

VOCABULARY INSTRUCTION

Anne O'Keeffe

INTRODUCTION

Much has been written about vocabulary from different perspectives. A large body of work looks at how vocabulary is learnt or acquired. This falls largely under the area of Second Language Acquisition. Another substantial area of research relates to describing the lexicon, that is how many words, word families, how words are organised into semantic and syntactic relations and patterns (e.g. collocation, multi-word units). Thirdly, from a teacher education perspective, a chapter on 'teaching vocabulary' is standard fare in core English Language Teaching (ELT) texts and there is also a considerable amount of teacher development material both in print and online which is dedicated to actual vocabulary teaching strategies for the classroom. Particular ways of teaching vocabulary, for example, the Lexical Approach or Data Driven Learning Approach are also well documented.

In this chapter, we also consider the importance of how words are organised into patterns. we consider what words are core and how we can accelerate our students vocabulary acquisition. We also look at how words are organised semantically and syntactically. Firstly, we briefly overview how the teaching of vocabulary has changed in the context of language teaching approaches over time. It is important to have an understanding of the influence of second language acquisition theory in relation to vocabulary instruction models.

BACKGROUND

SECOND LANGUAGE ACQUISITION

Theories of SLA attempt to explain how languages are learnt and, within that, account for how vocabulary is developed. These have been influential in changing the prevailing understanding of how best to teach vocabulary. Historically, until early in the 20th century, 'foreign' languages were taught using the Grammar Translation Method (see Larsen-Freeman 2000). This was based on the teaching of Latin and Greek and it was based around the introduction of high culture literary text and the learning of and subsequent parsing of grammar rules. In grammar, students were taxed with learning 'paradigms' whereas in terms of vocabulary, lists would often have to be learnt and most vocabulary came for the literary texts of the language of study. This meant that learners would often know vocabulary from their literary texts which was often of little use in any functional sense e.g. if one wanted to ask for directions. In the context of the times, learning a foreign language was a very academic exercise and the notion that one might need to ever ask anyone for directions was a slim possibility compared to the need to be able to read book in that language. Issues of mobility and the need to be competent in spoken language took on

a new imperative particularly around the time of the Second World War (Larsen-Freeman 2000).

Behaviouralist theories of psychology came very much into vogue in the US and this permeated to language teaching. In the behaviourist model, aspects of human behaviour, including language, can be broken into a series 'habits'. Therefore, all facets of language learning (including vocabulary teaching) were seen as a series of habit and learning these was a matter of 'habit formation' (see Skinner, 1953). The behaviourist approach to language teaching was called the *audio-lingual approach*. The classroom emphasis was on teacher modelling and student repetition of words. That is, students would hear the teacher model a word, then they would imitate it and repeat it, individually and chorally (for a classroom description, see Larsen-Freeman 2000). Language laboratories came out of this period. In fact, they were first used as a means of intensive language training for US troops who were being sent to the Second World War (Saettler 1990). An important aspect to vocabulary learning within the audio-lingual approach was that rote learning of vocabulary. McCarthy et al (2008: 109) note that while rote-learning of vocabulary is certainly not adequate for language acquisition to take place, it is still practised in many parts of the world. They say that while it may be entirely appropriate at the early stages of learning a second language, it is unlikely to work at more advanced levels as learners will become bored and frustrated by a perceived lack of progress. Schmitt (1997) points to evidence that, as learners become more advanced, they prefer and benefit from more cognitively engaging strategies for vocabulary learning.

Cognitive (sometimes referred to as 'mentalist') theories of SLA are the opposite to behaviourism in that they view language acquisition is a cognitive activity. Chomsky is the best known in this respect. His theory of Universal Grammar (Chomsky 1955) maintains that human-beings are pre-disposed to language acquisition and he puts forward the idea that we have an innate ability to learn a language during a critical period of our lives, normally by the age of about ten (referred to critical age theory). Within the cognitivist framework, it is argued that language input should be slightly above the learners' current level (see Krashen 1981). In terms of vocabulary teaching, there is an implicit view of learning: new words are acquired unconsciously and teaching has no influence on this process of acquisition and learners should simply be left to 'get on with it' (McCarthy et al 2008).

Interactionist theories provide yet another perspective, in this model, it is suggested that learning takes place through the interaction which occurs between teacher and learners, and between peers, that is learners and other learners. The theory was first put forward by Long (1983, 1996) and it emphasises that learning takes place when meanings are 'negotiated'. This concept of negotiation of meaning is therefore core to the learning task, and is obviously very salient in relation to vocabulary acquisition. It is argued that learning is optimised when learners work with each other and when they are going through cognitive processes of seeking clarification, checking meaning and making sure they understand.

Another key perspective comes from sociocultural theory. This influential model has its origins in the work of Vygotsky (1978) and central to it is the notion that learning a second language is very much a social activity, mediated by language. According to Vygotsky (1978) learning takes place when there is an 'expert' knower who assists learners using language and dialogue. It is proposed that learners pass through the Zone of Proximal Development (ZPD), that is, 'the collaborative construction of opportunities [...] for individuals to develop their mental abilities' (Lantolf 2000:17). ZPD in relation to vocabulary instruction is the degree to which learners can develop their mental abilities by working together on a common vocabulary learning task. In this process, the collaborative construction of is language is essential. In other words, learning occurs when 'individuals engage with a common task in the pursuit of a common goal' (McCarthy et al. 2008). Hence, task-based and form-focused instruction are at the core of this theoretical perspective. As McCarthy et al (2008: 111) put it 'learners must be given tasks to complete which are challenging, which require discussion and which help them to focus on *language*.'

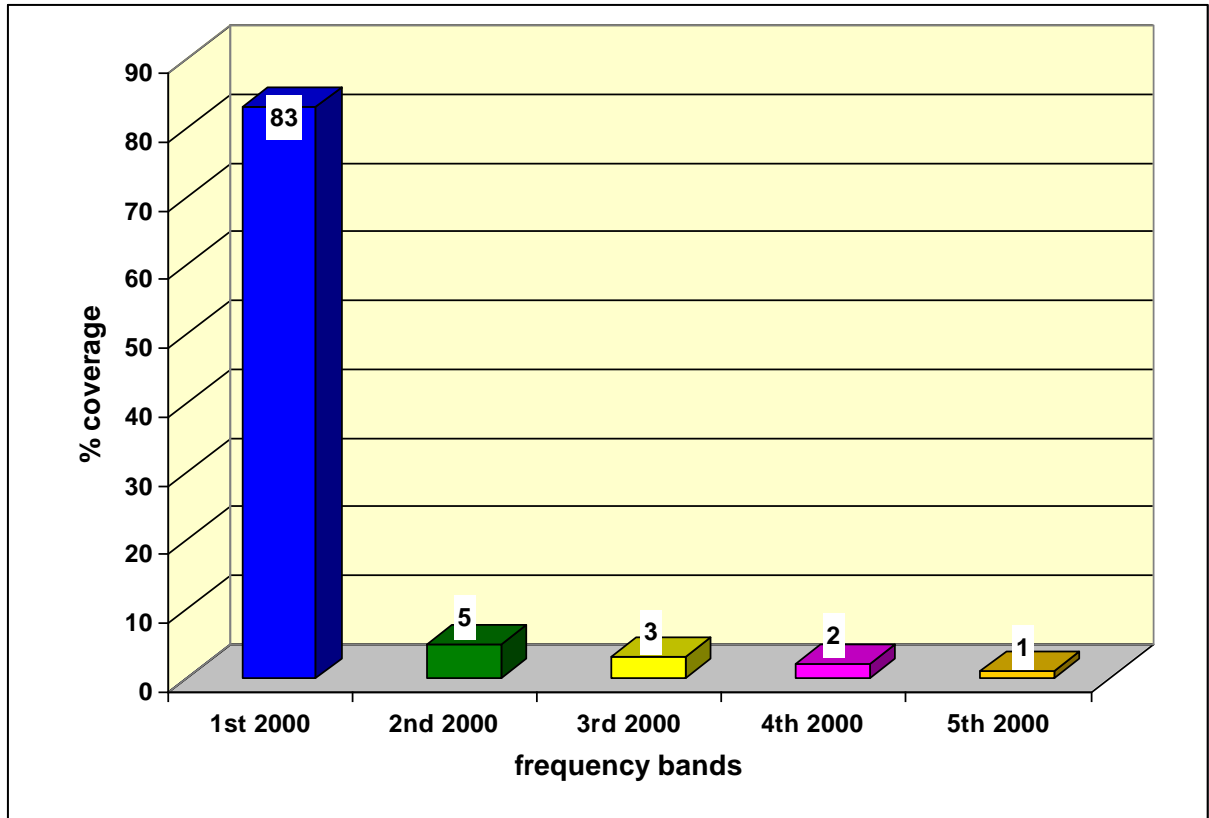
KEY ISSUES

DOES VOCABULARY SIZE MATTER?

There is plenty of empirical research to show that the more words learners know, the higher their attainment in language tests (Laufer, 1992; Laufer and Goldstein 2004; Alderson 2005; Albrechtsen, Haastrup, and Henriksen 2008). Alderson (2005: 88) concludes from his research that it the size of one's vocabulary which 'is relevant to one's performance on any language test, in other words, that language ability is to quite a large extent a function of vocabulary size'. Therefore it is safe to conclude that improving learners' vocabulary acquisition will leave to overall improvement in their reading, writing and listening skills.

Research tells us that there is a core vocabulary set of about 2,000 words which account for over 80% of all of the words in spoken and written texts (see O'Keeffe, McCarthy and Carter (2007). This amount is arrived at by looking at language corpora, large collections of everyday spoken and written texts stored on a computer and available for analysis. Figure 1 presents the findings of O'Keeffe et al (2007) based on their research into the Cambridge International Corpus.

Figure 1: Text coverage in a 10 million-word corpus of spoken and written English (based on O'Keeffe et al 2007)



As figure 1 illustrates, the first 2,000 core words in English account for 83 percent of coverage (that is, of all the words that you are likely to encounter in everyday spoken or written language). These results have interesting implications and interpretations which we will explore in greater detail. First let us briefly detail what the core words entail. Based on the work of O'Keeffe et al. (2007), we can summarise that they comprise:

Table 1 – A breakdown of the core words in English (based on O'Keeffe et al 2007)

Basic grammatical words	closed grammatical sets <i>articles, prepositions, pronouns, conjunctions, auxiliary verbs</i>
Modal verbs	<i>can, could, may, might, would, should, ought</i> to etc.
Modal words	<i>probably, possibly, definitely, apparently, certain, maybe</i> etc.
Delexical verbs	<i>make</i> (e.g. make a wish), <i>do</i> (e.g. do an interview), <i>get</i> (e.g. get a job), <i>take</i> (take a break)
Stance words	Words that show attitudinal stance, such as <i>unfortunately, basically, actually, just, (a) bit</i> .
Discourse markers	Boundary words such as <i>well, okay, right, however</i> .
Basic nouns	A wide range of nouns with both concrete and non-concrete meanings (e.g. <i>person, problem, life, family, room, car, school, door, water, house, situation, birthday</i>) Names of days, months, colours, body parts, kinship terms, common activities (breakfast, swimming), common places and events.

General deictics	Words that relate to space and time, e.g. <i>this, that, these, those, now, then, ago, away, front, side, back.</i>
Basic adjectives and adverbs	For example, <i>lovely, nice, different, good, bad, eventually, recently, always, usually, normally, generally, suddenly, totally, entirely, obviously, basically</i> and <i>hopefully</i> , etc.
<i>Basic verbs for actions and events</i>	Verbs referring to everyday activity, such as <i>give, leave, stop, help, feel, put, sit, listen, explain, enjoy, accept</i> and <i>fill</i> .

HOW MANY WORDS DO OUR LEARNERS NEED TO KNOW?

As figure 1 illustrates, it is not about how many words a learner knows, it is more about knowing as many of the senses of the core words as possible that impacts on the amount of words in a text that one will understand. Leaving aside the high frequency core grammatical items, what gives the core words such potency in terms of coverage is mostly to do with two factors:

1) the ability of the same form to appear in many meanings (polysemy)

The more students can know about core words, the more they will increase their vocabulary potency. For example the word *rich* may first be encountered in its meaning of having a lot of money but it has other meanings in other contexts, such as *rich food, rich soil, rich in resources, a rich colour*, none of which relate to money. Dealing with polysemy is a matter of acquiring 'depth', that is the need to deepen ones understanding of the many senses of the core vocabulary items.

2) the ability of the same form to combine with other forms to make new meanings

Take a delexical verb as an obvious example; these are high frequency items that are semantically quite empty but which can combine with certain other words to make specific meanings. The work *do* in any of these combinations does not have high semantic content yet when combined with certain nouns, it takes on new meaning: *do a favour, do an interview, do a lap, do the dishes, do the school run*.

HOW BEST TO ACCELERATE VOCABULARY LEARNING AND RETENTION?

As we move up in the frequency bands illustrated in figure 1, the words occur less and less so opportunities need to be created for learners to encounter more new words (to increase the 'breadth' of their vocabulary). Two endeavours can accelerate this process: increasing contextual encounters and working on extended meanings.

Increasing contextual encounters

Studies on vocabulary acquisition tell us of the value of learning words through several contextual encounters and endorse the point that the more students see, read, write or say a word, the more likely they are to retain it in their long-term memory (Mezynski 1983; Stahl and Fairbanks 1986; Krashen 1989; Nation 1990). These encounters would typically come in the form of watching television or reading. Reading, especially, offers the opportunity for the learner to build advanced vocabulary. As we move up the frequency bands, we move into more and more specialised and lower frequency vocabulary uses. If a student has a specific interest in a particular area, then s/he will be more motivated to read in this area and acquire vocabulary in this context (e.g. sport, medicine, law, cookery, fashion). However, Cobb (1997) argues that, in reality, few language learners have time to do enough reading for natural, multi-contextual lexical acquisition.

Take for example a random search for the word *dampen* in Figure 2. In its literal sense, it means to make something slightly wet. However, a quick search using the online Bank of English, brings up many other non-literal meanings which, even the most avid reader would not encounter with such intensity, even over a long period. The negative side is that unlike the book reader, the corpus reader is working without much in the way of context. This is overcome to a degree by training (see Sripicharn 2010 on learner training for DDL).

Figure 2 – a concordance sample from the Collins Bank of English for the word *dampen*

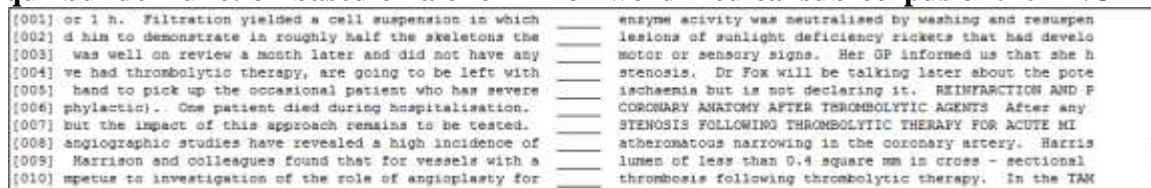
and high debt levels will continue to dampen consumer confidence and spending decisions. enity of the big band production tends to dampen enthusiasm, and though O'Connor's ability to breadcrumb coatings are easy to use. Just dampen the meat or fish pieces with water, coat with week two began. [p] The only incident to dampen ONCE's confidence was the false doping claim (lmost 20 years. Poor weather continues to dampen consumer spending appetites. [p] the physical punks the Membranes has totally failed to dampen hes squib. Tell lus about Bohemia, John. It's r good, natural coverage-for sheer colour dampen the applicator sponge first. [p] Matt shine-that President Assad's refusal appears to dampen hopes for a reconciliation between the two Government resorted to interest rates to dampen it down. But high interest rates crippled the because there is just no one authority to dampen things down. It's a total mess. So I think memorable movies. Still, who was he to dampen the producer's enthusiasm? [p] He was about s well," Whitlock admitted. [p] I hate to dampen your spirits but aren't you overlooking a e burden. But these possibilities did not dampen Haig's spirit. That they did not do so can be etails of living with someone can rapidly dampen libido. Marriage, supposedly meant to contain to government expenditure, in order to dampen down inflationary pressure. See also money End, the austere barracks did nothing to dampen our spirits. My Jowett Jupiter sports car had il revenues and tax free, was supposed to dampen internal criticism. However, many ordinary e buzz that even the continual rain can't dampen. Fitted out by Ben Kelly, the industrial did not favour a rapid sale. In order to dampen speculation, Talbot publicly stated that the orlock, in the fiftieth minute, failed to dampen their enthusiasm on a windswept Wiltshire venture so far. [p] While the award will dampen criticism that too much lottery money is take several years, a prospect that would dampen investor enthusiasm for the deal. Fear of

Apart from the lesser used literal sense of the word, we find the use of the word in contexts such as *dampen confidence*, *spending appetite*, *hopes*, *spirits*, *inflationary pressure*, *libido*, *criticism* as well as *enthusiasm*. It is difficult to argue with the density and richness of exposure to how the word is used. Tom Cobb has set up an excellent free web interface for corpus use called *Compleat Lexical Tutor* (www.lextutor.ca). For example, it is linked to corpora such as the BNC and it also allows teachers to load their own texts. It also allows students to test their vocabulary and is based on *wordlist bands*

and levels. Another interesting application on Cobb's page is the *Multi-Concordance + Quiz Builder*. This tool allows you to select a corpus (e.g., the Brown Corpus, a graded-reader corpus) and then to search a word or a phrase to produce a basic concordance which is linked back to the corpus that you have selected, a gap fill task sheet where the search word is deleted or a quiz format, which includes interactive gapped concordances for the search word or phrase. Target words are also linked to the *Cambridge Learners' Dictionary*.

For example, figure 3 shows an advanced gap fill task based which was generated at the click of a button based on a one million-word medical text corpus (BNC) for the search word, *residual*.

Figure 3 – A screenshot from *Compleat Lexical Tutor* (www.lextutor.ca) using quizbuilder function based on a one-million word medical sub-corpus of the BNC



HOW WORDS ARE ORGANISED AND HOW WE ORGANISE WORDS

How words are organised can be looked at from two perspectives: how we organise and connect words by meaning and how we connect and organise words syntactically. In organising words by meaning we can draw on connections between words especially through *synonymy*, *antonymy* and *hyponymy*.

Synonymy refers to two or more words having the same meaning, where one can substitute for the other without altering the meaning. For example, *start* and *begin*, *complete*, *end* and *finish*. In terms of vocabulary instruction, synonyms can be very useful because they allow teachers and learners draw on words of equivalent meaning. They are also a core facilitator of monolingual learner dictionaries. For example, the word *pause* might be explained in terms of its synonym *stop*, and so on. However, as McCarthy et al (2008) point out, we usually only have 100 percent synonymy with words which are used in different varieties of a language:

British English	American English
<i>kerb</i>	<i>sidewalk</i>
<i>trailer</i>	<i>caravan</i>
<i>cell phone</i>	<i>mobile phone</i>
<i>biscuit</i>	<i>cookie</i>

Hence, to teach meaning using synonyms in an absolutist manner would lead to learner error. For example, if one were to teach that the meaning of *pause* was exactly the same as *stop*, then a learner might plausibly intuit that the following usage is correct: *The driver paused the car outside the bank*. While it is useful to explain that *pause* is similar

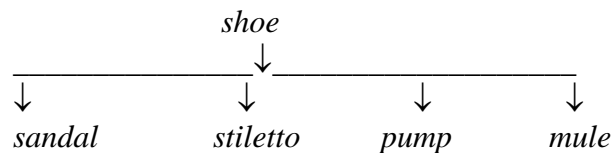
in meaning to *stop*, we obviously need to limit its context to use to stopping for a short period and explain that it usually refers to the temporary stopping of a sound or an activity.

An antonym is a word opposite in meaning, *wet – dry*, *bright – dark*, and so on. As is the case with synonymy, this sense relationship can be very useful in the teaching of meaning. For example, if we are explaining the meaning of *dark*, it is helpful to explain that it means the opposite of *bright*, and so on. Again, it can pose pedagogical challenges too because words do not always have just one antonym. Very often, antonyms differ in meaning because they are used in different contexts (we can say that they are *polysemic*). For example, the opposite to *rough*, could be a number of antonyms depending on the context:

The surface is very rough/smooth.
Kyle was a very rough/gentle child.
The sea is rough/calm.
It was a rough/accurate calculation.
He had a very rough/soft voice.

Pedagogically, this is very challenging when teaching meaning and it is easy to see how errors can be induced. The key point is to teach antonyms (and synonyms) in context. Over-generalisation of meaning equivalence can lead to errors.

Hyponymy is another semantic relationship which is very useful in teaching meaning. It helps us to organise words in terms of hierarchical categories, for example *water* is a hyponym of *liquid*. It equates to 'X is a type of Y'. Carter (1987) refers to *hyponymy* as a type of asymmetrical synonymy. The benefit of presenting meaning in this way is obvious since the category name is usually a high frequency core word that learners will already know and this will aid retention. Hence, we can use the relationship of hyponym very effectively to expand vocabulary very effectively, e.g. a *mansion* is a type of *house*, *sandal* is a type of *shoe*, *beret* is a type of *hat*. Hyponymy is also very applicable for learner vocabulary notebooks:



The other main organising principle of words that we need to be aware of when teaching vocabulary is that words go together in patterns. These patterns might be divided as follows:

Table 2 – A summary of how words are organised in to fixed and semi-fixed syntactic patterns.

Collocation	The way that words combine to form pairs which occur frequently together (McCarthy et al 2008), for example <i>release from prison/discharge from hospital/check out of hotel</i> all of the words <i>release</i> , <i>discharge</i> and <i>check out</i> share the semantic relationship of <i>leaving</i> but syntactically, they collocate differently in different contexts
Idioms (including phrasal, prepositional and phrasal prepositional verbs)	<i>see eye to eye, be over the moon, get up, give up, do without, cope with, look forward to, put up with</i> etc.
Formulaic language	<i>happy birthday; enjoy your meal, see you later, nice to meet you, etc.</i>
Lexical chunks or multi-word units (see Greaves and Warren 2010)	Short phrases, not longer than six words, which are fixed or semi-fixed such as <i>you see, a bit, as far as I know, you know what I mean, when I was young.</i>

Fixedness covers a broad gambit of areas but the key point to extrapolate for vocabulary instruction is that we need to move away from focussing on words as single items. They collocate with other items; they form parts of multi-word units and so on. This again explains why the core 2,000 words have over eighty percent coverage.

CONCLUSIONS

As Wilkens (1972: 111) notes without grammar very little can be conveyed, without vocabulary nothing can be conveyed. How we teach vocabulary is therefore central to the process of language teaching. A teacher's challenge is not only to provide the right stimulus and content to accelerate the learners' exposure to new language and new senses of words that they already know, but also to do so in ways that aid the retention of these items. Much more is needed in the way of classroom-based research, work such as carried out by Webb (2005, 2007). Equipping teachers with the know-how to conduct their own classroom studies is also something to be welcomed. Schmitt (2010) is a very timely resource in that respect.

KEY READINGS:

Carter R. A. and McCarthy, M. J. (1988) *Vocabulary and Language Teaching*. London: Longman.

McCarthy, M. J., O'Keeffe, A. and Walsh, S. (2008) *The Vocabulary Matrix: understanding, learning, teaching*. Hampshire: Heinle, Cengage Learning.

Nation, I.S.P. (1990) *Teaching and Learning Vocabulary*. New York: Newbury House.

- Nation, I.S.P. (2001) *Learning Vocabulary in another Language*. Cambridge: Cambridge University Press.
- Nation P. and Waring, R. (1997) Vocabulary size, text coverage and word lists. In Schmitt , N. and McCarthy, M. J. (eds.) *Vocabulary: Description, Acquisition and Pedagogy*. Cambridge: Cambridge University Press, 6-19.
- Schmitt, N. (2000) *Vocabulary in Language Teaching*. Cambridge: Cambridge University Press.
- Schmitt, N. (2010) *Researching Vocabulary: A Vocabulary Research Manual*. Basingstoke: Palgrave Macmillan
- Waring, R. and Takaki, M. (2003) At what rate do learners learn and retain new vocabulary from reading a graded reader? *Reading in a Foreign Language 15*: 130-163.
- Webb, S. (2005) Receptive and productive vocabulary learning: The effects of reading and writing on word knowledge. *Studies in Second Language Acquisition 27*: 33-52.
- Webb, S. (2007) The effects of repetition on vocabulary knowledge. *Applied Linguistics 28*, 1: 46-65.

REFERENCES

- Alderson, J.C. (2005). *Diagnosing Foreign Language Proficiency*. London: Continuum.
- Albrechtsen, D., Haastrup, K., and Henriksen, B. (2008). *Vocabulary and Writing in a First and Second Language: Process and Development*. Basingstoke: Palgrave Macmillan.
- Carter, R. A. (1987) *Vocabulary: Applied Linguistic Perspectives*. London: Routledge.
- Cobb, T. (1997) 'Is there any measurable learning from hands-on concordancing?' *System*, 25 (3): 301-315.
- Chomsky, N. (1955) *The Logical Structure of Linguistic Theory*. Cambridge, MA: The MIT Press.
- Krashen, S. D. (1989) 'We acquire vocabulary and spelling by reading: additional evidence for the input hypothesis.' *Modern Language Journal 73*, 440 – 464.

Krashen, S. D. (1981) *Principles and Practice in Second Language Acquisition*. London: Prentice-Hall International

Lantolf, J. P. (2000) *Sociocultural Theory and Second Language Learning*, Oxford: Oxford University Press.

Larsen-Freeman, D. (2000) *Techniques and principles in language teaching* (2nd Ed) Oxford: Oxford University Press.

Laufer, B. (1992). How much lexis is necessary for reading comprehension? In P.J.L. Arnaud and H. Béjoint (eds), *Vocabulary and Applied Linguistics*. London: Macmillan. pp. 126-132.

Laufer, B. and Goldstein, Z. (2004) Testing vocabulary knowledge: Size, strength, and computer adaptiveness. *Language Learning* 54, 3: 399-436.

Long, M. H. (1983) Native speaker/non-native speaker conversation and the negotiation of comprehensible input. *Applied Linguistics* 4(2): 126-41.

Long, M. H. (1996) The role of the linguistic environment in second language acquisition. In Ritchie, W. C., & Bahtia, T. K. (eds.), *Handbook of second language acquisition* New York: Academic Press.

Mezynski, K. (1983) 'Issues concerning the acquisition of knowledge: effects of vocabulary training on reading comprehension'. *Review of Educational Research*, 53: 253-279.

McCarthy, M. J., O'Keeffe, A. and Walsh, S. (2008) *The Vocabulary Matrix: understanding, learning, teaching*. Hampshire: Heinle, Cengage Learning.

Nation, I.S.P. (1990) *Teaching and Learning Vocabulary*. New York: Newbury House.

O'Keeffe, A., McCarthy, M.J. and Carter, R.A. (2007) *From Corpus to Classroom: language use and language teaching*. Cambridge: Cambridge University Press.

Schmitt, N. (1997) Vocabulary learning strategies. In Schmitt, N. and McCarthy, M. (eds.) *Vocabulary: Description, Acquisition, and Pedagogy*. Cambridge: Cambridge University Press.

Sripicharn, P. (2010) How can we prepare learners for using language corpora? In O'Keeffe, A. and McCarthy, M. J. (eds) *The Routledge Handbook of Corpus Linguistics*. London: Routledge, 371-384.

Skinner, B.F. (1953) *Science and Human Behaviour*. New York : Macmillan.

Saettler, Paul (1990) *The Evolution of American Educational. Technology*. Englewood, CO: Libraries Unlimited

Stahl, SA, & Fairbanks, MM (1986) The effects of vocabulary instruction: A model-based meta-analysis. *Journal of Educational Research*, 56, 72-110.

Vygotsky, L. S. (1978) *Mind in Society: the Development of Higher Psychological Processes*, Cambridge: Harvard University Press.

Wilkins, D.A. (1972) *Linguistics in Language Teaching*. London: Arnold.