

## VOCABULARY INSTRUCTION MODEL AS A FOUNDATION FOR READING ACADEMIC ARTICLES IN THE ISRAELI ACADEMIA

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### **Abstract**

A firm mastery of target language vocabulary is crucial for academic reading performance. Therefore, teachers should equip learners with tools that would help them understand and learn lexical items. To this end, we propose a graded instructional model, which combines strategies for decoding the meaning of novel words as well as learning and retaining them. In order to understand an unfamiliar word a student is encouraged to either guess it or consult a dictionary. Following lexical deciphering, the teacher assists the student in selecting the most frequent and useful words to be learnt. The learning process requires explicit focus on novel words. First, the learner copies the new word into his notebook alongside its dictionary definition and the context it was used in. Next, the student creates a keyword association which helps him retain the word. The learner then attempts to learn it using his preferred perceptual learning style. Since long-term retention of vocabulary requires multiple repetitions in varied contexts spaced at increasingly larger intervals, the teacher provides the learner with plentiful opportunities at novel vocabulary reinforcement. In addition, testing vocabulary progress guarantees further encounters with the target words. The graded vocabulary instruction model may be successfully integrated in versatile pedagogical frameworks aimed at lexical expansion.

**Key words:** vocabulary learning strategies, vocabulary retention, guessing, dictionary use, perceptual learning styles, mnemonics

## 1. Introduction

Vocabulary is one of the key components in reading comprehension at any level. Successful comprehension largely depends on the knowledge of word meanings. (August et al., 2005; Hiebert&Kamil, 2005; Koda, 2005; Sidek, 2013). Vocabulary plays a critical role in understanding reading materials in both L1 and L2 (Alderson, 2000; Goh, 2007; Joshi, 2005; Sidek, 2013; Qian, 2002; Ricketts et al., 2007). Research reveals that a firm mastery of target language vocabulary is crucial for academic reading performance (Harmon et al., 2006; Kelley et al., 2010; Qian, 2002).

Several studies demonstrate that the threshold for reading comprehension is lexical (Golkar&Yamini, 2007; Kameli, 2013; Qian, 2004; Zhang & Annual, 2008). Reading and comprehending authentic texts requires knowledge of at least 95% of the vocabulary, which means one unknown word in every twenty running words (Adolphs& Schmitt, 2003; Hu & Nation, 2000; Laufer, 1992). As each word derives and contributes meaning from and for its context, learner's vocabulary size is also a critical factor in successful guessing.

According to Nation (2001), "Incidental learning via guessing is the most important of all sources of vocabulary learning." (p. 232). However, Nation argues that unless the text is purposefully structured to provide clues for the meanings of unknown words, most guesses will not be 100% correct. The odds of accurately predicting a word's meaning from written context is very low—ranging from 5 to 15% for both native English speakers and English language learners (Beck et al., 2002). According to Nation (2001), "Learning by guessing from context is a cumulative procedure by which learners gradually develop their knowledge of words." (p. 234). Moreover, Folse (2004) and Laufer (1997) argue that L2 learners are not able to notice vocabulary through context, and, thus, do not learn new words when reading.

Due to the insufficient nature of learning vocabulary solely through guessing, direct vocabulary learning has been proposed as a more viable alternative for lexical enrichment. Research has shown that when learners' attention is explicitly focused on learning vocabulary, the uptake is stronger than in incidental learning (Hunt & Beglar, 2005; Laufer, 2005; Marzban&Kamalian, 2013; Schmitt et al., 2011).

Explicit vocabulary learning and teaching includes a number of strategies. One of these is dictionary consultation. Knight (1994) found that learners who consulted a dictionary acquired more vocabulary in both immediate and long-term tests compared with students who did not.

Moreover, students with deficient vocabulary benefit the most from dictionary use (Huang&Eslami, 2013). The major reason for superior word retention following dictionary consultation is that noticing language is the prerequisite for acquisition (Schmidt, 2001). Therefore, looking up a word in the dictionary and identifying the correct definition calls more attention to the word, which increases the chances of lexical retention (Peters, 2007; Pulido, 2007).

That being said and notwithstanding, looking up a new word in the dictionary should supplement the initial contextual inference rather than provide decontextualized meaning (Hayati & Fattahzadh, 2006; Huang & Eslami, 2013). Advocates of dictionary use suggest that teachers should encourage students to use a dictionary to find the precise meaning of an unfamiliar word in a specific context. Moreover, dictionary use needs to be selective, i.e. readers should check the meanings of words “that cannot be readily guessed from context and that are either useful to learn or relevant to the main points of the passage or the task at hand.”(Prichard, 2008, p. 220).

Despite the remarkable utility of dictionary consultation for vocabulary learner, many studies addressing dictionary users’ behavior reported failed look-ups caused by insufficient dictionary skills of the learners(Chan, 2011; Laufer, 2010). This deficiency calls for the necessity to explicitly teach dictionary consultation skills as part of vocabulary instruction (Chan, 2011).

Another vocabulary expansion strategy is familiarity with morphemes, i.e. knowledge of word formation. By recognizing the morphemes and deconstructing the new words into their constituent components learners of English are able to infer the meaning of unknown words and learn the novel lexical items (Larson et al., 2013; Mountain, 2005).

The optimal efficacy of vocabulary learning strategies relies on theutilization of the student’s individual perceptual learning style. Learning style is “the way in which each learner begins to concentrate on, process, absorb, and retain new and difficult information.” (Dunn & Dunn as cited in Pashler et al, 2008, p. 107). Versatile learning style models and inventories have been created in the past few decades. Learning styles that seem to be the most relevant for vocabulary learning are visual, auditory, kinesthetic and tactile. Visual learning style refers to perceiving and retaining the word and its meaning by seeing. Students with auditory learning style rely on hearing the word pronounced, while kinesthetic and/or tactile learners experience with the word through touching and manipulation.

One of the most widely discussed vocabulary learning strategies associated with perceptual learning styles is the keyword method (Fritz et al, 2007; Guey & Chun-li, 2014). This approach, which is based on pictorial memory, was devised in 1970s to expand vocabulary. The keyword method comprises three strategies: First, an L1 or L2 word is chosen based on acoustic/orthographic similarity with the L2 target word. Second, a strong association between the target word and the keyword is constructed, so that the learner, when seeing or hearing the word is immediately reminded of the keyword. Third, a visual image is created combining the referents of the keyword and the target word, preferably in a bizarre fashion in order to increase its memorability. Since the mnemonic association is either phonemic or morphemic, this strategy might cater for both visual and auditory learners. Keyword method was proven effective for both immediate and delayed recall of L2 vocabulary (Atay & Ozbulgan, 2007; Sagarra & Alba, 2006; Shapiro & Waters, 2005).

Aside from the use of strategies to promote learning and retention of new words, rich and varied exposure to the new vocabulary is vital (Lawrence, 2009; Nation, 2001). An average of ten repetitions is needed to learn novel words (Webb, 2007). According to Nation (2001), repetitions spread over a long period of time are more effective than massed repetitions at one time point. Vocabulary rehearsals should be spaced at increasingly larger intervals. Such spaced repetitions result in enhanced long-term word retention (Nation, 2001; Schmitt, 2000).

## **2. Vocabulary Instruction Model**

“I am so exhausted by looking up numerous words in the dictionary that I don’t have any energy for understanding the text and the questions”, reported a frustrated student in an EAP (English for Academic Purposes) course. College and university students in Israel need to be able to read and comprehend academic articles written in English both in the compulsory EAP courses and in the courses of their academic discipline. This requirement entails having enhanced knowledge of vocabulary in the target language. Unfortunately, many learners have insufficient lexical reservoir and are, thus, unable to adequately cope with written texts.

Therefore, concerted pedagogical efforts are made to enlarge the vocabulary of the EAP learners. The emphasis in the EAP courses in the Israeli academia is on receptive vocabulary knowledge, i.e. the ability to understand a word when it is encountered in an academic article. The model outlined below is aimed at helping the English language learners increase their

vocabulary. Our model comprises several graded instructional stages targeted at assisting the student in comprehension, learning and retention of novel words. The vocabulary work is always contextual and is related to a particular academic article.

### **Stage 1: Guessing in Context**

The student encounters a new word in the text and attempts to guess it applying the following guessing strategies: performing word structure analysis; determining the part of speech of the word; using context clues. For example, in the sentence “Two factors prevent settling the debate about whether to decriminalize drugs.” the learner performs word structure analysis dividing the word “decriminalize” into prefix, stem and suffixes (*de-crimin-al-ize*). In the sentence “The term globalization evokes strong positive and negative feelings.” The learner guesses the meaning of “evokes” using his knowledge of parts of speech as well as relying on contextual clues.

### **Stage 2: Consulting a Dictionary**

However, as some words are not amenable to adequate understanding by means of guessing the reader needs to use a dictionary. Therefore, specific dictionary consultation strategies are taught to guarantee that it is used efficiently. These include: omitting the prefix and the inflectional suffix; deciding what part of speech the word is; choosing the meaning that suits the context; looking up the base form of the irregular verbs in passive/ in past form; looking up phrasal verbs and collocations. While guessing and dictionary consultation strategies facilitate the reader’s understanding of the unknown vocabulary, a different set of strategies is used to help the student learn and retain novel lexical items.

### **Stage 3: Preparation for Word Learning**

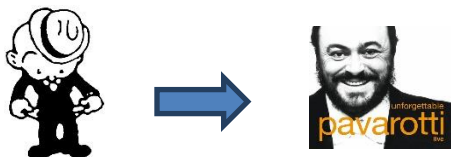
After the student has attempted understanding the novel words using guessing and dictionary skills, the teacher helps him choose the most vital words to be learned. The student copies every novel word into his notebook along with its translation and part of speech in the particular context. In addition, he copies the sentence containing the new item. If possible, the learner creates a mnemonic association for the word and a picture illustrating the connection. This triple reference to the word guarantees a meaningful representation of the word in the learner’s “personal dictionary”.

For example,

Outsourcing of manufacturing jobs may cause poverty in the long-term.

-Poverty (n.) - עוני. Mnemonic device-Pavarotti. In this example the key word bears an auditory (as well as some visual) semblance to the target word.

Sentence: Pavarotti used to live in poverty.



#### **Stage 4: Learning the Word**

Early on in the course the learner is introduced to the concept of learning styles. The learner receives a vocabulary-oriented learning styles questionnaire to help him determine his optimal manner of word learning and retention. The following word learning strategies are introduced:

For visual learners: Read the word several times in its context; read the word from the notebook; perform word analysis; create a visual mnemonic association; use flashcards; hang posters containing the word.

For auditory learners: listen to the word pronounced; say the word out loud; record yourself/ your teacher pronouncing the word and listen to it; devise an acoustic key word; sing the word.

For tactile/kinesthetic learners: write the word several times; write the word with your finger in the air/ on your friend's back etc.; prepare a flashcard containing the word; prepare a poster with the word; draw/find a funny picture illustrating the mnemonic association; jump/ jump rope/ tap the number of syllables the word contains.

#### **Stage 5: Vocabulary Reinforcement Exercises**

Since an average of ten repetitions spread over increasing time intervals is needed for the learner to retain the novel word in the long-term memory, the learner is repetitively exposed to the new vocabulary and experiences with it. The following lexical exercises are used in the classroom to guarantee sufficient exposure to the target words. In the first four types of exercises the new words are first used in the familiar context of the article read and later applied to a new context. 1) Word completion exercise with or without word bank; 2) Sentence continuation exercise; 3) Question answering exercise- the learner is presented with questions containing the target vocabulary and needs to answer them either in English or Hebrew; 4) Sentence/ paragraph

translation exercises; 5) Synonyms/ antonyms exercises 6) Writing independent sentences containing the new words; 7) Vocabulary games.

In addition to vocabulary reinforcement exercises, vocabulary quizzes are given on a weekly basis. Vocabulary testing ensures that the learner gets multiple repetitions of the target words while preparing for the quiz as well as provides an indication for the teacher which words have been internalized and which ones need further attention. Lexical exercises and quizzes are cumulative, i.e. once the novel words have been given a sufficient independent emphasis they are repeated together with previously learned lexis.

### 3. Conclusion

The graded vocabulary instruction model may be successfully integrated in versatile pedagogical frameworks aimed at lexical expansion. The model may be easily implemented both in the EAP classrooms around the globe and by independent academic readers. In addition, it can be adapted for other educational settings such as profession-oriented institutions, immigrant courses and school English courses by adding a productive lexical component.

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