

EFL Vocabulary Learning among Iranian High School Students through paradigmatic Relations

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Abstract

The study is based on examining the role of paradigmatic relations (the ability to be substituted by other words) on English vocabulary learning among Iranian high school students. To find out the role of paradigmatic relations, ۵۶ students from a state high school in Yazd, Iran, which were all females, and were studying in two junior classes (aged ۱۵), were divided into control and experimental groups. The students were supposed to answer a pre test based on their vocabulary knowledge. After executing the paradigmatic relations on vocabulary presented in their books, through teaching during a two- month period, the post test was held in May. The scores analysis revealed that there was a significant difference between pre-test and post-test scores in experimental group. The results specified the vocabulary learning through paradigmatic relations more successful. There will be room to make studies on the role of paradigmatic relations on other aspects of language learning.

Keywords: EFL vocabulary learning, paradigmatic relations, Iranian High school students

Introduction

There are two axes that create meaning; syntagmatic and paradigmatic. In paradigmatic axis, which is the vertical axis, words can be substituted by each other according to their grammatical rules. Therefore these words must obey the same grammatical rules.

The study describes the ways through which a sentence or a phrase can be taken by heart and as an outcome the vocabulary retrieving could be done too soon and or easier. In other words the study's focus is on applying words to produce and reproduce correct sentences through paradigmatic relations.

Consider the sentences below:

Some birds migrate in autumn.

These birds fly back in spring.

As it is seen in the above two sentences "these" and "some" are parallels, and they are paradigmatically the same, so are "fly back" and "migrate" and also "spring" and "autumn". It is obvious that these words are of the same grammatical rules.

To find out role of paradigmatic relations on EFL vocabulary learning, a question here will be discussed:

Does the use of paradigmatic relations play a significant role in EFL vocabulary learning among students studying in high schools?

Klampf (۲۰۱۰, p.۳), explains "The semantic relations between words include the syntagmatic and paradigmatic dimensions. Both of them have a tight relationship with the lexical knowledge of a language."

According to Silvrem (۱۹۸۳) paradigmatic is concerned to substitution. Another researcher, SchÜtze, has a definition which clearly specifies the paradigmatic relation:

Two words are paradigmatic parallels if they have similar close neighbors to the left or right." (SchÜtze, ۱۹۹۳, pp.۱-۵)

Lee (۲۰۰۶) discussed: "A paradigm may be constituted by all words sharing the same grammatical function, since the substitution of one for another does not disturb the syntax of a sentence. Linguistics often refers to the paradigmatic dimension of language as the 'vertical axis' of selection." (Lee, ۲۰۰۶, p.۷۹). Lee claims every sentence that carries a message is structured along these two systems: the paradigmatic and syntagmatic. The two major operations that produce meaning in any representation are selection and combination (p.۸۰).

Yatbaz et al. (۲۰۱۲) introduced "substitute vectors as paradigmatic representations of word context". As they titled "Paradigmatic representations of word context are based on potential substitutes of a word".

In explaining the Paradigmatically related words Sahlgren (۲۰۰۶) quotes "Paradigmatically related words are words that do not themselves co-occur, but whose surrounding words are often the same (p.۶۶).

Materials and Methodology

This section will discuss the methodology used in the project in a state high school in Iran. The two high school classes of grade one, in a state high school in Yazd were involved in the project. The research was conducted quantitatively. In order to test the effectiveness of paradigmatic relations on learning English vocabulary, the study was conducted semi-experimentally.

There were ۲۸ students in each class. In order to find out if there was any significant difference between the scores before and after the teaching based on paradigmatic relations, a pre-test was held at the beginning of the work. The analysis of pre-test by means of independent T-test, showed no significant differences between the students of two groups, thus the post-test was conducted for two groups in May.

The results are going to be analyzed in the next section.

Since this research involved all junior high school students in learning English in a typical school, to analyze the results, a cluster random sampling was conducted. ۵۶ female high school students in a state high school in Yazd, Iran, all of whom with Farsi as their native language, took part in this project. They were at the same age (۱۵). The Participants were from two different classes, they were randomly and equally divided into ۲۸ students in each of the classes. One group was considered as control, and the other as experimental group. All of these students had to pass the English course one to get qualified to participate in English ۲ as their mandatory course for their following year.

The instruments used in the study, were 'Iranian High School English Book ۱ (۲۰۱۴)', white boards by which the lesson was elaborated and pre-test, post-test both on vocabulary.

The tests were composed so that they included ۲۰ blanked sentences. The students were supposed to fill all.

How to teach the experimental group?

The plan got started from a sentence:

The sun shines in the sky during the day.

The students memorized the sentence as they tried to understand the meaning of it. Then another sentence was presented:

The moon shines in the sky at night.

It is noticeable that how a number of words are grammatically parallel to each other. The learners could differ between these words and that how the words were replaced by each other.

For the part 'New words' the students had to write down the sentences and memorize them. At the end, a total number of twelve sentences were written down and practiced, then they were substituted by their parallels. After this process some of the sentences were memorized by the students. Part 'Reading' was run in the same manner. After reading the text and then paraphrasing some sentences in English, or translating some of more difficult sentences into Farsi, the key sentences were written down and the parallel sentences were produced by the teacher.

Results

In order to test the hypothesis of the study and to find the convincing answer to the research questions, required data were collected. To analyze the data and calculate related descriptive statistics, paired-samples T-Test, and independent sample T-Test in the SPSS software version ۲۰ were carried out.

The purpose of the study was to investigate the effect of paradigmatic relations on EFL vocabulary learning.

Table ۱: Descriptive Statistics for Pre test Scores

	pretest ^۱ Control G	pretest ^۲ Exp. G
Mean	۱۳,۷	۱۳,۹
N	۲۸	۲۸
Std. Deviation	۳,۷۵	۳,۳۷

In order to find answers to the question on the role of paradigmatic relations, paired samples T-test was conducted. The comparison of the results of the pre test and post test in control group and the experimental group indicates that differences between pre-test and post-test in experimental group was statistically significant: ($p=۰,۰۲ < ۰,۰۵$). Analysis of the pre-test and post-test in control group revealed no significant difference. ($p = ۰,۱۶ > ۰,۰۵$). Therefore the control group did not perform significantly different in its pre and post tests.

Table ۲: Paired Samples T-tests

		Mean	N	Std. Deviation	Std. Error Mean
Pair ۱	pretest ^۱	۱۳,۷	۲۸	۳,۸	۰,۷
	posttest ^۱	۱۴,۲	۲۸	۴,۲	۰,۸
Pair ۲	pretest ^۲	۱۳,۹	۲۸	۳,۴	۰,۶
	posttest ^۲	۱۴,۹	۲۸	۳,۷۲	۰,۷

Table ۲ indicates paired-samples statistics in each group. As shown in the table, mean scores in two experimental groups differ significantly from pre-test of that group to the post-test of the same group.

Discussion

The main purpose of this study was to examine the role of a parameter called paradigmatic relations on EFL vocabulary learning. The study was conducted in a state high school in Yazd, Iran by means of pre and post tests. The scores were analyzed by the SPSS through T-tests.

What this study gained through the experiments and treatments in an Iranian state high school indicates clearly that for the students who have little familiarity with English, and on the other hand, in a short period of time, have to learn a certain amount of English vocabulary, learning sentences through their own parallels could be useful.

The results approving using word relations are as follows: ($p = ۰,۰۰ < ۰,۰۵$, df: ۲۷; t: -۰,۳۹). As a result the use of paradigmatic relations plays a significant role in EFL vocabulary learning of Iranian high school students.

References

- Klampfl, Alexandra. (۲۰۱۰). A comparative study of writing proficiency between an Austrian CLIL and mainstream EFL class with regard to vocabulary. Diplomarbeit, University of Vienna. p.۳
- Lee,H. (۲۰۰۶). The Two Principles of Representation: Paradigm and Syntagm - kuir.jm.kansai-u.ac.jp
- Noroozi, et al. (۲۰۱۳). English Book one. <http://eng-dept.talif.sch.ir>, pp.۸۰-۸۹
- Schütze, Hinrich, and Jan Pedersen, ۱۹۹۶, A Vector Model for Syntagmatic and Paradigmatic Relatedness Xerox Palo Alto Research Center, pp.۱-۷
- Sahlgren, M. (۲۰۰۶). The Word-Space Model: Using distributional analysis to represent syntagmatic and paradigmatic relations between words in high-dimensional vector spaces - su.diva-portal.org, pp. ۶۶, ۷۰, ۷۲, ۷۷
- Silverman, Kaja. (۱۹۸۳). The Subject of Semiotics. New York: Oxford University Press, p. ۱۰
- Yatbaz,Mehmet et al. (۲۰۱۲). Learning Syntactic Categories Using Paradigmatic Representations of Word Context, p.۱ Proceedings of the ۲۰۱۲ Joint Conference on Empirical Methods in Natural Language Processing and Computational Natural Language Learning, pp.۹۴۰-۹۴۳,۹۴۸.