pp. 63-81.

Yoshii, M. (2006). *"L1 and L2 glosses: Their effects on incidental vocabulary learning"*, Language Learning & Technology, No. 10(3), pp. 85–101.

Appendix 1:

When the Empire State Building Was New

W.M. Akers

Today, New York's Empire State Building is one of the most famous structures in the world. It stands hundreds of feet taller than the skyscrapers that surround it, and is visible from far away in New Jersey and Long Island. But it isn't the tallest building in the world. In fact, since the recent completion of One World Trade Center, it isn't even the tallest building in New York City !

But when the Empire State Building was constructed, it was more than just another skyscraper. It was the tallest, most remarkable building on earth—and it stayed that way for close to forty years. To understand what people thought about the Empire State Building when it was first constructed, we can look at original newspaper reports from The New York Times. These are called primary sources, because they were written by people who witnessed history first-hand. With these New York Times reports, we can see the building through the eyes of the past, and perhaps have a chance to appreciate this most famous skyscraper as though it were new .

The Empire State Building was built at the site of the famous Waldorf-Astoria Hotel, a lavish structure that, by 1929, was no longer up to the demands of the modern world. A corporation headed by former New York governor Alfred E. Smith proposed to build an office building there—not just any office building, but the greatest in the world. At this time, there was fierce competition to see who could build the tallest building on earth. The nearby Chrysler Building was set to claim the title, but Smith and his company wanted to steal it from them, by building something so big that it would be years before anyone could top it .

There was just one little problem: the Great Depression. The stock market crashed at the end of 1929, destroying banks, emptying savings accounts and leaving millions out of work. But the men behind the Empire State Building would not be stopped. They finished tearing down the old Waldorf-Astoria by the beginning of 1930, and on March 17—St. Patrick's Day—the work on the skyscraper began.

"Time was an essential element," wrote Smith, to complete "the greatest structural accomplishment" the city had ever seen .

Because height was of the utmost importance, the building was designed from the top down. At the very top would be a "dirigible mooring mast." A

dirigible is a kind of giant blimp, built to fly across the Atlantic Ocean in the days before jets. Although now that may seem silly, at the time, dirigibles were cutting edge technology, and the mooring mast, according to Smith, was "a logical development of this day of air transportation." Moreover, the 200-foot mast would allow the building to solidly surpass the Chrysler Building in height .

The mooring mast was planned to reach nearly 1,300 feet above Fifth Avenue. Below that was the building—as wide as a city block on the first floor, but narrower as it went up. The places where it got narrower are called "setbacks," and they started at the sixth floor, a design the architects said, "will save space and assure light and air to neighbors ".

"We believe we have solved the problem of light and air in congested districts," said Mr. Smith .

Construction began on the bottom floors even before the designs for the top floors had been finalized. Once it started, it went fast. Times reporter C. G. Poore described the process as "a chase up into the sky, with the steel workers going first and all the other trades following madly after them." To illustrate this, Poore produced "some staggering figures :"

The building of the skyscraper represents an investment of $50,000,000 and all other figures are in proportion. More than 50,000 tons of steel, 10,000,000 bricks, and 200,00 cubic feet of stone will be used before the frame is completed. There will be seventy-five miles of water mains and 2,000,000 feet of electric light and power wiring...More than 3,000 men are daily at work...Among them are 225 carpenters, 290 bricklayers, 384 brick laborers, 328 arch laborers, 107 derrick men.

 Each day, those men walked to work past long unemployment lines, which reminded them how lucky they were to have such well-paying jobs. Building the Empire State Building was a dangerous job, performed without hardhats, harnesses, or any of the safety equipment required today. Imagine walking out on a narrow steel beam, 1,000 feet above the street, and then having to work up there all day!

On each floor, Poore tells us, there was "a miniature railway system," to haul the steel, wood and marble brought up from street level. And to keep the men from having to go all the way down to eat lunch, there were "restaurants at

various levels of the building" designed for the workers. At night, when the bosses went home, the workers could relax. They would pick a specific floor of the building and throw a party—laughing and having fun, knowing that they were higher above the city than any of the richest men in town.

The building was finished in just over a year. Of all the words written afterwards, perhaps the most interesting come from Mrs. Alice Liddell Hargreaves, an elderly English woman who visited the tower soon after its completion. Seventy years earlier, Mrs. Hargreaves had known a quiet country pastor named Lewis Carroll, who used her as the inspiration for his most famous book: Alice's Adventures in Wonderland. Now much older than the character she inspired, Mrs. Hargreaves "seemed almost as excited with her newest adventures in the wonderland of New York".

The Empire State Building, she said, was "just like the tumble down [the] rabbit hole".

Retrieved from: http://www.readworks.org/search/site/empire%20state