Issues in the emerging area of vocabulary learning strategies

Norbert Schmitt
University of Nottingham
Nottingham

In 1997, I attended several international Applied Linguistic/TESOL conferences and noted that there were several presentations on vocabulary learning strategies. One year earlier at the same conferences, only one or two people spoke on this subject. Before that hardly anyone at all worked on the topic. This trend interested me because of my own work in this area. In 1993 I carried out a large scale study into vocabulary learning strategies, primarily because so little had been done on them up until that point. It occurred to me that what I was seeing was the emergence of a new topic in the Applied Linguistic arena. In retrospect, it was probably inevitable once work on language strategies gained general acceptance and then proliferated. Because language strategies cover such a wide scope (including communication strategies, compensation strategies, social strategies, learning strategies, etc.), their specialization was always likely. Coinciding with the current emphasis on vocabulary, it was only a matter of time before scholars concentrated on lexically-focused strategies. In this paper, I will highlight a few of what I see as the important issues in this emerging area of interest.
1. Description and classification of vocabulary learning strategies

Second language vocabulary has always been my main research interest, and when I did a reasonably thorough survey of language strategies in 1993, it struck me that the place where these two major areas intersected — vocabulary learning strategies\(^1\) — was almost totally unresearched. I found that many of the general language strategy studies had used vocabulary as part of the research design, but this was mainly because vocabulary is relatively easy to measure and so made a convenient proxy for global language learning. But very few scholars had concentrated on vocabulary learning strategies themselves as a category. Perhaps most telling was that fact that I could find no adequate inventory of vocabulary learning strategies in the literature.

It seemed to me that a principled approach to vocabulary learning strategies would be impossible until a reasonably comprehensive listing was compiled. Once that was accomplished, one would be able to get an overview of all of the vocabulary learning strategies as a group, and so begin to make more rational global judgements about them, rather than working solely at the level of individual strategy. The inventory given below is my attempt to compile such a list (Schmitt, in press). I would claim it contains most of the important strategies, but it is almost certainly not yet comprehensive.

**Strategies for discovering information about a new word**

**Determination strategies**
- analyze part of speech
- analyze affixes and roots
- check for L1 cognate
- analyze any available pictures or gestures
- bilingual dictionary
- monolingual dictionary
- word lists
- flash cards

**Social strategies**
- ask teacher for an L1 translation
- ask teacher for paraphrase or synonym of new word
- ask teacher for a sentence including the new word
- ask classmates for meaning
- discover new meaning through group work activity

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\(^1\) Of course there are vocabulary production strategies as well.
Strategies for consolidating a word once it has been encountered

Social strategies

- study and practice meaning in a group
- teacher checks students’ flash cards or word lists for accuracy
- interact with native-speakers

Memory strategies

- study word with a pictorial representation of its meaning
- associate the word with its coordinates
- use semantic maps
- peg method
- group words together spatially on a page
- study the spelling of a word
- say new word aloud when studying
- underline initial letter of the word
- affixes and roots (remembering)
- paraphrase the words meaning
- learn the words of an idiom together
- image word’s meaning
- connect word to a personal experience
- connect the word to its synonyms and antonyms
- use ‘scales’ for gradable adjectives
- loci method
- use new word in sentences
- group words together within a storyline
- study the sound of a word
- image word form
- configuration
- use keyword method
- part of speech (remembering)
- use cognates in study
- use physical action when learning a word
- use semantic feature grids

Cognitive strategies

- verbal repetition
- word lists
- take notes in class
- listen to tape of word lists
- put English labels on physical objects
- written repetition
- flash cards
- use the vocabulary section in your textbook
- keep a vocabulary notebook

Metacognitive strategies

- Use English-language media (songs, movies, newscasts, etc.)
- skip or pass new word
- testing oneself with word tests
- use spaced word practice
- continue to study word over time

Compiling an inventory of vocabulary learning strategies was the first step, but without some sort of organization, a mere list would have been less than useful. The reader will notice the inventory is categorized according to two classification systems. The first borrows four categories (social strategies, memory strategies, cognitive strategies, and metacognitive strategies) from a system developed by Oxford (1990). To this I added a fifth category unique to vocabulary learning strategies: determination strategies — strategies useful
in determining (by oneself) what a new word means. In addition, the strategies are divided according to a more global distinction: **discovering** information about a new word (either by oneself or through interaction with someone else) and then **consolidating** and enhancing that partial knowledge once the word has been introduced (see Schmitt, in press — for a much more detailed discussion).

I believe that the resulting taxonomy above (however imperfect) provides a basis for a more principled discussion of these strategies. For instance, the taxonomy suggests that certain strategies have different purposes (discovery vs. consolidation). In addition, it shows that some strategies can be used for either purpose, e.g. using affixes and roots can be utilized both in the analysis of a new word, and as a memory aid in remembering that word later. The taxonomy framework should also be useful in formulating research questions in the future, for instance, by categorizing different strategies so that they can be compared for effectiveness.

As informative as this taxonomy may be, the fact remains that such a large inventory will prove impractical for many purposes. For instance, one has difficulty imagining students being instructed in the use of all 56 strategies. In cases like this, a smaller number of the most important strategies may be more viable. Stofferr (1995) shows how this smaller number might be derived in a principled manner. She gave a survey containing 53 vocabulary strategies to 707 undergraduates studying a foreign language at a U.S. university. She then ran a factor analysis on the results and discovered that the strategies clustered into nine groups: 1) strategies involving authentic language use, 2) strategies involving creative activities, 3) strategies used for self-motivation, 4) strategies used to create mental linkages, 5) memory strategies, 6) visual/auditory strategies, 7) strategies involving physical action, 8) strategies used to overcome anxiety and 9) strategies used to organize words. These nine categories could be used as a basis for a realistic vocabulary strategy instruction program, with perhaps one or two strategies being suggested from each category.

### 2. Strategies are often used together in clusters

Research has shown that strategies are usually not employed in an individual, discrete manner, but rather, learners often use several in conjunction...
in order to reach their objectives. Ahmed (1989) used a cluster analysis technique to isolate five kinds of learners typified by the kind of vocabulary learning strategies they used. The subjects in the three ‘good learner’ groups used a variety of strategies, while ‘poor learner’ subjects used few strategies. Sanou (1995) found two distinct approaches to vocabulary learning and one of the main determinants was whether learners independently engaged in a variety of learning activities or not. Erten (1997) found his subjects averaged about two strategies per word when studying written and oral word lists.

This multiple use of strategies is really quite intuitive when one thinks of concrete examples of vocabulary learning. Let us imagine a vocabulary learning activity many would consider quite basic: learning words from a word list. Using a word list itself could be considered a strategy, but beyond that, learners are likely to ‘attack’ each word in several different ways. At the very least, they will try to memorize the meaning(s) and form of the word. This will probably involve one or more strategies for retaining the meaning (perhaps a memory strategy), one or more strategies for retaining the word form (some verbal and written repetition for instance) and maybe some strategies that encompass both (entering the word form and meaning down in a vocabulary notebook). If the students are serious about learning, they will need to have some strategy to review the words on the word list. This may vary from a scheduled review system to a general commitment to review the words whenever it is convenient. The learners may also try to use the new words where possible, or to test themselves on their retention. So it seems clear that learners often use multiple strategies when learning vocabulary. This needs to be recognized in future vocabulary strategy research. Until now, most studies (mine included) have dealt with the individual use of strategies, making interpretation unclear in view of the clustering phenomenon.

3. The effect of personal factors on the use of vocabulary learning strategies

The emphasis on language learning strategies initially drew its impetus from the view that they could empower individual students to improve their learning in a way that was specific to them. Numerous studies have shown that strategy use is indeed quite idiosyncratic, depending on a number of factors,
including "proficiency level, task, text, language modality, background knowledge, context of learning, target language, and learner characteristics" (Chamot & Rubin, 1994: 772). In the more specific area of vocabulary learning strategies, these factors are important as well, including the personal ones. In my survey study (Schmitt, in press), I was able to show that the patterns of vocabulary strategy use by Japanese learners change as the learners mature. Also, their perceptions of the helpfulness of those strategies change over time. So age appears to be a factor. L2 proficiency also seems to be important. For example, word lists proved better for beginning students, but more advanced students benefitted more from contextualized words (Cohen & Aphek, 1981). Cohen & Aphek (1980) found that if students were more proficient initially, they were better able to use associations in recall tasks.

One of the more obvious personal factors which affect vocabulary learning strategy use is the learner's culture. O'Malley and Chamot (1990) found that Hispanics who had strategy training improved their vocabulary scores compared to the Hispanic control group, but Asians in the strategy training groups (who resisted training) performed worse than the Asian control group who used their familiar rote repetition strategy. My colleagues and I (Schmitt, Bird, Tseng and Yang, in press) compared the Japanese results from Schmitt (in press) to those from other cultures to see if the learners' perceptions of strategy usefulness were similar. The comparison groups were Taiwanese 1st-year university students studying in Taiwan, Taiwanese PhD students studying in England, and a mixed group of Turkish and European students, also studying at British universities. In general, cultural differences did show up, with the Japanese results being closer to the mixed group than the Taiwanese 1st-year students. This was somewhat unexpected, since one might have expected the Japanese and Taiwanese 1st-year results to be similar, since both groups were orientals studying in their home country. Also, at least to Western eyes, they seem to come from apparently similar cultures. The results warn us that, although culture is an important factor, we should not make assumptions based on cultural stereotypes; rather it is far safer to gather opinions from the learners themselves concerning various learning strategies.

Within each cultural background, learners will vary of course. We also found that the Taiwanese PhD students had quite different opinions from the Taiwanese 1st-year students, even though they came from the same culture and were educated in the same school system. The most likely explanations for this are proficiency and motivation differences. This highlights the likelihood that the various personal factors interact in perhaps complex ways in affecting strategy use.
Not every personal factor seems to make a difference, however. The same movement towards emphasis on the learner has focused attention on different learning styles, the main four commonly mentioned being visual, auditory, kinesthetic, and tactile (Reid, 1987). Since these learning styles are by definition personal, one would expect them to affect which vocabulary learning strategies are used. However, Erten (1997) found no meaningful correlation between them and use of vocabulary learning strategies.

4. The effect of external factors on the use of vocabulary learning strategies

In addition to personal factors, external factors also play a part. Three of these are the mode of language use, the learning environment in general, and the nature of the words to be learned. Erten (1997) found that when his subjects learned written and oral word lists of 12 words, the mode made a difference in the amount of usage for a third of the vocabulary learning strategies he studied (8/24). This suggests that learners change strategies to a certain extent according to the mode of input. McDonough (cited in Schmitt & McCarthy, in press) relates how the learning environment can also affect strategy use. His university allows bilingual dictionaries into exams, but not monolingual ones. (If the school allowed international students monolingual dictionaries, they would need to allow native-speaking students the same privilege.) This fact may well work against advice from EFL staff to switch to monolingual dictionaries. This implies that tests and testing procedures can have a backwash effect not only on what students believe is worth studying, but also on strategic choices of how they study.

In choosing vocabulary learning strategies, the frequency of occurrence of a word is also relevant; Nation (interviewed by Schmitt, 1994) suggests that teaching students strategies is especially important when it comes to dealing with low frequency words. He argues that vocabulary can be considered from a cost/benefit viewpoint: high frequency words are so essential that the ‘cost’ of teaching them is justified by the resulting benefit, but low frequency words will not generally be met often enough to merit individual explicit teaching. Since teaching time is not justified on these low frequency words, he suggests teaching three strategies to help students deal with them: guessing from context, using mnemonic techniques, and using word parts (Nation, 1990, Chapter 9).
5. Trainability of vocabulary learning strategies

I think I am safe in saying that most people involved with language teaching would agree that there is a place for learning strategies in the language acquisition process. But going further and stating that their instruction should be built into the curriculum rests on the assumption that they can be effectively taught. On this point the evidence is not so clear. Some strategy instruction studies report a reasonable degree of success, while others report only limited success, or even student resistance. It seems much depends on the proficiency of the learners (Kern, 1989) and the knowledge and acceptance of the teachers involved (Chamot, 1987). McDonough (1995) reviews strategy training research and, among other things, concludes that improvement caused by strategy training is relatively weak and only shows up on certain measures, is culture specific, and may be better for beginning students. An earlier summary by Skehan (1989) had also suggested that strategies may be performance based, and the only strategies which can be taught are those that affect the immediate task being done. On the other hand, Stoffler (1995) found the single best predictor of vocabulary learning strategy use was previous vocabulary learning strategy instruction. I personally believe that vocabulary learning strategies have great potential, but the discussion on their trainability continues.

Conclusion

In this paper I have tried to briefly highlight some important aspects concerning vocabulary learning strategies. This area is still in its infancy, but if the recent trend of increasing research is any indication, we can expect to hear much more about it in the near future.
References


Z nowych zagadnień strategii uczenia się słownictwa języka obcego

Streszczenie

Artykuł podejmuje temat strategii przyswajania słownictwa przez uczącego się języka obcego. Autor dokonuje opisu i próby klasyfikacji poszczególnych strategii, uwzględniając w dyskusji wpływ czynników zewnętrznych i czynników związanych z osobą uczącego się na stosowanie przezeń poszczególnych strategii. Autor wyraża pogląd, że zagadnienie strategii uczenia się powinno mieć również swoje miejsce w programach nauczania języka obcego, choć sprawą dyskusyjną pozostaje to, czy można skutecznie nauczyć zastosowania takiej strategii. Stwierdzając, że stosowanie przez uczących się strategii przyswajania słownictwa języka obcego ma charakter idiosynkratyczny, autor akcentuje rolę kultury osoby uczącej się. Do czynników zewnętrznych, które mają wpływ na dobór tych strategii, autor zaliczył między innymi naturę przyswajanego słownictwa w języku obcym i częstość występowania konkretnych słów. Stosowanie strategii ma charakter intuicyjny, wybór poszczególnych strategii zależy od rodzaju przyswajanego materiału, a także środowiska, w którym ma miejsce uczenie się.

Norbert Schmitt

Zu neuen Problemen der Strategie der Beherrschung vom fremdsprachlichen Wortschatz

Zusammenfassung