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VOCABULARY ACQUISITION: IMPLICIT LEARNING AND EXPLICIT TEACHING

Review by Wang Dakun

INTRODUCTION

Numerous studies have revealed that the English language proficiency of second language learners in great measure, correlates with their vocabulary learning (Gu & Johnson, 1996; Kojic-Sabo & Lightbown, 1999). Hence, learning a second language largely means learning its vocabulary (Gass, 1999) as vocabulary skills make a significant contribution to almost all aspects of second language proficiency. In this vein, research on vocabulary acquisition is likely to yield insightful implications for effective second language learning and instruction.

Vocabulary learning and teaching research has as yet followed basically two approaches: these being vocabulary can be either learned implicitly and incidentally, or taught explicitly and intentionally. In effect, there has been a long-running debate about which of these two methods of learning vocabulary is more important. Given the importance of vocabulary in language learning, this article examines the positions of the two prominently competing theories and the implications for second language learning and instruction in general.

REVIEW OF RESEARCH

Implicit Learning of Vocabulary

The extreme implicit vocabulary learning hypothesis holds that the meaning of a new

word is acquired totally unconsciously as a result of abstraction from repeated exposures in a range of activated contexts. This strong implicit position is usually identified with Krashen (1989). Krashen's Input Hypothesis assumes that vocabulary acquisition takes place so long as there is comprehensible input as the essential environmental ingredient. Krashen asserts that "*language is subconsciously acquired – while you are acquiring, you don't know you are acquiring; your conscious focus is on the message, not form*" (1989, p. 440).

Krashen has found support from quite a few authors who also maintain that language learning takes place at an unconscious level. For example, Nagy and Herman (1987), Anderson, Wilson and Fielding (1988) also advocate implicit vocabulary learning from context alone. For instance, Anderson, Wilson and Fielding (1988) asked their subjects to record their after-school activities. The analysis of the data reveals that those who reported more reading performed better in vocabulary - hence reading books was a good predictor of vocabulary acquisition. In fact, Nagy and Herman (1987) claim that reading leads to greater vocabulary growth than any program of explicit instruction.

Krashen (1989) reviewed 144 studies concerning the acquisition of vocabulary and spelling. These studies suggest that a considerable amount of vocabulary

acquisition takes place as a result of exposure to comprehensible input. The amount of reading positively correlates with the lexical size of the readers. But it is very important to note that all but several of the studies Krashen (1989) reviews involve native speakers rather than second language learners. In this sense, "*research that positively supports Krashen's claims as regards second language vocabulary acquisition is still very limited*" (Coady, 1997, p. 226).

Explicit Teaching of Vocabulary

Contrary to the implicit position represented by Krashen (1989), an explicit vocabulary learning hypothesis holds that a certain amount of consciousness must be involved in vocabulary acquisition, from the learner noticing novel vocabulary, selectively attending to it, and using a variety of strategies to trying to infer its meaning from the context (Gass, 1999; Schmidt, 1990). The explicit learning hypothesis maintains that there are benefits from applying cognitive strategies to consolidate a newly encountered word by note taking, dictionary consulting and by associational learning strategies such as a semantic approach and various mnemonic techniques.

Laufer (1997) states that it is necessary for a reader to understand 95% of text coverage in order to comprehend the text successfully. This implies, according to some frequency counts obtained from corpus linguistics, a threshold level of the knowledge of around 3,000 word families, or 5000 lexical items (Laufer, 1997; Nation & Waring, 1997). Cohen and Apek (1980) suggest that lower level proficiency learners benefit from learning words out of context rather than learning them in context.

Hulstijn (1993) finds that context is not always reliable and more distracting to learners with lower level proficiency than learners with advanced proficiency. This substantiates the contention of Nation (1990) that the basic vocabulary should be taught to students as soon as possible and that vocabulary learning through contextual guessing should be delayed until learners have mastered the basic vocabulary.

There is a large host of language practitioners advocating explicit vocabulary learning and teaching, with some vocabulary lists and a variety of teaching models recommended (e.g. Nation, 1990; West, 1953). Most work in this area has been concerned with management of vocabulary learning: how to reduce the vocabulary load, as reflected in the frequency count movement (West, 1953); how to handle specific difficulties (Nation, 1990); what methods of vocabulary teaching have proved successful (Carter & McCarthy, 1988).

Once learners are equipped with the basic vocabulary, the context can serve as a useful source and medium of vocabulary learning. However, presenting words in the context alone has been suggested to be insufficient for optimal vocabulary learning. Learners must use the reading skills they have developed to infer the meanings of unknown words they meet (Nation, 1990).

Besides guessing from context, the predominant number of memory models, learning models and learning strategies is based on the crucial role of consciousness and attention in learning. The element of consciousness and attention can not be stressed too much in the learning processes involved in the model of human memory (Atkinson & Shiffrin, 1968), various

learning theories and learning strategies, such as depth of processing, dual coding, dictionary use, note-taking etc. As Ellis (1994) has argued, any aspect of vocabulary learning having to do with meaning involves conscious explicit learning and added effort helps to achieve more learning.

Current Trends in Acquiring Second Language Vocabulary

Historically, our perspective on learning vocabulary has been greatly influenced by dominant teaching methods. The pendulum has swung from direct teaching of vocabulary under the sway of the grammar translation method to implicit acquisition under the influence of top-down, naturalistic, and communicative approaches, and now, laudably, back to the middle: implicit and explicit learning (Sokmen, 1997).

Implicit learning takes place in all areas of life and it is therefore reasonable to assume that it takes place in the realm of vocabulary learning as well (Gass, 1999). However, it is hard to thoroughly subscribe to the extreme implicit vocabulary learning hypothesis. Since input can be made salient either by the teacher, materials, books, and so forth, or by the students themselves, the attention focus of learners can be shifted both externally and internally. In this vein, though many authors take implicit learning as something that is learnt without the object of that learning being the specific focus of attention in a classroom context, the pedagogically induced attention may or may not fit in with learner attention. As Ellis (1994) has argued, the fact that we have not been taught vocabulary does not mean that we have not taught ourselves. Learners are also their own teachers and they can control and shift their own focus of attention.

Learners' attention may go to a particular word as they perceive the need for it when they are attempting to express a particular meaning. Learning is facilitated by such a recognisable knowledge gap created by learners themselves.

The arguments for not focussing solely on implicit learning also come from a number of potential problems associated with inferring words from context. Acquiring vocabulary mainly through guessing words in context is likely to be a very slow error-prone process. Students, especially those with low-level proficiency, are often frustrated with this approach and it is difficult to undo the possible damage done by incorrect guessing (Sokmen, 1997). Even when students are trained to use flexible reading strategies to guess words in context, their comprehension may still be low due to insufficient vocabulary knowledge. Besides, guessing from context does not necessarily result in long-term retention. Some studies have shown that students who were just doing extensive reading made smaller increases in word acquisition than those who read and completed accompanying vocabulary exercises. Furthermore, putting too much emphasis on inference skills when teaching vocabulary belies the fact that individual learners have different strategies and styles of acquiring unfamiliar vocabulary. Students with a large vocabulary are not necessarily good at inferring, they may use other means (Sokmen, 1997). Thus, current research suggests that it is worthwhile to add explicit vocabulary instruction to implicit vocabulary learning. Explicit vocabulary instruction may not only enhance the efficiency of implicit learning, but may also have an effect on students' learning strategies, and overall interest and motivation in learning words. Nevertheless,

advocating explicit learning does not invalidate contextual learning. Even if some decontextualised learning, such as list learning, may be effective for retention, the ultimate goal of learning language for use entails re-contextualization by the users. Moreover, contextual guessing may be especially helpful to students with higher proficiency.

Ellis (1994) offers a comprehensive review about implicit and explicit learning of vocabulary. She concludes that both implicit and explicit processes are involved in vocabulary learning. Whereas some aspects of vocabulary learning are more amenable to conscious learning, some other aspects are more accommodating to explicit teaching. Information concerning the surface forms such as the frequency, phonologic and orthographic regularity of vocabulary is acquired implicitly while semantic aspects are acquired explicitly. Language learners acquire the more procedural knowledge aspect of implicit learning by repeated exposure and practice. Simple attention suffices for implicit learning mechanisms to induce regularities in the input environment. Thus, implicit learning is a process, occurring naturally, simply, and without much conscious operation.

However, the function of words is to convey meaning and indicate reference. The mappings between lexical, conceptual and semantic aspects of vocabulary represent the declarative knowledge aspect of vocabulary learning, which is more dependent on explicit learning processes. People are strategic, active processors of information. Language learners can achieve semantic and conceptual knowledge through various kinds of cognitive and metacognitive learning strategies.

CONCLUSION

Implicit learning is not entirely 'implicit', as learners must pay at least some attention to individual words. Students generally benefit from explicit vocabulary instruction in conjunction with extensive reading. To the extent that vocabulary learning is an implicit skill acquisition, it is also an explicit knowledge acquisition process (Ellis, 1994). The tunings of the implicit learning can be guided and governed by explicit learning and explicit learning can be consolidated and reinforced by implicit learning. Thus, implicit learning and explicit learning are, as it were, two sides of a coin in vocabulary acquisition. We should not think in terms of better/worse or whether/or, but rather we should see the two approaches as complementary. While explicit teaching can be a very good first introduction to a word, the context encountered in the subsequent reading can lead to new knowledge of its collocation, additional meanings and other higher level knowledge. In addition, repeated exposure from reading will help to consolidate the meaning(s) first learned.

In addition, explicit teaching is probably essential for the most frequent words of any second language, since they are prerequisites for language use. The learning of these basic words can not be left to chance, but should be taught as quickly as possible, because they open the door to further learning. Less frequent words, on the other hand, may be best learned by reading extensively, since there is just not enough time to learn them all through conscious study. So a well-considered vocabulary learning program will eventually include both methods, with each lending its strengths.

IMPLICATIONS FOR TEACHING

1. Encourage second language students to read extensively after class.

Since extensive reading plays a vital role in vocabulary building and improving the general proficiency of second language learners, it is important for teachers to help their students develop a positive attitude toward reading in English and orient them to the goals and methodology of extensive reading. Among other things, the orientation should include the following ground guidelines.

- Select reading materials based on interests and reading ability. High-interest materials within the students' linguistic competence can enhance the students' motivation to read and help them develop the feeling that reading is its own reward. A positive attitude toward reading in English is the first step to encourage the students to read as much as possible.
- Practice the skills of either guessing at the meanings of unknown words or ignoring them. Reading skills of contextual guessing and ignoring 'wean' the students away from the word-by-word processing of text. Consequently, students increase their reading speed and confidence and can give more attention to working out the overall meaning of what they are reading. Successful reading experiences lead students to enjoy language learning and to value their study of English.
- Use a dictionary as a handy aid. As a repository of scientifically determined information, a dictionary is a useful tool for handling unfamiliar vocabulary in reading. Though it is not a good practice for the students to consult a dictionary about every unfamiliar word encountered in reading, it undoubtedly does them good to look up unfamiliar key words affecting comprehension. A potential problem with relying only on context is that second language learners may not always be able to guess the meaning of a word from context. Besides, the students surely stand a greater chance of retaining a word when they refer to a dictionary as opposed to just wild guessing.
- If a book is boring or too hard, stop reading and find another book. Struggling with difficult, dull material is not the way to become a willing ESL reader. Nor is it the most efficient way of becoming an able reader.

2. Explicit teaching is worthwhile.

- Help second language learners develop a large sight vocabulary so that they may automatically access word meaning. Learning the 2,000 most frequent words in English can be very productive, thus, explicitly teaching them can provide worthwhile returns.

- Teach students words which will cause confusion, e.g. false cognates and ‘false friends’. The time is well spent to explicitly teach students these words with an eye to clearing up confusion.
- Teach students difficult words. Because students will avoid words which are difficult in meaning, in pronunciation, or in use, preferring those that can be generalized, lessons must be designed to tackle the tricky, less frequent words along with the high frequency words.
- Model various explicit methods of vocabulary acquisition, such as semantic mapping, semantic feature analysis, word unit analysis etc. Following their teacher’s modeling, students not only learn words but also experience ‘cognitive apprenticeship’.
- It is not enough to teach pupils where clues are located in contexts or the various forms the clues may take when available. Declarative knowledge and procedural knowledge are not of the same nature. Exposure to successful models and interactive practice in deriving information from contexts could give students opportunities to develop a sense of how to use context to take advantage of the information it offers without introducing information that is irrelevant or causes interference. Modeling, interactive practice and prompt feedback from the teacher can encourage students to reflect on their vocabulary handling strategies in reading, increase their awareness of what they do, provide them with a starting point to assess the effectiveness of their efforts and help them discover other more effective strategies.

3. Encourage independent learning strategies.

- Encourage students to recognize their own learning styles. Since most vocabulary learning will take place outside of the classroom, students should be encouraged to utilize strategies accommodating to their verbal and non-verbal cognitive styles.
- Exhort students to keep notebooks about new words encountered and to go through their notebooks on a regular basis, adding more information in order to elaborate understanding of the words and rehearse their meanings. Acquiring a word is facilitated by cognitive effort in an explicit learning process.
- All efforts to encourage independent learning culminate in developing internal motivation of the students to learn vocabulary. Once students come to the classroom with the awareness that vocabulary acquisition is crucial to their skill in using a second language, they will want to command more words. Such internal motivation will affect their vocabulary learning both inside and outside their classroom for a long time.

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