

Vocabulary Acquisition in Second Language

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Abstract

This article aims at compiling and presenting some results of recent studies about strategies of foreign language teaching, focusing on vocabulary acquisition from data reported in studies by several authors. After carefully considering the outcomes presented by researchers, it was organized a list of learning strategies that were tested by them as well as the results obtained.

Keywords: Foreign Language - Acquisition- Teaching Strategies- Vocabulary

1. Introduction

Teaching a foreign language in Brazil is a tough task. As in most developing countries, public schools invest their efforts to teach the mother tongue, leaving foreign languages for private schools that hold a minority student population. The difficulties reported by institutions that do not invest in teaching foreign languages are very similar: the high cost of materials, the difficulty in hiring skilled staff, the lack of interest of the target audience, etc. Within this context, we decided to review the matter, seeking information about vocabulary strategies for teaching a second language on seven authors who carried out researches on second languages learning.

Studies in the area of second language acquisition (L2)¹ are very important. They allow the discovery of strategies for teaching second language that contribute to the development of learners and facilitate teachers' work. In public schools of developing countries, the brainpower and material resources are scarce. Within the wide range of pedagogical approaches, we will focus our review on studies that examine the relevance of teaching strategies related to the acquisition of vocabulary in second language.

This review article seeks 1) describe some recent results of studies about foreign language teaching strategies, focused on vocabulary acquisition and then 2) compile this information, organizing a roadmap of strategies for second language instruction. Among the authors who deal with this issue, we chose the studies of Qian (1996), Rott (1999), Barcroft (2006, 2009), Webb & Kagimoto (2009), Catalán & Alba (2009), and Lee (2009) to present the data. Finally, 3) after carefully analyzing the elements presented by these researchers, we present a list of learning strategies that have been mentioned by them.

2. Literature Review

Several variables can be identified on the difficulties faced by second language learners. All of them are somehow dependent on factors such as socioeconomic, ideological and cultural conditions beyond their own teaching /learning and the intellectual characteristics of learners. Research methods seek to address these different aspects and each researcher, from his/her point of view, analyzes groups of informants in an attempt to give contributions to solving the problem.

¹ Second Language Acquisition (L2) is when the person learns another language in his/her own country.

Qian's study (1996) was designed to verify whether L2 words encountered in context are better retained than those presented through descontextualized instruction in the form of a word list.

Specifically, the study attempted to find out: i) between the two learning techniques, namely, learning vocabulary in context and learning vocabulary in isolation, which one is more effective in terms of the retention of target words and ii) what are the levels of immediate, one-week, and three-week retention of vocabulary learned in context and in isolation.

The sample selected by the author consisted of 63 Chinese young adult learners at a major Chinese university who were attending a first-year university English as a foreign language (EFL²) course. The students were tested in two parallel classes taught by the same teacher, an experienced instructor with a near-native command of English. The classes were organized based on the university's assessment of the students' EFL levels at the beginning of the semester. In this experiment, the two classes were treated as two groups: one group (n=32) learned new words in a contextualized situation and the other (n=31) in a descontextualized situation.

In order to make the present study comparable to earlier studies on vocabulary retention, the author followed Anderson & Jordan's methodology (1928). The data selection was carried out in five steps: pretest, instruction, recall 1, recall 2, recall 3.

In short, the results of the present experiment showed that the effect of descontextualized vocabulary learning on later recall is clearly stronger than contextualized vocabulary learning.

The second study analyzed, Rott (1999), aims at answering three research questions – i) do intermediate foreign language learners acquire vocabulary incidentally through reading? ii) if acquired, is vocabulary retained over a longer period of time: 1 week later and 1 month later? and iii) does frequency of exposure to a lexical item have an effect on incidental acquisition and retention of vocabulary?

Rott selected 95 learners of German as a foreign language, all of them in the fourth-semester at the University of Illinois. To test them, the author used 12 lexical items selected as target words (TWs), which are related to items and actions of everyday life (but did not entail new target culture-specific concepts for learners). To certify that the words were unfamiliar for participants, she offered them a list of 50 lexical items (12 TWs and 38 distracters) and she instructed them to attempt a translation of each of the words and skip only those items they had never encountered before.

After that, she wrote six different paragraphs using this 12 TWs following some criteria as the same extension and unit of content (for example, the ideas in each paragraph were developed clearly, with concrete subjects and situations). The participants were exposure 2, 4 or 6 frequencies with texts. Then, she presented for them the same list of words used in the pretest to verify the effective gain of vocabulary. They repeated the supply-definition task, whose results indicated that two encounters with unknown words while reading can be considered a significant gain in vocabulary, but more significant results for learning and retention of news words can be better observed in six meetings with these items.

In 2006, Barcroft examined the effects of word writing on second language vocabulary learning. Two experiments were conducted with 20 Native American participants, learning Spanish as a second language, enrolled in a second-semester Spanish class, in a public university in the Midwestern of the United States.

Experiment one consisted of each participant attempting to learn 12 words in the word-writing condition and 12 words in the non-writing condition during word-picture vocabulary learning. The experiment included a pretest, a language background questionnaire, a worksheet with general instructions, 24 numbered flashcards for the learning phase and 24 numbered flashcards for testing, an audiotape, a word-writing worksheet and posttest. The 24 words consisted of concrete nouns that were presented twice for 6 seconds for the non-writing condition. In the word-writing condition, participants were instructed to write each word once in the appropriate numbered box on the worksheet.

² English as a Foreign Language (EFL) is when a foreign person studies another language in another country.

Experiment two was a partial reapplication of Experiment 1 with the participation of the same classes in a private university in the Midwestern of the United States. Differently of the first experiment, the researcher used a computer-based presentation program and he had 46 Spanish students.

The findings of both experiments indicated that copying target words negatively affected productive L2 vocabulary learning. In this study, word-writing scores were approximately 0.34 times lower – Experiment 1 – and 0.21 times lower – Experiment 2 – than non-writing scores. The present results suggest that forcing learners to produce output without access can detract from learning new L2 words.

Barcroft (2009) examined the effects of synonym generation on second language learning during reading in *incidental*³ and *intentional*⁴ vocabulary learning context with Spanish-speaking adults learners of L2 English at low and high intermediate levels. The participants were 114 Spanish-speaking university students learning L2 English in a university in Mexico City.

Without receiving instructions that the experiment was about vocabulary learning, data were collected in regular classroom following the procedures: all of the participants received one learning packet which corresponded to one of the four learning conditions – i) incidental; ii) intentional; iii) incidental-semantic; and iv) explicit-semantic.

This packet contained a language background questionnaire, a worksheet with four activities in each the 10 target words for the experiment had been embedded, an activity 2 with instructional worksheets to read a passage for meaning and specific instruction for each learning condition; the passage *The date that was not meant to be!* with or without spaces for writing synonyms close to Spanish translation of target words, a 15 question comprehension quiz and a post experiment questionnaire on the participants' opinions about how well they learned the translated words and how well they had comprehended the text. The participants were given 10 minutes to read the text; 2 minutes to complete each vocabulary quiz; and 15 minutes to complete the 15 questions comprehension quiz.

The results showed that the effect of task by recall type on L2 word learning during reading in both situations – incidental and intentional – and task –semantic and +semantic had gained vocabulary. Furthermore the scores of test in the –semantic and intentional conditions were much higher than in the +semantic and incidental conditions. The outcomes for the text comprehension were higher in the -semantic condition than in the +semantic condition and higher in the incidental condition than in the intentional condition.

In another research conducted by Webb & Kagimoto (2009), three specific questions were investigated: i) in which sense reading and cloze tasks are effective as tools for explicitly teaching collocation⁵ in the language classroom, ii) in which way the differences in the type of learning condition (receptive and productive) influence learning gains in receptive the type of learning condition (receptive and productive) influence learning gains in receptive and productive knowledge of collocation and meaning, iii) what do the results show us about the nature of the relationship between collocation and meaning? - about three main areas concerning the teaching of collocation in the language classroom: the extent to which reading and cloze tasks are effective tools for explicitly teaching collocation, the influence of the type of learning condition (receptive or productive) on the ultimate learning goals and the general nature of the relationship between collocation and meaning.

The authors selected 145 Japanese native speakers learning English as EFL in nine first-second, and third year classes in two universities in Fukuoka, Japan. To test the abilities of the learners, two experimental groups of 117 participants were assigned – encountering collocations in three glossed sentences and writing the same collocations in a cloze task – and 28 participants were assigned to a control group, which did the pretest and the receptive knowledge of collocation posttest. Amongst the learners in the study, 62 were classified as higher level learners. In addition, 55 learners were classified as lower level learners. To ensure that there was a valid comparison between the two treatments the participants were assigned to the experimental groups according to their pretest scores. The reading and cloze groups, and their subgroups – higher level and lower level – all had statically equivalent scores on the pretest.

³ Learners acquire new words while intending to do so.

⁴ Learners acquire new words from context without having the intention of doing so.

⁴

⁵ Regular combination of words.

The methodology applied was the following: three weeks before the experiment, all participants took the pretest and they were given as much time as they needed to complete it – 24 target collocations were chosen for this experiment. The mode word in each collocation was a verb with a noun as its collocate.

Verb noun collocation were used in this study because previous research indicated that they were very difficult to EFL learners (Chan & Lion, 2005; Nesselhauf, 2003). All collocations were comprised of high frequency words that the participants were likely to know. The scores on the tests measuring collocation indicated that reading glossed sentences and completing a cloze task may be effective and efficient methods of learning collocation.

The results indicated that there was little difference between the effects of the receptive and productive tasks on knowledge of collocation and meaning. There may be three reasons to the difference in results between the two levels.

In Catalán & Alba's study (2009) the main objective was to analyze if there are differences or similarities regarding the number and the kind of words produced by male students compared to those produced by female students in response to cue words from a lexical availability task. For this, 210 Spanish sixth grade students (105 females and 105 males), with age from 11 to 12 were selected. They were studying English as a foreign language in four schools located in the middle class in the north of Spain, and they received a total of 625 hours of English instruction.

The authors used a questionnaire containing fifteen English cue words or phrases (e.g. parts of the body, clothes, parts of the house, food and drink). The students were given thirty minutes to provide responses – two minutes for each cue word.

The authors proceeded to edit the data according to the following criteria: i) did correction in the spelling errors and retained grammatical errors; ii) repeated words were counted only once for each cue word; and iii) unintelligible words and responses in Spanish were discarded. After that, the words produced by female and male students for each cue word were classified according to alphabetical order as well as word frequency (using Wordsmith Tools). Finally, the authors proceeded to count the total of words types and calculate the number of items provided by females and males.

The results pointed out that, on average, the students are capable of generating 109 English words in thirty minutes by means of a lexical availability task. Among the words provided by students, most words are nouns, a few are verbs, and none are adjectives and adverbs.

Finally, the research conducted by Lee (2009) aims at verifying vocabulary acquisition in uninstructed silent reading of a short story with and without a vocabulary list followed by a story rewriting task. The participants were 70 intermediate multi-L1 and multi-grade students (n=39 experimental group and n=31 comparison group) in a public secondary school in Vancouver.

The author used as pretest and posttest a sentence-making and a multiple-choice test on 82 single words and 21 lexical phrases. No dictionaries or translators were allowed in both tests. For the pedagogical intervention, the author selected a short story – *The return* by NgugiWa Thiong'o. This choice was based on the fact that the story was not familiar to the students. Both groups performed a story rewriting task after reading the short story: the experimental group read the story with a vocabulary list while the comparison group read without a vocabulary list.

The results showed that in silent uninstructed reading followed by story rewriting task, with or without vocabulary list, the experimental group attained significantly greater learning than the comparison group. Improvement was noticed in both variables: in listed single words and lexical phrases.

In order to present the strategies in a more clear way, a summary was organized. This table is not considering the effectiveness of the results about these strategies, it is only a synthesis of them.

Author	Teaching Strategies of New Words
Qian (1996)	In contextualized situation (in a reading passage) and decontextualized situation (list of words form).
Rott (1999)	Using a list of 50 words (12 target words + 38 distracters) to translate, skipping unfamiliar ones. After that, six short paragraphs were created with the 12 target words and students were exposed 2, 4, and 6 frequencies with texts. Finally, the same list of words was presented to them to translate and check if they retain the target words.
Barcroft (2006)	In the word-writing condition and no-writing condition.
Barcroft (2009)	In four conditions: incidental; intentional; incidental-semantic and explicit-semantic.
Webb & Kagimoto (2009)	Using a task that they encounter collocations in three glossed sentences and write the same collocations in a cloze task.
Catalán & Alba (2009)	Using a questionnaire containing 15 English cue words or phrases (e.g. parts of the body, clothes, parts of the house, food and drink) to the students provide responses.
Lee (2009)	In a reading and also rewriting a short story with and without list of words (glossary).

Strategies to vocabulary acquisition

3. Conclusion

The investigation conducted by authors about strategies for vocabulary acquisition in second language provided some reflections. Firstly, there is a small number of existing studies - especially with a significant number of participants to be able to generalize the results. What can be found are isolated initiatives at different levels of schooling and these findings, for being punctual and using similar teaching materials, add little to the subject.

Anyway, there are some strategies for teaching vocabulary during the acquisition of L2/EFL presented by the authors that deserve attention by the possibility of replicating in different circumstances. Analyzing the table for teaching strategies for new words presented in the previous section, together with the results of studies compiled in the literature review, you can enumerate some considerations.

- The effect of decontextualized vocabulary learning on later recall is clearly stronger than contextualized vocabulary learning (Qian, 1996).
- The copying target words affected productive L2 vocabulary learning negatively, that is, forcing learners to produce output without access can detract from learning new L2 words (Barcroft, 2006).
- The effect of task by recall type on L2 word learning during reading in both situations – incidental and intentional – and task –semantic and +semantic had gained vocabulary. The scores of the test in the –semantic and intentional conditions were much higher than in the +semantic and incidental conditions (Barcroft, 2009).
- The text comprehension were higher in the -semantic condition than in the +semantic condition and higher in the incidental condition than in the intentional condition (Barcroft, 2009).
- There was little difference between the effects of the receptive and productive tasks on knowledge of collocation and meaning (Webb & Kagimoto, 2009).
- On average, students are capable of generating 109 English words in thirty minutes by means of a lexical availability task. Among the words provided by students, most words are nouns, a few are verbs, and none are adjectives and adverbs (Catalán & Alba, 2009).
- In silent un instructed reading followed by story rewriting task, with or without vocabulary list, the experimental group attained significantly greater learning than the comparison group. Improvement was noticed in both variables: in listed single words and lexical phrases (Lee, 2009).

These results, therefore, are different from Qian's outcomes (1996) concerning to strategies for learning vocabulary in second language acquisition. The author's study showed that linguistic context (the text) has not contributed to increase the performance of students. These divergent results in different studies reinforce the need for such studies to be replicated for different participants in different contexts of learning L2/EFL.

References

- Anderson J. P.; Jordan A. M., (1928). Learning and retention of Latin words and phrases. *Educational Psychology*, 19, 485-496.
- Barcroft, J. (2009). Effects of synonym generation on incidental and intentional L2 vocabulary learning during reading. *Tesol Quarterly*, 43, 79-103.
- _____. (2006). Can writing a new word detract from learning? More negative effects of Forced output during vocabulary learning. *Second Language Research*, 22, 487-497.
- Catalán, R. M. J.; Alba, J. O. (2009). Girls' and boys' lexical availability in EFL. *International Journal of Applied Linguistics*, 158, 57-76.
- Chan, T. P.; Lion, H. C. (2005). Effects of Web-based concordancing instruction on EFL student's learning of verb-noun collocations. *Computer Assisted Language Learning*, 18, 231-251.
- Lee, S. S. (2009). Vocabulary learning in uninstructed silent reading and story rewriting: effects of reading with and without a vocabulary list. *International Journal of Applied Linguistics*, 158, 97-134.
- Nesselhauf, N. (2003). The use of collocations by advanced learners of English and some Implications for teaching. *Applied Linguistics*, 24, 223-242.
- Qian, D. D. (1996). ESL vocabulary acquisition: contextualization and des contextualization. *Modern Language Review*, 53, 120-142.
- Rott, S. (1999). The effect of exposure frequency on intermediate language learners' incidental vocabulary acquisition and retention through reading. *Studies in Second Language Acquisition*, 21, 589-619.
- Webb, S., Kagimoto, E. (2009). The effects of vocabulary learning on collocation and meaning. *Tesol Quarterly*, 43, 55-75