

Charles University, Pedagogical Faculty
Department of English Language and Literature

VOCABULARY ACQUISITION AND MEMORY

A Course in Memory Strategies

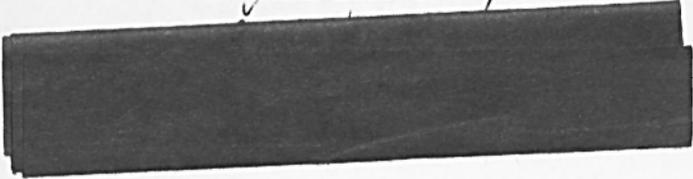
Author: Šárka Cetlová
Subject: English Language and Literature
Supervisor: Radmila Perclová, PhD
The date the thesis is handed in: 2.2.2007

Prohlášení o původnosti práce

Prohlašuji, že jsem předkládanou diplomovou práci vypracovala samostatně, a že jsem uvedla veškerou použitou literaturu v příložené bibliografii.

Praha 10.dubna 2007

Šárka Cetlová



Abstracts

This thesis deals with memory and its functions in foreign language vocabulary acquisition. In the theoretical part memory is explored from this perspective, but special attention is paid to practical implications of the theories and principles mentioned there. Some of these implications or recommendations were put into practice in the project described in the practical part. In this project a short course in memory strategies was prepared and carried out for a group of three adult pre-intermediate English learners. Its aim was to present a number of memory and note-taking strategies to the learners in order to enrich their studying habits and increase the effectiveness of both vocabulary learning and teaching.

Předkládaná diplomová práce se zabývá paměťovými funkcemi tak, jak se uplatňují při osvojování slovní zásoby ve výuce cizího jazyka. Z tohoto úhlu pohledu je paměť analyzována v teoretické části práce. Zvláštní pozornost je nicméně věnována praktickým důsledkům či doporučením, která lze z uvedených paměťových teorií a principů vyvodit pro vlastní výukové metody. Některá z těchto doporučení byla realizována v projektu popsáném v praktické části práce, jehož jádrem byl návrh krátkého kurzu paměťových strategií a jeho realizace ve skupině tří dospělých, mírně pokročilých studentů angličtiny. Cílem tohoto kurzu bylo nejen obohacení palety učebních strategií, ale i zvýšení efektivity učení a vyučování slovní zásoby cizího jazyka.

Key words : vocabulary learning, vocabulary teaching, memory, learning strategies, memory strategies, note-taking strategies

CONTENTS

1	INTRODUCTION	1
2	OBJECTIVES	2
3	THEORETICAL PART	3
3.1	GENERAL LEARNING CONCEPTS	3.1
3.2	VOCABULARY LEARNING AND RETENTION	3.2
3.2.1	Selection of vocabulary	3.2.1
3.2.2	Aspects of knowing a word	3.2.2
3.2.3	Choosing strategies	3.2.3
3.2.4	Fluency hypothesis	3.2.4
3.2.5	The process of establishing word knowledge	3.2.5
3.3	MEMORY AND VOCABULARY LEARNING	3.3
3.3.1	Memory systems	3.3.1
3.3.2	Classification of memory	3.3.2
3.3.3	Memory models	3.3.3
3.3.4	Retrieval	3.3.4
3.3.5	Memory deficit	3.3.5
3.3.6	Personal differences	3.3.6
3.4	CONCLUSION	3.4
4	PRACTICAL PART	4
4.1	CONTEXT OF THE STUDY	4.1
4.1.1	Time and where	4.1.1
4.1.2	The teacher	4.1.2
4.2	DESIGN OF THE COURSE	4.2
4.3	METHODS	4.3
4.3.1	Interview	4.3.1
4.3.2	Word list analysis	4.3.2
4.3.3	Test	4.3.3
4.3.4	Memory strategies	4.3.4
4.3.5	Organisation and note taking methods	4.3.5
4.4	RESULTS	4.4
4.4.1	Interview	4.4.1
4.4.2	Word list analysis	4.4.2
4.4.3	Test	4.4.3
4.4.4	Memory strategies	4.4.4
4.4.5	Organisation and note taking methods	4.4.5
5	CONCLUSIONS	5
6	DISCUSSION - QUESTIONS	6

Acknowledgements

I would like to thank Ms Radmila Perclova, PhD for her counselling advice and my students for participating in the project presented in the practical part of the thesis. Without them, this thesis would not exist.

CONTENTS

1	INTRODUCTION	3
2	OBJECTIVES	4
3	THEORETICAL PART	5
3.1	GENERAL LEARNING THEORIES	5
3.2	VOCABULARY LEARNING AND TEACHING	5
3.2.1	Selection of vocabulary.....	5
3.2.2	Aspects of knowing a word.....	5
3.2.3	Choosing strategies	6
3.2.4	Planning repetition	6
3.2.5	The process of establishing word knowledge	6
3.3	MEMORY AND VOCABULARY LEARNING.....	7
3.3.1	Memory theories	8
3.3.2	Classification of memory	8
3.3.3	Memory models	8
3.3.4	Retrieval	17
3.3.5	Mnemonic devices	21
3.3.6	Personal differences	25
3.4	CONCLUSION.....	27
4	PRACTICAL PART	29
4.1	CONTEXT OF THE STUDY.....	29
4.1.1	Time and setting.....	29
4.1.2	The learners.....	29
4.2	DESIGN OF THE COURSE	30
4.3	METHODS	30
4.3.1	Interview	31
4.3.2	Word lists analysis	31
4.3.3	Tests	31
4.3.4	Memory strategies.....	31
4.3.5	Organisation and note-taking strategies.....	32
4.4	RESULTS	32
4.4.1	Interview	32
4.4.2	Wordlist analysis.....	33
4.4.3	Tests	34
4.4.4	Memory strategies.....	36
4.4.5	Organisation and note taking strategies	39
5	CONCLUSIONS.....	42
6	IMPLICATIONS – QUESTIONS	47

LIST OF TABLES

Table 1: Spaced repetition	13
Table 2: Recommendations for learners	27
Table 3: Recommendations for teachers	28
Table 4: The learners' characteristics	29
Table 5: List of methods used in the project	30
Table 6: Problematic items	35
Table 7: Analysis of the interview (7a) and the wordlists analysis (7b)	43
Table 8: Initial test results	44
Table 9: Final tests results	45
Table 10: Final wordlist analysis	46

1 INTRODUCTION

This work deals with memory as it applies to second language vocabulary learning. The ability to understand spoken and written language and to produce it in speaking and writing depends on the ability to recognise and retrieve information stored in memory. Memory is in fact one of the most important factors in vocabulary learning. It is its most important determinant, actually setting the limits of how much and how well a person can learn.

This thesis is based on the assumption that memory is not only an inborn quality but also a talent which can be, at least partly, improved. Attention, repetition, elaboration, retrieval cues, organisation and consolidation are the keys to the effective use of memory. There are many English learners who complain about poor memory, but many experts, e.g. Sternberg (2002), explain that it is not the memory as such but the learners' using it that causes most of their problems. It is their inability to apply appropriate study strategies to the information they would like to remember. Sternberg (2002) continues to claim that there is a very wide range of strategies and learners use them with varied success and skills. Or worse, they do not use them at all because they have never learnt to do so. Yet, there are many ways which can enhance learning and learners need to be made aware of them, how to use them well, and how to choose between them.

Another assumption which this thesis is built on is the beneficial effect of explicit vocabulary learning and teaching (Sternberg 2002, Nation 2001). Sternberg distinguishes two types of learning: incidental and intentional. In incidental learning remembering does not happen on purpose. Information is remembered because it is accompanied by emotion and interest on the learners' side. On the other hand, in intentional learning (typically school learning) remembering is preceded by motivation and setting goals and it is enabled by appropriate, conscious activities.

Coady and Huckin (1997) proved that most vocabulary knowledge comes from meaningful language encounters, or contexts, i.e. it happens incidentally. But other research carried out by Paribakht, Wesche and Zimmerman (in Coady and Huckin 1997) showed that if systematic vocabulary instruction (i.e. intentional learning) is added, it makes a more successful approach than simply learning through context alone. Nation (2001) concludes that intentional or direct learning 'can help incidental learning by raising consciousness of particular words and providing knowledge that can be enriched and strengthened through incidental meaning-focused learning' (Nation, 2001:316).

One part of such systematic vocabulary instruction might be a course in appropriate memory skills, which is the subject of this thesis.

2 OBJECTIVES

The objective of this thesis is to design a course in memory strategies for learners of English with an emphasis put on vocabulary learning. The theoretical part presents information of those memory functions which are relevant to vocabulary learning and implications for the classroom practice. It can be seen as a synthesis of psychological and pedagogical approaches to memory. Its main purpose is to gain a better insight into the workings of memory in vocabulary learning and teaching and to be able to design, carry out and justify presenting and practising memory enhancing techniques in class.

The practical part brings the description and results of a course in memory strategies held for a group of three adult learners of English. The course was designed to try and find the answers to the four questions below. Nevertheless, due to the limited time span of this project and the small number of participants, the results of this project are not to be generalised. They should be understood as a practical example of what is possible to study in this area, how memory strategies can be dealt with in class and what reactions to them may occur. It is necessary to stress that the course was designed for a particular group of learners and so were the questions.

- QUESTION 1 Do the learners use effective vocabulary learning strategies based on basic memory principles?
- QUESTION 2 Is it true that the more memory enhancing strategies a learner uses, the more successful he/she is in vocabulary learning?
- QUESTION 3 Will the learners enjoy a brief course in memory enhancing strategies?
- QUESTION 4 Will a course of memory enhancing strategies help the learners to become more successful in vocabulary learning?

3 THEORETICAL PART

3.1 GENERAL LEARNING THEORIES

The study of learning has been in the centre of psychology since its beginning in the 19th century. Out of all theoretical debates two main groups of theories arose:

- association learning (behaviourism)
- cognitive learning (gestalt psychology)

Behaviourism traditionally took interest only in observable behaviour (including language), which was seen as learned responses. (Behaviourist language teaching techniques were based on drills and memorisations with no or little free practice.)

On the other side, **cognitive theories** (the main representatives are M. Wertheimer, W. Kohler, and J. Bruner) view learning as a reorganisation of a number of perceptions.

Cognitivism explains learning by how people think. It describes all cognitive processes and functions: perception, judgement, thinking and last but not least, memory. (Sprinthal, Sprinthal, 1990)

3.2 VOCABULARY LEARNING AND TEACHING

To ensure effective vocabulary learning these steps must be taken:

3.2.1 Selection of vocabulary

Most contemporary textbooks, apart from their grammatical structure, are also carefully structured lexically. The choice of vocabulary follows the frequency, practicality, productivity and topic principles, and the needs of the target group of learners. Textbook vocabulary is then organised usually by topics in a cyclic manner which allows repetition and deepening of the knowledge.

Nevertheless, a significant proportion of vocabulary is chosen by the teacher and especially the learners themselves with regard to their age, abilities, level, interests, needs and goals.

3.2.2 Aspects of knowing a word

The most important aspects are typically meaning, spelling and pronunciation (sufficient for receptive knowledge), but according to Nation (2001) also other aspects must be learned for speaking and writing activities:

- **form** (pronunciation, spelling, word parts)
- **meaning** (concept, reference, associations, form-meaning connections, connotations, denotations)

- **use** (grammar, collocates, constraints of use, appropriateness)

Unfortunately, most learners do not pay attention to more than two aspects of knowing a word (meaning and spelling are the two most valued aspects). In her research Suchánková (2004) found out that the use of collocations and word parts tended to be neglected. Yet, all aspects of knowing a word learned should be gradually learned. (For a list of activities to practise different aspects of knowing a word see Appendix 25).

3.2.3 Choosing strategies

Both for learning and teaching it is useful to have a wide range of strategies to be able to choose from them. Suchánková (2004) maintains that when students revise vocabulary at home they only use one or two ways of doing so (namely reading aloud and writing target items). Only few students use elaborative rehearsal (more in 3.3.3.1.3) and deeper levels of processing new vocabulary (more in 3.3.3.4).

Several solutions are available for students who are not effective enough in using strategies: they can be taught that in class by the teacher modelling and demonstrating strategies for the class, teachers may also indicate directly how they expect the learners to study, or they may assign learners with good learning strategies as peer leaders of group study sessions. (Sternberg, 2002)

Teachers can greatly help their students develop metamemory skills by showing them a wide range of strategies so that they can decide which works best for them.

3.2.4 Planning repetition

According to Hill (2004), systematic repetition is the key to successful vocabulary learning. Suchánková (2004) found out that some students feel two or three encounters with a new item are sufficient for them to remember it but in fact the numbers are much higher (typically 5-7 encounters but for some students it may be as many as twenty). (See more in 3.3.3.4). Moreover, Suchánková adds that few students revise older vocabulary regularly and systematically. Most students only revise for tests.

3.2.5 The process of establishing word knowledge

Nation (2001) distinguishes three major categories of processes to establish word knowledge. They can be used across all aspects of knowing a word.

3.2.5.1 Noticing

Noticing is the initial stage. It is the least effective process of these three. It involves seeing or hearing the word, looking it up in a dictionary, having it explained, etc. Usually, the meaning

and form of the item are presented (the new item is semantised). Such semantisation of a new vocabulary unit can be done through translation (fast but sometimes viewed as undesirable as it encourages using L1 in class, and shows the item without knowledge of its behaviour in sentence) or without translation. According to Nation (2001) non-translation methods can be further divided into verbal and non verbal. Non-verbal make use of visual and other sensory aids (performing actions, showing objects, pictures and diagrams). Verbal methods include explanation (time consuming but useful as listening exercise which revises previously acquired words), breaking word into parts, definition (by exemplification, by function, taxonomic definition, grammatical definition), by giving synonyms and antonyms, guessing from context. Nation (2001) recommends using both verbal and non-verbal methods to aid memory and make lessons more varied.

3.2.5.2 Retrieving

According to Sprinthal and Sprinthal (1990), retrieving involves recall of previously met items, e.g. perceiving the form and having to recall its meaning. Each retrieval makes the connection between the cue and the word stronger. Retrievals are either receptive or productive. As retrieving is a matter of great importance in vocabulary learning and memory processes it will be further discussed in sections 3.3.3 and 3.3.4.

3.2.5.3 Generation

Generation is the most effective stage. It can also be receptive and productive. Nation (2001) defines it as attaching new aspects to what we already know about a vocabulary item (e.g. using it in a figurative way, as a different part of speech, etc.).

3.3 MEMORY AND VOCABULARY LEARNING

In short, memory could be described as the ability of live organisms to remember, store and retrieve information (Wikipedia, 2007). Not only due to modern information technologies is memory sometimes viewed as a place in the brain where we store information. It is even compared to libraries, hard discs, etc. But memory is not a passive storage room. It is more likely an umbrella term for several particular functions of the organism which take part in almost all mental processes (Benesch, 2001).

Many areas of science have looked into the structure and mechanisms of memory: from the psychological, physiological and chemical points of view and a number of memory theories have been created.

3.3.1 Memory theories

In psychology, Benesch (2001) distinguishes three main groups of memory theories :

Filter theories – there is so much information input that the only way memory can handle this is selecting those pieces worth storing which are then processed further. The main interest of these theories is the criteria of the selection.

- **Association theories** – these theories state that similarity, contrast, spatial or temporal relation and coherence increase the likelihood something will be remembered.
- **Multi-storage theories** – the concept of 'more memories' is the most frequently used concept today. All information has to pass through certain levels of memory where the information is processed. These levels differ in the means of their capacity, structure and organisation of information and function.

3.3.2 Classification of memory

Memory itself has been classified by various criteria (below see listed classifications relevant to this thesis only):

By duration (e.g. Sternberg 2002 and Hill, 2004)

- sensory register
- short-term memory (STM)
- long-term memory (LTM)
- working memory (WM)

By information type (e.g. Sternberg 2002)

- explicit / declarative (semantic and verbal)
- implicit / procedural
- conditional

3.3.3 Memory models

A number of models have been created to explain what happens when information enters memory and how it is remembered. Possibly the most important models are:

- The standard model
- The connectionist model
- The working memory model
- The levels-of-processing model

Most of the models agree that all information which is to be remembered undergoes three operations: encoding, storage and retrieval. Sternberg (2002) explains these terms as follows. **Encoding** refers to how you transform a sensory input into some kind of representation that you can place into memory. **Storage** refers to how you retain encoded information in memory. **Retrieval**, as was said before in 3.2.5.2, refers to how you gain access to information stored in memory. He also stresses that although these three operations tend to be seen as successive they often interact. More importantly they should do so. Retrieval is usually more successful when practised during the encoding stage already. For vocabulary learning and the classroom practice this implies that students should test themselves (or be tested by the teacher) as soon as they try to learn something. Testing of information that has to be remembered is more effective than simply studying the material without testing. (Wikipedia, 2007)

3.3.3.1 The standard model

Possibly the best known memory model is the standard model. This model classifies different kinds of memory by the length of time for which the information is held in them. These kinds are sensory register, short-term memory (STM) and long-term memory (LTM). Nevertheless, as will be shown later, duration is not the only feature in which they differ.

3.3.3.1.1 SENSORY REGISTER

Sternberg defines (2002) the sensory register as the first stage in the process of encoding information. It can hold about nine items of information, after they are sensed, for very short time – up to one second. These sensations can be of visual, auditory, kinaesthetic or tactile nature.

3.3.3.1.2 SHORT-TERM MEMORY

Everything that is sensed enters the register but only a very small amount of information continues its journey to STM. Sternberg (2002) emphasises that if information is to be transferred to STM a certain amount of **attention** is vital. It is often the lack of attention paid to encoding which is to blame for later retrieval failures. In terms of establishing knowledge of a vocabulary item, it is noticing which takes place here.

Gaining the learners' attention is crucial from the very beginning of the vocabulary learning process. Some possible ways of doing so are using attractive visual aids, repeating and emphasising the target vocabulary items, activating students by asking questions, creating information gaps, etc.

The **capacity** of STM is rather limited. It stores information which is being used at the moment. Most sources (Brennan, 2000; Hill, 2004) agree that the number of items which can be stored in short-term memory is 7 ± 2 . There are several important implications of this fact for language teachers. Most importantly, when giving a presentation of new items it is recommended to apply the well known saying that fewer means better.

The capacity of STM can be expanded by a technique called **chunking**, or grouping items of information, learning expressions or whole sentences as single vocabulary units. This technique is frequently used with phrases, idioms and sentences containing grammar beyond the learners' current knowledge. If the number of the words in one sentence is up to 5-7 the number of remembered sentences will be the same as if they were single words (Brennan, 2000). Actually, with native speakers and advanced learners fluency is achieved by combining chunks of speech, thus simplifying processing. However, breaking speech into the correct, helpful chunks is essential. Then their storage and retrieval will be aided. In the lexical approach to vocabulary learning, the idea of chunking, its presentation to learners and providing them with materials facilitating chunking is one of the central activities. (Lewis, 1996)

As regards duration, STM is only capable of holding information for a short time: from a few seconds up to two minutes. Information will disappear rapidly from STM unless it is rehearsed it, i.e. the item is repeated. (Sternberg, 2002) Nevertheless, for rehearsal to succeed, more than just mindless repeating of words is usually needed. An active effort has to be made to pass the information on in LTM.

3.3.3.1.3 LONG-TERM MEMORY

Long term memory is generally considered to be the 'real memory'. It is this memory which people judge when they speak about their good or bad memory. That is why it deserves special attention and more space. This section has been further divided into subsections, most of which, namely 'Rehearsal', 'Total-time hypothesis', 'Sleeper effect', 'Reactivation programs' and 'Forgetting curve', are devoted to the practical aspects of the workings of LTM and their implications for learning and teaching. The last subsection, 'Classification of LTM by information type', defines the declarative, procedural and conditional types of LTM and brings information about the dual-coding principle, which also plays a major role in classroom practice.

REHEARSAL

As regards capacity, Sternberg (2002) maintains, LTM can probably hold unlimited amounts of information for extremely long periods of time, perhaps even forever. However, information can only stay in LTM on condition that it is well encoded. Information is typically learned either by elaborative or maintenance rehearsal. In **elaborative rehearsal** learners take a piece of information and try to associate it with other things they know. In **maintenance rehearsal**, also known as rote learning, learners simply mechanically repeat the items to be learned. Opinions on the effectiveness of rote learning differ. On the one hand, rote learning is considered unnecessary and even harmful, because information acquired in this way is 'inert' – lacking information about the behaviour of the word in a sentence and thus impossible for the students to make full use of it. Sternberg (2002) even argues that maintenance rehearsal only helps retain information in STM without passing it on to LTM, as it is impossible to organise and transfer information any further without elaboration. Last but not least, it is common knowledge that rote learning tends to be rather boring. On the other hand, there are claims (e.g. on Wikipedia 2007) that what is learned through memorisation is less likely to be forgotten and that especially for vocabulary learning it is the most efficient way. It is even believed that some material can only be learned in this fashion, namely vocabulary of a foreign language. Sternberg (2002) presents a third view suggesting combination of the previous two: teachers can combine the techniques of rote memorisation, such as repetition and drilling, with more meaningful learning methods, in order to give their students the advantage of both methods. For example, teachers can practise vocabulary with their students by drilling the items with flash cards, but each time a student sees a word on the flash card he/she might try to make up a sentence using the item.

Importantly, students should want and try to elaborate in the first place. Studies carried out by Suchánková (2004) proved that elaborative rehearsal is less frequently used by students when they study outside the classroom so it may be useful to practise it with them in class. Students can for instance categorise new vocabulary items, define them, and use them in sentences (preferably making use of the self-reference effect).

TOTAL-TIME HYPOTHESIS

There are other principles concerning LTM which are to be followed in order to achieve successful and effective learning. Firstly, Sternberg (2002) presents the total-time hypothesis, which says that how much and how long you remember depends on how much time you spend learning the subject matter. In the perspective of one lesson or study session it does not

affect the result if you study each word once only but for a longer period of time or if you study each word for half that time but repeat the procedure twice. However, across a bigger number of lessons or study sessions the distribution becomes vital. Sternberg (2002) distinguishes between **distributed learning** (i.e. learning spaced over several learning sessions) and **massed learning** (i.e. learning that occurs all at one time).

From the long-term point of view it is no use trying to remember huge amounts of information within a short time. It is ineffective and without repetition it will not be stored long. It is more useful to teach vocabulary in separated sessions (e.g. briefly at the beginning of a lesson, reviewed later in the same lesson and again in the next) than all at once. Ur (1996) stresses out that such approach requires careful lesson-planning, but is worth the effort.

SLEEPER EFFECT

Another research finding which supports distributed learning is the 'sleeper effect' (Benesch, 2001; Sternberg, 2002). They argue that all learned information needs some time to 'settle down'. Cramming the night before an exam does not allow learners to make full use of all learned information. Sternberg concludes that it is sleep full of long periods of REM phases which helps consolidate memory.

Brennan (2000) also argues that dividing the total study time into smaller parts does not only ensure longer-term effects but also helps create confident and positive expectations of one's own performance. Smaller amounts are easier to master and learners can thus more frequently experience success after each portion. Brennan also points out that after a certain time of studying a biologically induced period of inhibition arrives. To avoid negative feelings students should not view these periods as failures but accept them as necessary and temporary states and signals for taking a break (Brennan, 2000).

Distribution over time also allows more thorough revision of information from previous study sessions, which is crucial for the information to stay available and accessible in LTM. In other words distributed learning ensures better consolidation and repetition of what was learned.

However, as regards repetitions, the intervals between individual study sessions must not be too long, because a repetition can only be effective if the learner perceives it as a repetition (Nation, 2001). That is why several repetition schemes or reactivation programs have been developed.

REACTIVATION PROGRAMS

Reactivation programs suggest the optimal distribution of repetitions over certain periods of time. As was said above, **spaced repetition** of information helps to retain information in memory and it also enables better integration of the information into the already existing system of knowledge (Schmitt, McCarthy 1997). The table below shows two possible patterns of distribution suggested by Russel and Pimsleur:

REPETITION	1	2	3	4	5	6	7	8	9	10	11
<i>after the end of a study session</i> (Russel in Schmitt, McCarthy, 1997: 216)	10 <i>min</i>	24 <i>hours</i>	1 <i>week</i>	1 <i>month</i>	6 <i>months</i>	<i>only if necessary</i>					
<i>after the first encounter with the word</i> (Pimsleur in Nation 2001: 78)	5 <i>sec</i>	25 <i>sec</i>	2 <i>min</i>	10 <i>min</i>	1 <i>hour</i>	5 <i>hours</i>	1 <i>day</i>	5 <i>days</i>	25 <i>days</i>	4 <i>months</i>	2 <i>years</i>

Table 1: Spaced repetition

As can be seen in the table, the intervals between repetitions grow steeply. It is because not only these two but all repetition models are based on the fact that each repetition increases the optimum interval before the next repetition (Wikipedia, 2007). Nation (2001) presented a general principle saying that the older a piece of learning is the slower the learner forgets it. This principle is based on Ebbinghaus's forgetting curve.

FORGETTING CURVE

Ebbinghaus (in Wikipedia, 2007) introduced the forgetting curve, which illustrates the process of forgetting in time. It shows that people lose 50% of new information shortly after learning it (within days or weeks) unless they consciously review the learned material. The speed of forgetting depends on a number of factors (difficulty of the material, its mental representation (cf. dual-coding below), stress, sleep, etc.) but the basal forgetting curve does not differ much between individuals. Nation (2001) concludes that most forgetting occurs immediately after the initial learning and then slows down, which proves that repetition of new items should occur very soon after they are first studied. After this repetitions can be spaced further apart.

CLASSIFICATION OF LTM BY INFORMATION TYPE

Long-term memory is further divided (e.g. by Sternberg, 2002; Hill, 2004) into the following types:

- declarative or explicit memory
- procedural or implicit memory
- conditional memory

DECLARATIVE MEMORY

Declarative memory, which is based on conscious recall, can be further divided into semantic and episodic. **Semantic memory** includes abstract facts, rules, words and symbols independent of context. It holds our general knowledge which can be compared to an encyclopaedia. **Episodic memory** includes information which is dependent on context. It holds knowledge of personal experiences, sensations and associations for various contexts (referring both to the past and future). It is closely connected to time and place.

Sternberg (2002) highlights that students learn facts, words, symbols, etc. in the context of their everyday experiences; that is, they encode their semantic knowledge along with episodic knowledge. As a result, if a lesson is interesting and enters the episodic memory the semantic knowledge included in the lesson is more likely to be remembered and recalled. Sternberg suggests several ways of involving episodic memory into lessons: e.g. project work, role play activities, emotionally arousing and humorous events.

Emotionally arousing events are more likely to be remembered than emotionally neutral events, because arousal leads to narrowing of attention, which is vital for deeper processing of information. Analogically, humorous items are more easily remembered than non-humorous ones because of the emotional arousal caused by humour.

Another important notion connected to semantic memory is the **dual-coding** or dual-tracing presented by Sprinthal and Sprinthal (1990). Information in LTM is stored in two ways: as visual images (resembling the original stimuli) and verbal representations (based on arbitrary symbols). According to the dual-code principle, students are more likely to remember information if it is presented to them both linguistically and visually, e.g. both as words and pictures. To encourage the development of both analogical and semantic representations Sternberg (2002) recommends visually demonstrating topics on the whiteboard, OHP or data projector, using posters, timelines and movies and encouraging students to create their own mental pictures and meanings. He suggests that what makes visual aids so effective is probably the fact that a picture is immediately and spontaneously given a name, whereas a word is not automatically visualised. As stated by Coady and Huckin (1997), this also provides one possible explanation of why concrete words are easier to remember than abstract words, as abstract words can be associated with the verbal system only. Generally, learning

abstract things is aided when the material is made concrete for the learners. In classroom practice and vocabulary learning, this may mean relating abstract items to current events, providing experiences with the items, or having students relate the items to their own lives (Schmitt, McCarthy, 1997).

PROCEDURAL AND CONDITIONAL MEMORY

According to Sternberg (2002) and Hill (2004) **procedural memory**, which is based on unconscious recall, holds little importance for vocabulary learning, as it's primarily employed in learning motor skills. On the other hand, **conditional memory** comprises knowledge and control of one's memory. It holds information of how to apply appropriate learning strategies in various situations (cf. 3.2.3 Choosing strategies). Therefore, he concludes, conditional memory is extremely important for successful learning, not only at school.

3.3.3.2 Connectionist model

As explained in Sternberg (2002), a large number of models agree that information is stored in a network of interconnected slots. In connectionist model it is not the information itself but connections between the slots which are the most important, where knowledge can be found. In other words, without connections there would be no knowledge.

When one slot is activated by a stimulus the activation spreads to all connected slots. Such connections are based on topic, spatial or temporal similarities. Activating connected slots related to a topic to be studied is called **priming** (Benesch, 1997). Priming is very important as it can set the stage for introducing new information and facilitate learning.

Based on this theory, Sternberg (2002) lists several objectives of vocabulary activities:

- creating new connections (or associations)
- activating existing connections
- strengthening connections through reviews of information and concepts

Those activities which increase the richness of associations can be of two types: those establishing syntagmatic relationships (collocation activities, semantic mapping, and dictation) and paradigmatic relationship (giving synonyms, antonyms, meronyms/hyponyms, and co-ordination partners). For the complete list of these activities see Appendix 25.

As regards the activities establishing paradigmatic relationships, there are certain drawbacks to them. Coady and Huckin (1997) warn that learning near synonyms, opposites or free associates together is more difficult than learning unrelated items, as it causes confusion. This principle runs counter to the principle presented in the connectionist model and the principle

of using semantic networks in vocabulary learning and teaching. To overcome this contradiction, Nunan (1991) suggest that teachers experiment, in an informed way, with various techniques and the activities mentioned above, to find out what works best in their teaching practice.

3.3.3.3 Working-memory model

In the standard model the different types of storage (sensory register, STM and LTM) are viewed as rather passive, distinctive parts and the term working memory is used synonymously with STM. Sternberg explains that unlike the standard model, the working-memory model presents working memory as an active part of the storage. Moreover, according to this model, STM is not entirely separated from LTM. STM is a part of working memory which also comprises the currently activated information in LTM. The main purpose of the working memory is to retain useful pieces of information as long as a task is being carried out. Such information, Sternberg (2002) explains, can be either new, coming from the sensory register, or it can be recalled from LTM. WM is seen as a temporary storage which enables carrying out several tasks at a time. It holds the most recently activated portion of LTM and it moves these activated elements into and out of brief, temporary memory storage (Sternberg, 2002). WM carries out such tasks as integrating acoustic and visual information, organising information into meaningful chunks and above all linking new information to existing forms of knowledge in LTM, which is also all the time available for reformatting and adjustments as new information enters the system.

The concept of WM, according to Sternberg (2002), reinforces the implication for teachers that priming (cf. 3.3.3.2) or activating the students' knowledge prior to introducing new items helps them integrate the new information into their LTM.

3.3.3.4 Levels-of-processing model

Sternberg (2002) mentions one more memory model, i.e. the levels-of-processing model, according to which there is only one store in which items can be encoded at an infinite number of **levels of processing**. This model states that different methods of encoding information into memory have different levels of effectiveness. The level at which information is stored depends on how it is encoded. The deeper the level, the higher is the probability that the item will be retrieved. Sternberg (2002) distinguishes three main levels of encoding a new vocabulary item: **physical, acoustic** and **semantic**. Information processed into the brain on the semantic, i.e. the deepest level, provides the best way to remember the item.

There are various ways of helping learners with deep processing: e.g. asking them to supply synonyms or having them categorise new items in meaningful ways.

Interestingly, mere sorting out new items into categories is as effective as actually learning them by repetition. Categorising vocabulary items helps students concentrate on the meanings, thus making the items more meaningful, which is, as Sternberg (2002) asserts, the best way to help students learn.

SELF-REFERENCE EFFECT

Sternberg (2002) mentions another possible way of processing vocabulary items on the deepest level is making use of the self-reference effect, i.e. having learners decide whether and how a new item is related to them personally. He asserts that memories which are considered self-relevant are better recalled than other, similar information. Even words that people decide are not very descriptive of themselves are better remembered, merely because the person had considered whether the words were descriptive of themselves or not. Moreover, everybody has a very well-developed self-scheme. That is why it is relatively easy for learners to elaborate information related to themselves. Sternberg suggests that in class teachers can ask their students to make sentences about themselves using the vocabulary items to be learned.

3.3.4 Retrieval

Generally, retrieval is the utilisation of stored information. Nation (2001:221) distinguishes two types of retrieval, receptive and productive. 'Receptively, the stimulus which triggers retrieval may be the written or spoken form of the word and the retrieved information may be its meaning or use. Productively, the stimulus is the meaning or the use and the retrieved information is the word form'. (Nation, 2001:221) He also stresses that each retrieval significantly strengthens the connection between the stimulus and the retrieved information. Therefore it is recommended that teachers tolerate and allow for delays when learners try to retrieve a vocabulary item because the retrievals are greatly contributing to learning.

Apart from the classification into productive retrieval (or recall) and receptive retrieval (or recognition), Nation (2001) distinguishes also visual/oral retrieval, overt/covert retrieval and decontextualised retrieval/retrieval in context. Retrieval occurs across all four skills: reading, writing, speaking and listening, when only either the form or the meaning of the word are presented to the learner who has to retrieve the other. Nation (2001) highlights that it is important for learners to realise that there is a difference between (1) studying words in list and notebooks where the form, meaning and use of the word are presented together and (2)

retrieving previously met information where only a cue (either the form or the meaning) is present and its counterpart has to be recalled by the learner.

Generally, proceeding from easier tasks to more difficult ones is generally as optimal and more effective. In vocabulary learning it means starting with the receptive retrieval (recognition) and going on to the productive retrieval (recall).

3.3.4.1 Recognition (receptive retrieval)

As was stated above Nation (2001) defines receptive retrieval or recognition as perceiving the form and having to retrieve its meaning when a word is met in listening or reading. It is analogical to receptive knowledge essential for reading and listening skills: students are to identify words they have learned previously. They are exposed to the word once again. Recognition exercises often take the form of multiple-choice exercises, matching the target word and its synonym or definition, picture labelling with a choice of words provided or translating words from L2 into L1. (For the complete list of activities see Appendix 25.)

3.3.4.2 Recall (productive retrieval)

As opposed to recognition, productive retrieval (in vocabulary learning namely pair-associates retrieval) involves having to retrieve the spoken or written form of a word (Nation, 2001). In recall tasks students are asked to produce information from their memory without being exposed to the same or similar information. This may have the form of producing a single word, expression, phrase or a sentence in a gapped text exercise, writing tasks, open cloze exercises, labelling pictures, answering questions requiring the target word, translation from L1 to L2 or providing synonyms of L2 words. (For the complete list of activities see Appendix 25.) As regards the four basic skills recall plays a major role in speaking and writing. The number of words to be learned for productive knowledge is rather limited in comparison with receptive knowledge because the knowledge of these words should reach a certain level of automatization.

3.3.4.3 Retrieval cues

For classroom practice the most important information concerning retrieval is the possibility of making it easier. Teachers and learners should know what makes retrieval easier and how to practise it.

Sternberg (2002) and Hill (2004) differentiate between **available** and **accessible** information. Availability refers to whether information is actually stored in LTM. Accessibility refers to how easily stored information can be retrieved. Difficulties in free-recall tasks are sometimes

not due to availability but accessibility difficulties. A typical example of accessibility problem is having a word 'on the tip of the tongue'. And retrieval cues are a good way to help retrieve inaccessible information. These retrieval cues, as will be shown below, may take the form of advance organisers or contextual cues.

ADVANCE ORGNIZERS

Paribakht and Wesche (in Coady, Huckin, 1997) maintain that teachers can enhance students' learning if they provide an advance organiser, i.e. a way to organise information in advance. They can, for instance, present categories classifying the items to be learned, they can use boldfacing, italicising, circling, underlining, colouring and other visual marking of target vocabulary items in texts or they can provide the learners with lists of target items given to the learners prior to reading. Successively, these items can be underlined in the text. (For the complete list of activities see Appendix 26.)

Hill (2004) explains that organisation greatly helps remembering as it offers meaningful connections of items. He states that recall is higher if items are arranged into meaningful hierarchies. Chunking of information (cf. 3.3.3.1.2) helps enlarge the capacity of memory.

CONTEXT

According to many experts (e.g. Sternberg 2002; Hill, 2004), what is recalled and how also depends on the context in which it was encoded. He distinguishes two types of context: **outer** (current physical condition, learning environment) and **inner** (cues, hints, directly connected with learned material).

Firstly, retrieval is better when the environment (outer context) is the same as at the time of encoding (the learning environment itself serves as a cue). As regards school learning, Sternberg asserts that recall time and accuracy for a school related memory are lower at home and vice versa.

Furthermore, Sternberg (2002) states that even people's moods (outer context) can provide retrieval cues for later recall. He explains that being or just thinking of the mood the learner had at the time of encoding helps retrieve information from their memory. Especially positive emotions help encode, retain and retrieve information. Exciting moments are recalled more easily than neutral ones. Moreover, they tend to be recalled spontaneously (cf. declarative memory in 3.3.3.1.3).

Another type of retrieval cue is visual aids (inner context). Teachers can use posters, maps and other visual aids as retrieval cues by using them at the time of presentation and not removing them completely at the time of practising and testing. Sternberg (2002) suggests

covering some parts or turning the poster around to help students retrieve information. He asserts that the mere presence of the aid provides enough context to facilitate retrieval.

Nevertheless, for all the cues mentioned above there is one principal rule, emphasised by Brennan (2000): the most effective cue is prepared and realised already at the time of encoding. Therefore, it is optimal to prepare cues already before the presentation of new items. Analogically, if students are told what a test will look like they will be able to prepare suitable retrieval cues and achieve more success.

If learners feel an item is available but still cannot retrieve it (the tip-of-the-tongue phenomenon – see more in Benesch, 1997) they can try using other types of inner context, e.g.:

- visual search for the word - imagining where exactly in their notebook or textbook the item appeared
- categorical search - imagining related words within the same topic
- alphabetical search - trying to find the first letter of the word

morphological search – trying to recall the number of syllables of the item, the stem, affixes, etc.

As can be seen, there are really many types of context to make use of in the language classroom. Yet there is one type, as Benesch (2001) underlines, which does not help at all, and that is **stress**. Excessive levels of stress are harmful and inhibit both encoding and retrieval of information. That is why excessive stress should be avoided in lessons at all times, both when presenting and practising words and testing knowledge.

3.3.4.4 Forgetting - retrieval failure

Sternberg (2002) defines forgetting as being unable to recognise or recall an item from memory. Forgetting is a process which protects memory from being overfilled with useless, impractical information. Unfortunately, people also forget information which they need or wish to retain.

Analogically with memory theories, there are many theories to explain forgetting too. Three most common theories listed in Sternberg (2002) are as follows:

- decay theory
- interference theory
- consolidation theory.

According to the **decay theory**, information is forgotten because unused memory traces gradually disappear. Consequently, learners who wish to retain information in their memory should revise it repeatedly. (See 3.3.3.1.3)

Interference theory asserts that we forget because of competing information. Such information makes the information we want to remember inaccessible or unavailable. Two types of interference are distinguished (e.g. in Sternberg 2002; Hill, 2004): **retroactive** (new information interferes with older information) and **proactive** (old information interferes with new). Sternberg explains that when a number of items are learned at once, and later retrieved, some items are likely to be recalled more easily than others. In particular, items near the beginning (**primacy effect**) and near the end of the list (**recency effect**) are usually better recalled than items from the middle of the list. If a language lesson is viewed as a list of presented items, interference theory implies placing the most important material either at the beginning or at the end of the study session, because then they will be most likely remembered. As regards learners, interference theory advises not to study for hours without a break. Splitting the study time into 20-50minute periods with breaks in between creates more primacy and recency points and learners tend to remember more from studying (cf. total-time hypothesis in 3.3.3.4.3). Wikipedia (2007) suggests that the breaks should be filled with relaxation, physical or creative activity which would give the mind a chance to rest from learning and actually stimulate it.

3.3.5 Mnemonic devices

Mnemonic devices are a group of vocabulary learning strategies, which Gu and Johnson (in Nation, 2001) divide into:

- beliefs about vocabulary learning
- metacognitive regulations
- guessing strategies
- dictionary strategies
- note taking strategies
- memory strategies

Wikipedia (2007) defines mnemonic devices or aids as strategies used for improving encoding, rehearsal and retrieval. These strategies are based on general principles of encoding and retrieval and they are easily taught. They do not only rely on repetition of the facts to be remembered but also on associations between some well-known spatial, personal or other meaningful information and the new information to be remembered. The major assumption is

that at least some parts of memory can be trained and improved through learning and practising these techniques. Mnemonics work by a simple principle. First, a retrieval plan is developed during encoding the target information so that later the information can be recalled through verbal and visual cues. In other words, mnemonics aid integration of new material into existing cognitive structures.

There are many various techniques based on various principles. Wikipedia suggests that learners should experiment with numerous techniques to see which ones work best for them.

However, as Coady and Huckin (1997) emphasised: 'Mnemonic methods should not replace the more natural and contextual methods fostering incidental learning. Instead, mnemonics, fostering intentional learning, should be used for words that for whatever reason have not been successfully acquired. They must be added only when needed and applicable.' (Coady, Huckin, 1997:220 verbatim)

At the very least, mnemonics are a means of making the learner think more actively about what he or she is trying to remember, instead of mindless repetition which is often considered to be vocabulary 'learning'.

In total, there are many types of mnemonics. Below, only those that can aid vocabulary learning are enumerated and briefly described.

3.3.5.1 Linguistic mnemonics

1. **THE KEY WORD METHOD** (Coady and Huckin, 1997, Wallace, 1998, Hedge, 2000) - linking the form (L2) and meaning (LI) of a word via the form of another word (LI) with a similar sound, while constructing an unusual or even bizarre visual image. (For more information see Appendix 22.)

3.3.5.2 Spatial mnemonics

2. **THE TOWN MNEMONICS** - relating the vocabulary of everyday language to things which can be found in a town neighbourhood. Learners choose a place which they are familiar with and they use its parts and objects within it as cues to recall the target items. Nouns are associated with objects in shops and streets. Adjectives and verbs are added to the nouns or, for different groups of verbs, e.g. sports verbs, different places are used, e.g. a park or a sports centre (Wikipedia, 2007).

3.3.5.3 Visual mnemonics

3. **PICTURES** - using and making pictures to illustrate target items. Especially self-generated pictures are extremely memorable because of the personal investment. One

possible way of making learners create their own pictures is the party game called Pictionary or Aktivität. It is a lively, entertaining way to associate a picture with a word (Schmitt and McCarthy, 1997).

3.3.5.4 Mnemonics making use of other senses

4. **USING REALIA** – using real objects to comment on weight of things, their taste, smell and surface, labelling objects at home or in the classroom.
5. **CONCEPT QUESTIONS (or MULTIPLE SENSORY INPUT)** - involving all senses by asking questions about the new item. For example, if the item is 'crisps' these questions can be asked: 'What colour are they? How much does a packet weigh? How do they smell? What do they taste like? What sound does it make when you eat them?' Such questions do not only enhance memory skills but they also exercise imagination.
6. **RHYME** – finding an already known word which rhymes with the new item.
7. **SOUND** – creating non-verbal associations based on the sound of the new item (e.g. onomatopoeic words).

3.3.5.5 Semantic mnemonics

8. **GROUPING (or CATEGORICAL CLUSTERING)** – grouping target items according to various criteria, e.g. phonetic, semantic, visual, auditory, kinetic, olfactory and sensory.
9. **ELABORATION** - (see 3.3.3.1.3)
10. **PERSONALIZATION (or SELF-REFERENCE)** - (see 3.3.3.4)
11. **SEMANTIC MAPPING** - building up a visual framework of connections between ideas, organising facts into a map which helps remember new items, discussing and justifying choice of items and their position. Semantic maps can be created after reading a story, when speaking about a film that the class watched together, to sum up a unit from the textbook or a general vocabulary topic, e.g. housing. They may be even used for a single vocabulary item in a word list (Nation, 2001). (For more information see Appendix 24.)
12. **REAL-LIFE PRACTICE** - practising foreign language in environment which resembles the real-life environments as much as possible helps later retrieval by providing the learner with suitable context cues (e.g. role play activities, dramatised dialogues). (Cf. retrieval cues in 3.3.4.3.)

3.3.5.6 Mechanical means

Many students record newly learned words in long lists in their exercise books. According to Scrivener (1994) these lists are disorganised and often never used again after they have been written. Scrivener suggests that learners should be trained to record new vocabulary in a more useful manner, which may ensure that teaching vocabulary has a value out outside the classroom too.

13. **ENRICHED TRADITIONAL WAYS OF NOTETAKING** – keeping chronological lists of words but instead of using L1 translations learners can use alternative ways of defining the items:

- by exemplification
- by function
- by taxonomic definition
- by grammatical definition
- by giving synonyms and antonyms
- by adding words that may be useful together with the new item
- by adding information about pronunciation, stress, part of speech
- by adding different meanings, style, collocations or retrieval cues

14. **ALTERNATIVE WAYS OF NOTE TAKING** - keeping an alphabetically, grammatically or situationally ordered lists instead of or simultaneously with keeping a chronological list of words, entries can be accompanied by pictures (both hand-made and cut-out from magazines, learners can also create word networks (word spiders/semantic maps - cf. 3.3.5.5) or analograms (see 4.4.4.5).

15. **WORD CARDS** – using small, easily carried cards on which the learner writes a foreign word on one side and its L1 translation on the other. Nation (2001) recommends word cards as a quick way of increasing word stock through direct intentional learning, very efficient in terms of return for time and effort, allowing learners to control the repetition and processing of the vocabulary. (For more information see Appendix 23).

3.3.5.7 Other

16. **TOTAL PHYSICAL RESPONSE** – connecting target vocabulary items with relevant physical actions (Nunan, 1991).

17. **ANALOGRAMS AND ACROSTICS** (Birkenbiehl, 2002: 32) – using the letters of the target items as initial/final/middle letters of words semantically associated with the

target word, an activity similar to forming acronyms (e.g. LASER, SCUBA, RADAR) by using first letters of a group of words to form a new word. An example of acronym used in teaching English is SVOMPT (for the word order in an English sentence).

Although Acronyms as such have little use in vocabulary learning analograms can be the basis of a number of exercises.

Acrostics work on a similar principle as acronyms. But instead of using the letters to write new words whole sentences are made, creating a story or even a poem. The use in vocabulary learning is similar to use of analograms although acrostics are more suitable for advanced students.

18. **RHYMES AND SONGS** – aiding memory with rhythm, repetition, melody and rhyme. Many children learn e.g. the English alphabet to the tune of a song, Twinkle, twinkle little star. Rhymes and songs draw on the auditory memory and may be particularly useful for those who can learn tunes, poems and songs easily (cf. learning styles in 3.3.6). However, rhymes and songs make use of rote learning not understanding, that is why they are mostly effective for learning ordered lists (e.g. days, months, etc).

Rhythmical repetition of target items, singing what is to be remembered to the tune of a favourite song and walking around or back and forth are other time and experience honoured techniques. (Wikipedia, 2007)

In conclusion, there is a long list of techniques which can be used to help students become expert learners. Some learners are naturally able to 'imagine' or 'visualise' information to support elaboration, dual-coding or deep processing, while others are not. Training in mnemonic techniques can help overcome differences between learners, but they can also be used to vary lessons, to make them more interesting, outstanding and therefore memorable.

3.3.6 Personal differences

People differ in their memory abilities. They differ in how easily they remember an item, how long and how precisely they can store it in their memory and how quickly they can retrieve information. Their memory capacity may differ as well. Some of these differences are inborn, some are influenced by age, education, current situation and current environment. Other differences are based on the preferred type of memory used for example in school learning. Vesely (Cizí jazyky; 33/5, p196) states there are five types of memory preferred by learners of foreign languages:

- **auditive** – these learners need to hear the word in order to remember it well
- **visual** – these learners need to see the written form of the word
- **grapho-motoric** – these learners need to write the word down
- **articulative-motoric** – these learners need to say the target item aloud
- **verbal-logical** – these learners need to know the context in which the word is used, they need to systemise it

McCarthy (2007) looks at personal preferences from another perspective. According to her there are four types of learners:

- **innovative** – these learners need to know the reason why to learn something
- **analytical** – these learners need to know some facts and information about the item
- **common sense learners** – these learners need experience with the item
- **dynamic** – these learners prefer self-discovery strategies

Regardless of the classification, the preferred types of memory are often combined. Therefore, what is really important for the classroom practice is not to know which student prefers which memory type but that all types are likely to be present in one group of students. That is why the more ways of presenting and practising new vocabulary items are employed, the more successful learning will be.

3.4 CONCLUSION

The information presented in previous sections and especially its implications for classroom practice are summarised in the following table. The table presents recommendations on effective vocabulary learning for both teachers and learners.

	IT IS RECOMMENDED THAT LEARNERS...
PREPARATION AND PLANNING	...believe they are able to improve
	...choose vocabulary items to learn according to their interests, needs and goals
	...divide bigger amounts of learning into parts, distribute them over a longer period of time
	...try to involve episodic memory by considering how new items are related to them
	...get involved and be active
	...split study time into 20-50minute periods with breaks in between to create more primacy/recency points, and fill the breaks with relaxation or physical or creative activity to get a chance to rest from learning and actually stimulate it
	...place the most important material either at the beginning or at the end of the study session, because then it will be most likely remembered
PRESENTATION	...think of what they already know about a topic to be studied and what they would like to learn about it (in order to activate existing knowledge)
	...pay attention during presentation of new vocabulary, if self-studying use the techniques of visualisation, total physical response, concept questions etc.
	...divide the total number of items into smaller groups not to overfill STM
	...allow themselves with enough time to rehearse and process new information
	... test themselves from new words as they try to learn them
	...organise new information
PRACTICE	...repeat and revise the new items systematically in recommended intervals
	...try to encode information at the deepest level possible (semantic encoding)
	...combine techniques of maintenance and elaborative rehearsal
	...allow for delays in retrieving vocabulary because retrievals are contributing to learning
	...make use of retrieval cues
METAMEMORY	...prepare suitable retrieval cues and strategies for tests
	...experiment with various techniques to see which ones work best for them

Table 2: Recommendations for learners

	IT IS RECOMMENDED THAT TEACHERS...
PREPARATION AND PLANNING	...believe their students are able to improve
	...let students choose new items to learn according to their interests, needs and goals
	...think of (or make the learners think of) possible retrieval cues and present them to the learners during presentation
	...try to involve episodic memory in lessons by doing project work, role play activities, etc.
	...encourage students to think about how new information relates to them personally
	...make lessons emotionally arousing
	...split lessons into shorter periods to create more primacy/recency points
PRESENTATION	...place the most important material either at the beginning or at the end of the study session, because then it will be most likely remembered
	...activate the learners' previous knowledge related to the topic
	...make sure they have the learners' full attention during presentation of new vocabulary (by using various aids and techniques, e.g. visual aids, repetition and emphasising of key words and activating learners with questions)
	...encourage the development of both analogical and semantic representations in their learners' memories by using visuals to help them develop a dual memory trace
	...present a limited number of items not to overfill STM and lose learners' attention
	...pause occasionally and allow students with enough time to rehearse new information
	...let learners ask questions during presentation
	...'test' learners from new words already during the presentation
	...supply learners with advance organisers and teach them how to further organise it
	...make sure the learners repeat the items systematically in recommended intervals
PRACTICE	...encourage learning by doing in their class
	...help their learners encode information at the deepest level possible by e.g. asking them to supply definitions, synonyms, having them categorise words, etc.
	...combine techniques of maintenance and elaborative rehearsal
	...help learners elaborate
	...tolerate and allow for delays in retrieving vocabulary because the retrievals are contributing to learning
	...make use of retrieval cues and encourage the learners to use them as well
	...tell the learners what tests will look like so that they can prepare suitable retrieval cues
	...help learners develop metamemory skills by modelling and demonstrating various techniques in class
METAMEMORY	

Table 3: Recommendations for teachers

The above mentioned principles may be useful cues to gain a better insight into teaching and learning practice. However, as was stated in chapter 3.3.6 every learner is different, every class is unique and so following the principles strictly will not ensure effective vocabulary learning. It is the individual approach to each group and each learner, experimenting with the suggested techniques in an informed way and finding out which of them best suit a particular learner or group that plays the key role in effective vocabulary learning.

In the following section, i.e. the practical part of this thesis, a project is described in which a group of learners was presented with a number of techniques based on the principles mentioned above.

4 PRACTICAL PART

4.1 CONTEXT OF THE STUDY

4.1.1 Time and setting

This project spanned a period of six weeks, January 2 – February 10, 2007, during which a series of experiments were carried out in a class consisting of three Czech adult learners of English. They attended private English lessons twice a week (one sixty-minute and one two-hour lesson). The total number of forty-five-minute lessons was 15. Unfortunately, due to some adverse events some lessons were not attended by all three learners.

4.1.2 The learners

The three learners were chosen for this project on account of the number of lessons they attend a week as well as their willingness to undergo training in vocabulary learning strategies.

They had all been studying English and other foreign languages exclusively in formal environments of schools and language schools. Despite a lack of time (e.g. one learner was externally studying at university at the time of this project) all three learners showed genuine interest in English and were well motivated. For more details see the table below.

	LEARNER 1	LEARNER 2	LEARNER 3
age	30	35	41
occupation	civil servant	civil servant	manager in a private company
education	university graduate	university pregraduate	university graduate
Languages			
English years/proficiency	3,5/low pre-intermediate	7,5/low pre-intermediate	4,5/low pre-intermediate
German years/proficiency	8/pre-intermediate	-	4/beginner
Russian years/proficiency	2/beginner	7/beginner	9/intermediate
aims in English	everyday communication (to be used in summer 2007 during a three-month stay in Australia), better job prospects	passing the exam in English at university, everyday communication (to be used soon in Australia), better job prospects	travelling, further education

Table 4: The learners' characteristics

4.2 DESIGN OF THE COURSE

The aim of this thesis was to design a course in memory strategies. First of all, a survey of the learners' studying habits and note-taking strategies was carried out, followed by testing their knowledge of a given set of vocabulary items. Those items identified as difficult were then used as the basis of memory strategies or activities presented to the learners and practised with them. The activities were divided into two areas: learning strategies and note-taking strategies. Finally, the learners were tested once more and their wordlists were analysed again to find out if the learners' habits, strategies and knowledge had been affected or enriched by the course. In the end, the course was evaluated by both the learners and the teacher.

4.3 METHODS

In this project a number of methods were used in successive lessons. The methods are summarised in the table below and in more detail described in the following sections. To learn more about the results of individual activities and the conclusions drawn see section 4.4 and section 5.

1 INTERVIEW (Appendix 1)		
Each learner was asked the same questions. Answers were put into a prepared form.		
2 WORDLIST ANALYSIS (Appendices 2-4)	INITIAL (Appendix 2,3)	FINAL (Appendix 4)
One to two pages from the learners' notebooks (reflecting one particular lesson) were photocopied and analysed.		
3 VOCABULARY TESTS (Appendices 5-10)	INITIAL	FINAL
Tests of the productive knowledge of the target vocabulary. (one week after presentation)	TASK 1 (Appendix 5)	TASK 4 (Appendix 8)
Tests of the receptive knowledge of the same vocabulary as in tasks 1 and 4.	TASK 2 (Appendix 6)	TASK 5 (Appendix 9)
Tests of recognition of target vocabulary items in context (concerning vocabulary items not recognised in tasks 2 and 5).	TASK 3 (Appendix 7)	TASK 6 (Appendix 10)
4 A TRAINING IN MEMORY STRATEGIES (Appendices 11-21)	EFFECTIVE LEARNING METHODS (Appendices 11-13)	EFFECTIVE ORGANIZATION AND USE OF WORDLISTS (Appendices 14-21)
A number of strategies were presented and practised with the learners. Each activity was followed by the learners' feedback: expressing their opinion of the technique and their willingness to apply it in their studying.		

Table 5: List of methods used in the project

4.3.1 Interview

The learners were interviewed about their vocabulary learning habits (see Appendix 1). The questions were aimed generally but they also reflected the learners' revision of a particular lesson. The learners had not been informed about the interview beforehand.

4.3.2 Word lists analysis

Photocopies of the learners' wordlists were made and analysed. Attention was paid to which words were written down in the wordlists and how it was done. Emphasis was put to the correctness of Czech translations, spelling and above all to contextualisation of the items, self-testing possibilities of the list etc.

4.3.3 Tests

The learners were tested on vocabulary from the previous lesson. Both sets of tests (initial and final) were based on the learners' preferred ways of studying, i.e. using L1 translations of the target vocabulary items (see Appendices 4-10). Each set comprised three tasks given to the learners successively. In tasks 1 and 4 the learners were asked to translate the target items from L1 into English, and only after completing and submitting this they were asked to translate the same items from English into L1 in tasks 2 and 5. They were also asked to comment on the words they found difficult. After completing tasks 2 and 5 a copy of the relevant page from the Students' book was given to them to try and remember or guess the meaning of the still unrecognised words.

From the results of the tasks, a number of words were identified as difficult or problematic. These words were used later on in the training in memory strategies. Some of these words appeared in more than one technique to help the learners realise that there is a big number of strategies they can choose from.

4.3.4 Memory strategies

A series of tasks were prepared in order to present and practice various memory enhancing techniques (see Appendices 11-13). The tasks were prepared to suit different learning styles (see 3.3.6) and to present new possibilities to the learners. Each task was followed by questions reflecting on the learners' feelings and opinions of the technique. These techniques were as follows:

- Decomposition – designed for the analytical student (see 3.3.6)
- Sentence making – designed for the practical and verbal-logical student (see 3.3.6)
- Imagery/visualisation – designed to support dual-coding (see 3.3.3.1.3)

- Mental images – designed to support dual-coding (see 3.3.3.1.3)
- Analograms – designed for the auditive and grapho-motoric student (see 3.3.6)

(To find out about the results of these activities go to 4.4.4).

4.3.5 Organisation and note-taking strategies

Another group of activities was aimed at the organisation and use of new vocabulary items in the learners' wordlists. All three learners are used to taking notes of new words and keeping a vocabulary notebook. Yet the analysis of the notes showed they tend to be rather ineffective (see the results of the analysis in 4.4.2). Therefore a number of activities were done suggesting alternative ways of note-taking, aimed at making notes more effective and reusable. The list of activities is presented below.

- Learning vocabulary items in context – designed to enrich associations (see 3.3.3.2)
- Grouping (see 3.3.5.5) – designed to enrich associations and organise information (see 3.3.3.2)
- Word maps and Semantic maps (see 3.3.5.5) - designed to enrich associations and organise information (see 3.3.3.2 and 3.3.4.3)
- Linking new items with previous knowledge – designed to integrate new information into the existing system of knowledge (see 3.3.3.2 and 3.3.3.3)
- Imagery/Pictures (see 3.3.5.3) - designed to support dual-coding (see 3.3.3.1.3)
- Archives - to enrich associations and organise information and vary forms of revision (see 3.3.3.2 and 3.3.4.3)
- Word cards (see 3.3.5.6) – to provide the learners with a quick way of increasing vocabulary through direct intentional learning, efficient in terms of return for time and effort (see 3.3.4.7)

(For more details see Appendices 14-21. To find out about the results of these activities go to 4.4.5).

4.4 RESULTS

4.4.1 Interview

(See Appendix 1) Based on the answers given by the learners during the interview, their studying habits were as follows. All three of them stated that they usually studied at home once a week typically at the weekend. The length of the whole study session varied from 15 to 90 minutes out of which only 5 to 20minutes (25-30%of the time) was devoted to

intentional vocabulary learning. All three learners found both the time and frequency insufficient. As regards their preferred ways of learning new vocabulary items, one learner preferred to use the students' book rather than a special vocabulary notebook, which was only used for words occurring during conversation activities. The most frequently used method was reading the target items and their L1 equivalents in the book. Two learners copied all new items from the book into their wordlists and practised self-testing. They liked to read the items in their wordlists aloud. They used bilingual dictionaries to look up unknown words they met outside the class. Only one learner used a dictionary to get more precise information about the items presented in class (and added it to appropriate entries in the wordlist). This learner was also the only one to mention using mnemonic aids for problematic vocabulary items based on their similarity (phonetic or orthographic) with L1 words. It was also only this learner who expressed satisfaction with his/her learning while the other two learners complained about not being able to remember words effectively.

4.4.1.1 Conclusion 1

All three learners found the time which they spent studying new vocabulary insufficient. With regards to their lifestyles having more 'full-time' study sessions was not really feasible. Therefore, more 'instant' techniques like using word cards were recommended to increase both the total time and frequency of vocabulary learning.

As regards memory strategies, two of the learners did not use any apart from repeating and loud reading, and therefore various techniques were recommended to them: mnemonic aids for problematic items on one hand and elaborative techniques for all items to increase the effectiveness of studying. One learner already used a method resembling the keyword method (see 3.3.5.1), but was encouraged to learn other techniques as well, to gain a more varied choice of strategies.

As regards their note-taking habits, the learners usually wrote down new vocabulary and therefore were likely to benefit from a course in note-taking strategies as well.

4.4.2 Wordlist analysis

Note-taking in L2 vocabulary learning is very useful as it allows learners to practise the written form of the item and to point out those aspects of knowing a word that are new to the learner. Nevertheless, a closer look into the learners' wordlists showed that they abound in various shortcomings (for illustration see Appendices 2, 3). Many of them were common to all three learners. Firstly, all wordlists took the form of random lists with no other connection between the new words than their chronological occurrence. Moreover, they were not

organised in columns or other ways that would allow self-testing. No other information seemed to be added once the entry was made, no additional corrections or precisions made (e.g. misspellings are frequent, there are no sentences showing the use of the words or their common collocations). Only Czech equivalents were used to explain the meaning of the words, yet these were often incorrect (referred to a wrong part of speech, e.g. *compare* was translated as *srovnání*). Moreover, the learners did not use any kinds of aids (pictures, associations, links, etc.) to help them remember the new vocabulary items.

A considerably high proportion of words in the lists were wrong. Some entries were unfinished and apparently intentionally abandoned, yet they were not crossed out in order to make the list shorter and less confusing. Judged by the ways in which memory works such notes seemed rather ineffective and unhelpful, not only frequently presenting a wrong form or meaning of the new item but also not allowing effective self-testing (see 3.3.3).

When discussing the way words were organised in their notebooks the learners stated that the traditional organisation of words into three distinct columns (L2, pronunciation, L1) was extremely uncomfortable for them. They were made to keep their vocabulary in that fashion at school which caused their negative attitude to it.

4.4.2.1 Conclusion 2

The analysis of the learners' wordlists proved they might benefit from learning new effective ways of noting and organising vocabulary. The random way of writing down new words could be seen as a revolt against the school-like regularity and order. The fact that the learners usually took down isolated words instead of longer chunks and phrases was also probably result of the school methods. They were therefore presented with a number of alternative ways less resembling their school years and more effective than their own methods. Those took the form of handouts the learners filled in, thus trying the techniques out by themselves.

4.4.3 Tests

The initial tests (see Appendices 5-7) and final tests (see Appendices 8-10) comprised three tasks: one testing the productive knowledge and two testing the receptive knowledge (without and with context). The answers were marked as follows:

- C - correct
- W - wrong (wrong answer provided, no accompanying comments suggesting doubt)
- F - familiar (no answer or wrong answer provided accompanied by a comment)
- U - unknown (no answer provided, accompanied by comment A: "Have we really studied this word?")

4.4.3.1 Task 1

Out of the total number of fifteen only three to five vocabulary items (20-33%) were recalled correctly in this task. Approximately the same number of answers was wrong. The biggest number of words (four to seven) was not recalled correctly or at all but marked as familiar. The learners stated that they either remembered where the items had appeared in their books or stated they would recognise them if they saw them in English. However, when compared with the results of Task 2, this feeling of familiarity proved to be true only in 50-66%.

4.4.3.2 Task 2

Out of the total number of fifteen, ten to eleven items (66-73%) were recognised and translated correctly. Three to five items were marked as familiar. Not more than one item was marked as completely unknown. As a result, four items altogether were identified as difficult or problematic as they had given problems to all three learners.

4.4.3.3 Task 3

Those words that still remained unrecognised after Task 2 were highlighted on a photocopy of the relevant page from the Students' book. Out of the number of 3-5 unrecognised items in Task 2 three remained unrecognised even after providing learners with the context.

After comparing the results of Tasks 1 and 2, four words were identified as difficult or problematic for all learners and another five for different learners. In the table below the list of these words can be seen.

WORDS NEITHER RECALLED NOR RETRIEVED BY ANY OF THE LEARNERS				
unexpectedly	membership	a competition	to tidy	
OTHER WORDS THAT CAUSED DIFFICULTY TO SOME OF THE LEARNERS				
to lie	a live wire	to meet friends	to sort out	a resolution

Table 6: Problematic items

The items were discussed with the learners and the difficulty of the items can be therefore explained as follows. Four of these words (*unexpectedly*, *membership*, *competition* and *resolution*) are long, three or more syllable words which contain various affixes. Long, complicated words reduce the capacity of STM, which is rather limited already, and render it impossible for the words to enter LTM (see 3.3.3.1.2). The short items (*to tidy*, *to lie*, *to meet friends*) were not remembered due to retroactive interference (see 3.3.4.4). The previously learned word *to clean* was preferred over the new item *to tidy*. The new meaning of the word *to lie* (*ležet*) was not recalled due to a previously learned meaning *lhat*. Two items were idiomatic expressions (*a live wire*, *to sort out*) and one item is a verb-object collocation,

whose Czech equivalent (unlike the English collocation) contains a preposition (*to meet friends x setkat se s přáteli*).

4.4.3.4 Conclusion 3

The fifteen vocabulary items which appeared in the tasks were actually all the new vocabulary items from one (the previous) two-hour lesson. That approximated 7.5 items per hour which is in accordance with the principle of 7 ± 2 new items (see 3.3.3.1.2). The words were presented at the beginning of the lesson, in context, practised and several times revised during the lesson (in spaced intervals). In the last thirty minutes of the lesson a piece of grammar was revised with the learners before the final revision of the new vocabulary. The learners had two pieces of homework: to learn the new vocabulary and a short grammar exercise. While two out of three learners admitted not having studied the vocabulary too much, everybody did the grammar exercise, which implied their tendency to underestimate the importance of vocabulary to grammar. Another important finding of the tests was not the results themselves but the surprise the learners expressed after finding how many words they did not recall and even recognised. Also the number of words they believed they would recognise if they saw it in English proved to be much lower in reality. These results suggested that the learners did not use such techniques of learning new vocabulary which would provide them with enough feedback and that may have been why they did not have a completely realistic view of their own knowledge. As a result, techniques which make use of self-testing were presented to them during the course.

4.4.4 Memory strategies

(See also 4.3.4). Out of a vast number of memory strategies and vocabulary exercises only those were chosen, which could help the learners remember the items identified as difficult (see 4.4.3.3) and similar items. The aim of these strategies was not to change the learners' learning styles, but rather to enrich them. The learners needed to experiment with various techniques to see which ones work best for them. They did not have to replace their usual methods. The new strategies, at the very least, could make the learners think more actively about what they were trying to remember. (For handouts see Appendices 11-13).

4.4.4.1 Decomposition

Decomposition as such gave the learners no problems at all as they were able to identify the word part boundaries in all words. However, apart from the most frequent affixes (un-, dis-, -ly), understanding the meaning of the parts proved to be more difficult. The

learners were not able to guess the exact meanings of the words. The activity proved to be rather difficult as it only concerned isolated words. If words had been presented in context the identification of the stem and at least some of the affixes may have sufficed for the learners to guess the meaning fully. Therefore, for further practice it was decided to practise this technique on contextualised items as well. As regards the learners themselves, they found this activity useful and expressed a wish to learn more about word formation processes.

4.4.4.2 Sentence making

The learners agreed they all knew this technique but rarely used it despite its undoubtedly positive effects. One of the reasons was its seemingly time-consuming nature and the necessity of using their imagination, which they disliked. As an advantage they stated revising other vocabulary items and grammar together with the new item. Yet, for fear of inaccurate use of new items they expressed a wish to do this activity in class only.

4.4.4.3 Imagery/visualisation

There were only two words in this activity very different in nature. The word *to tidy* refers to a specific and very common activity and the learners had no difficulty thinking of various situations associated with it to speak about. On the other hand, the word *unexpectedly* caused quite a lot of frustration as there were no associations at hand. Struggling with this word caused that the learners lost interest in this technique and called it time-consuming and useless. Imagery/visualisation is a useful technique making use of the self-reference effect (see 3.3.3.4). However, in a group of students who do not enjoy applying their imagination it has to be done carefully not to lose their interest. One possible way is asking the learners to use those items for which they can easily think of a sentence and skip the others, another possibility is supplying them with cues for the more difficult (possibly abstract) items (e.g. *Her husband/unexpectedly/return/business trip/lover/bedroom.*).

4.4.4.4 Mental images

This activity was rather unsuccessful. Firstly, the words on which it was meant to be practised were already well known to the learners from the previous activities and so the motivation was low. Moreover, the same problems with the learners' unwillingness to employ their imagination and the feeling of little connection to "real" vocabulary learning as in Imagery/Visualisation (4.3.4.3) were faced.

4.4.4.5 Analograms

Analograms (see 3.3.5.7) are an entertaining way of vocabulary practice and as such were perceived by the learners. From the learners' point of view the ready made analogram (see Appendix 13a) was perceived as the best (even though it was only prepared as a model) as it helped them practise the new word together with words learned earlier. They were asked to explain the connection between the target and analogram words and they found creating such sentences and getting immediate feedback extremely useful. Making their own analogram (see Appendix 13b and 13c) proved more difficult and a little 'painful' as the learners had to think of their own words using their imagination again. Yet, it helped uncover mistakes (e.g. *stressful* confused with *important*) and was not rejected as a total waste of time. It was perceived as a little childish way of practising vocabulary and later it made a nice ice-breaker for the beginning of a lesson or a filler activity for the end.

4.4.4.6 Conclusion 4

The learners' willingness to participate in and continue using a particular technique seemed connected to its similarity to 'serious' exercises. Decomposition and sentence making were viewed as such exercises and thus best accepted. The ready-made analograms were welcome unlike those to be made by the learners themselves. Imagery and mental images were new to the learners and even viewed as a little irrelevant to vocabulary learning as the learners could not see the link between visual and verbal coding. Moreover, these tasks required using the learners' imagination, which was rather unpopular in this class.

As the learners in this project were adults who had been learning English or other languages for a long time their attitude to learning methods seemed to be set and firm. It would have taken a longer time and a repeated exposure to the techniques to make the learners change their attitude to the new techniques and to enrich their choice of strategies. Theoretical explanation of the principles proved insufficient for this purpose. The learners needed some kind of tangible proof of the effectiveness and purposefulness of the activities to accept them and consider using them on a regular basis. This may have been achieved by doing some motivation activities (activities to demonstrate how memory works) and by practising the techniques more often to convince the learners of their beneficial effects. Actually, the fact that more than one technique was presented within a short period of time decreased both its effect and the learners' motivation. This is due to the fact that the principle of spaced learning (see 3.3.3.1.3) applies to both learning vocabulary items and learning new strategies. Both types of learning require repetitions to 'settle' and to consolidate into LTM.

4.4.5 Organisation and note taking strategies

As was stated in section 4.3.5, these activities were done to offer alternative ways of note-taking to the learners. These strategies were aimed at making notes more effective and reusable. (For handouts see Appendices 14-21).

4.4.5.1 Learning vocabulary items in context

The prepared exercise (see Appendices 14 and 17) was well accepted as an additional vocabulary exercise but until it was repeated two or three times with various sets of words it proved insufficient in terms of convincing the learners about the necessity of taking down not isolated but contextualised items.

4.4.5.2 Grouping

Grouping new vocabulary items in traditional wordlists involves rewriting, which could be seen as a nice practice of spelling but was actually rejected by the learners for its time-consuming nature. Therefore, alternative ways of grouping had to be offered: using highlighters and other means of marking the distinct groups in word lists, and above all using word cards (see 4.4.5.7) for these purposes.

4.4.5.3 Word maps and semantic maps

This visually attractive technique was successful in terms of the learners' motivation and interest (see Appendices 14 and 18). However, the novelty of this format brought either a little chaotic way of filling in the grams (with words not always relevant to the central term) or an ineffective use of time.

Besides using semantic mapping as an alternative way of organising vocabulary items in wordlists, Nation (2001) recommends semantic mapping for transforming receptive knowledge of vocabulary items into productive. To demonstrate that I prepared a semantic map of the vocabulary learned in the previous module of the learners' Students' book (see Appendix 20). I also prepared a handout for the learners with only the central word provided (see Appendix 21). The closest links were only suggested by a number of empty 'bubbles'. In class the learners tried to fill in the bubbles and continue in creating the map by adding more links and justifying the choice of words (thus practising them in sentences). Due to absences, this activity was carried out with only one learner at a time and as such caused a certain amount of frustration. The learners felt uneasy due to the fact that they were not able to recall the target words promptly enough or at all. If the same activity had been carried out with all three of them together, this may have been avoided. Another problem was that semantic maps were a completely new format for the learners. So apart from practising vocabulary which

proved difficult enough they had to concentrate on the format itself. Such situation defies the principle of 'a single difficulty', i.e. new items should be practised within a well known structure (Suchánková 2004). That can only be avoided by practising this technique repeatedly to make the learners more familiar with semantic maps.

4.4.5.4 Linking new items with previous knowledge

This technique (see Appendix 15 and 19) was well accepted by the learners as a good way of revising vocabulary and practising improvisation in situations when a needed vocabulary item is not at hand. The aim of this technique was to link new items with previous knowledge already well established. If both the new item and the link had been perceived as new or nearly new confusion may have arisen. (See 3.3.3.2) That is why the learners were asked not to give the best synonym/antonym possible but a word(s) they were well familiar with. As this activity was done in a group of three, each learner contributed to finish the task which was therefore done swiftly and well accepted as a pleasant and useful activity.

4.4.5.5 Imagery/Pictures

The aim of this activity in the first place was to show the learners how powerful dual-coding can be (see 3.3.3.1.3). Moreover, it tried to show the less confident learners that even a sketch, a match-stick picture was useful for that purpose. Although this activity (see Appendix 15) gained popularity and was seen as a nice diversion from the usual routine, the pictures did not prove to be of much use in terms of effectiveness as the recall of words after practising them this way did not actually increase.

4.4.5.6 Archives

The biggest drawback of this activity suggested by Birkenbiehl (2002) was that the learners perceived it as rather pointless and without much sense. Yet it made them revise the vocabulary of several modules from their textbooks in written form. Interestingly, as the instructions did not really specify what words should be used, two approaches appeared. One learner tested his/her memory by recalling as many words from her memory as possible thus practising his/her productive knowledge (see Appendix 16a). Another learner went through the module in the book once more and copied mostly items he/she did not remember and considered difficult, thus revising the items receptively (see Appendix 16b). To make it an efficient note-taking strategy, there should be vocabulary items from one unit only on one sheet of paper to allow writing more than one word in the same line and adding the Czech equivalents or other comments.

4.4.5.7 Word cards

Immediately after the first set of tests the learners were given packs of blank paper cards to create the first set of word cards which they were asked to use to prepare for the next lesson. Their reaction to this technique was extremely positive and whenever they successfully retrieved a target vocabulary item in the next lesson, they assured me it was thanks to the cards. They appreciated being able to revise vocabulary during commuting to work. Also excluding the words they had mastered and self-testing were welcome. Nevertheless, none of the learners spontaneously continued with card making when we proceeded to a new set of vocabulary. They had to be reminded repeatedly and even 'bribed' with more packs of blank cards. Demonstration of possible uses of the cards also proved extremely useful as the learners spontaneously only tested themselves in productive translation (L1 into L2). Adding one way of using the cards every lesson proved to be optimal – not taking up too much time and allowing revision of the vocabulary with the learners once again (thus providing feedback on pronunciation too). These ways included receptive translation (L2 into L1), sentence making, grouping, etc.

4.4.5.8 Conclusion 5

Most of the presented techniques were well accepted as nice vocabulary exercises. But with the exception of word cards none of them was immediately adopted by the learners to be used out of class as well. Even the use word cards would have been discontinued, had the learners not been 'bribed' with more blank cards and repeatedly reminded to create new cards for new vocabulary items.

If these techniques had been practised repeatedly and most importantly for a longer time, the learners would probably have begun to see their advantages. Such practice was unfortunately beyond the scope of this project. Whether a time as short as six weeks sufficed to affect and enrich the learners' note-taking habits was to be shown in the final tests and wordlist analysis (see 4.4).

5 CONCLUSIONS

In this section the results of the project are summarised and the questions raised in section 2 are answered.

QUESTION 1

Do the learners use effective vocabulary learning strategies based on basic memory principles?

The results of the initial interviews (see 4.4.1) and wordlist analysis (see 4.4.2) have been arranged into Table 7. The entries in each line have been ranked according to how much they abide the basic memory principles and given a mark from zero (the lowest score) to three (the highest score). The same ranking took place with the results of both sets of tests (see Table) and the final wordlist analysis (see Table). The total scores were then compared in three ways. Firstly, a comparison of the results of different students was made. Secondly, the results of the interview and initial wordlist analysis were compared with the results of the initial tests to see if there is any relationship between them. Thirdly, the initial test results and wordlist analysis were compared with the final test results and wordlist analysis to find out if any interesting changes had taken place. Nevertheless, it has to be highlighted that the conclusions drawn from these comparisons are not of much significance (at least from the statistical point of view. The low number of learners involved in this project and its limited time span do not allow for any general conclusions to be made. Yet, they produce interesting information and many a point to think about.

As regards the learners' preferred ways of learning vocabulary, they often belong to those less effective (see 3.3.3). Namely copying new items into exercise books and reading the items (forms and meanings at the same time) establish knowledge of the items at the shallowest level of noticing (see 3.2.5.1). Moreover, the learners tend to focus mainly on isolated instead of contextualised items, thus neglecting many aspects of knowing a word (see 3.2.2). Their repetition scheme (see 3.3.3.1.3) is insufficient in the long-term view as they rarely revise items from previous lessons unless directly instructed to do so. The learners' wordlists and the interview showed that few mnemonic aids are used by the learners to facilitate successful encoding, storage and retrieval of more difficult items.

INTERVIEW	Learner 1	Score	Learner 2	Score	Learner 3	Score
Number of self-study sessions per week	1	0	2	3	2	3
Preferred ways of learning vocabulary	copying, reading, self-testing	2	reading, repeating	1	copying, self-testing in written form, reading items in exercise book	3
Satisfied with the effectiveness of word study?	varies	2	no	1	yes	3
Adding information to entries in wordlists	no	0	no	0	yes	3
Underlining entries in wordlists, highlighting words in the book	yes	3	no	0	no	0
Other ways of facilitating learning	no	0	no	0	yes (for difficult words) mnemonic aids based on phonetic or orthographic similarity with L1	3
TOTAL SCORE Table 7a		7		5		15

WORDLISTS initial analysis	Learner 1	Score	Learner 2	Score	Learner 3	Score
The ratio of isolated words vs. longer expressions and collocations	2,1:1	2	2,3:1	1	1:2,3	3
Percentage of wrong entries	4%	3	21%	1	8%	2
Percentage of misspelled words (meaning clear)	20%	3	29%	2	38%	1
TOTAL SCORE Table 7b		8		4		6
TOTAL SCORE Table 7		15		9		21

Table 7: Analysis of the interview (7a) and the wordlists analysis (7b)

QUESTION 2

Is it true that the more memory enhancing strategies a learner uses, the more successful he/she is in vocabulary learning?

It is not only the number of strategies applied by a learner but also the skill with which they are applied that affects the results of learning, of course. Nevertheless, using more strategies

may cause that the learner creates a more complex network of associations with the new item (cf. mnemonic devices in 3.3.5 and connectionist model in 3.3.3.2).

INITIAL TESTS	Learner 1	Score	Learner 2	Score	Learner 3	Score
TASK1 (correct items)	4/15	2	3/15	1	5/15	3
TASK2 (correct items)	11/15	3	10/15	0	11/15	3
TASK3 (unrecognised)	1	2	3	1	0	3
TOTAL SCORE		7		2		9

Table 8: Initial test results

Table 8 presents the results of the initial tests, which have been scored in the same way as the results in Table 7. Interestingly enough, the learner who got the highest score in the interview and wordlist analysis also did best in the tests and vice versa. In other words, the learner with the highest number of strategies, and the most effective use of them was the most successful in the tests. This implies that the answer to Question 2 may be positive. Yet the same doubt as in Question 1 has to be expressed: the number of the learners involved and the number of the activities carried out with them in this project were too low to allow for drawing reliable conclusions. Moreover, the results of the tests do not depend solely on the strategies applied, but also on other factors as the learners' motivation, current situation, interests and needs.

QUESTION 3

Will the learners enjoy a brief course in memory enhancing strategies?

Due to the very short time which this study spanned, approximately one new strategy per one forty-five-minute lesson had to be introduced. That number is far too high to allow the learners to practise and evaluate the strategy for themselves and perhaps to start using it outside the class. My idea was to present more strategies to make it possible for the learners to choose from them. However, without thorough practice and sufficient repetition these strategies were perceived as mere exercises and not as tools with bigger potential. Moreover, at the beginning it was necessary to provide the learners with significant amount of instruction concerning the new strategies which changed the nature of the lessons: the teacher talking time increased and instead of 'learning English' the learners had to get used to many types of new activities. At that time their motivation began to fall. That is why after the initial presentation of more strategies we spent more time practising those which seemed to be of most use and were also best accepted by the learners. Then the learners slowly began to see their beneficial results.

As regards Question 3, the answer is unfortunately negative. It was undoubtedly due to the unsuitable design of the memory strategy course that the learners enjoyed it less than expected. The main faults of the course were the high number of strategies presented, insufficient practising of the strategies, and the disturbance of the usual nature of the lessons (TTT vs. free practice, the amount of grammar vs. vocabulary, etc.). When these faults were avoided towards the end of the course, the learners' motivation rose rapidly.

QUESTION 4

Will a course of memory enhancing strategies help the learners to become more successful in vocabulary learning?

To be able to objectively measure the influence of the course on the learners' success would have required much more testing, both prior to and after the course, which was far beyond the scope of this thesis. The results of the final tests presented in Table 9 below thus could not be used as a proof of the influence of the course on the learners' success. Nevertheless, they suggested there had been some beneficial effects, as all learners managed to gain higher scores than in the initial tests. Moreover, the ratio of words correctly retrieved in the productive vs. receptive tests also changed in all three learners, showing that higher percentage of words had been mastered productively. The number of words unrecognised in context fell to zero.

FINAL TESTS (cf. initial test results)	Learner 1	Learner 2	Learner 3
TASK 4 – correct answers out of 15 (Task 1 – correct answers out of 15)	11 (4)	4 (3)	8 (5)
TASK5 – correct answers out of 15 (Task 2 – correct answers out of 15)	14 (11)	12 (10)	13 (11)
The ratio of correct answers in the productive vs. the receptive test (Initial tests)	11/14=0.78 (4/11=0.36)	4/12=0.33 (3/10=0.3)	8/13=0.61 (5/15=0.33)
TASK6 (unrecogn. words in context) (Task 3)	0 (1)	0 (3)	0 (0)

Table 9: Final tests results

As regards the effect of the course on the learners' note-taking habits, Table 10 shows that a slight improvement took place in all three analysed areas: taking down contextualised instead of isolated words and paying attention to the correctness of the entries both in terms of form and meaning. Such increased attention to new vocabulary items, if maintained, may be extremely beneficial in the learners' future vocabulary learning.

WORDLISTS final analysis (cf. initial analysis results)	Learner 1	Learner 2	Learner 3
The ratio of isolated words vs. longer expressions and collocations (Initial analysis)	1,1:1 (2,1:1)	2,1:1 (2,3:1)	1:2,2 (1:2,3)
Percentage of wrong entries (Initial analysis)	0% (4%)	10% (21%)	0% (8%)
Percentage of misspelled words (Initial analysis)	17% (20%)	21% (29%)	19% (38%)

Table 10: Final wordlist analysis

The results of both the tests and wordlist analysis suggested that the learners had enriched their vocabulary learning habits in terms of return for time and energy invested. However, it was not clear from these results if the number of methods they applied (word cards, organisation, etc.) had risen or if the change was mainly due to the increased attention paid to vocabulary learning. Whether it was due to the former or latter reason, or the combination of both, the changes that had taken place were for the better, and the answer to Question 3 was therefore positive. Nevertheless, the question, whether they would remain, arose. To make sure these changes were not only temporary and would not fade, it was decided to continue with the instruction in memory strategies and vocabulary learning techniques.

6 IMPLICATIONS – QUESTIONS

I am fully aware of the fact that the circumstances under which this project was carried out do not allow drawing any generalisation of the conclusions. Firstly, it was the extremely limited number of respondents involved. Secondly, the lack of time. Last but not least, more objective research would require gathering more information about the learners learning styles and learning habits based on a longer observation.

However, several helpful conclusions which could improve my own teaching practice were drawn out of the results. Firstly, influencing and enriching learners' attitudes and preferred ways of learning is a long-term goal. It requires gradual, systematic instruction spaced over a long period of time. This project spanned a period of six weeks only, which proved to be too short to affect the learners' attitudes and preferred ways of learning. It had probably taken the learners a long time to form their studying habits and it would take a comparably long time to change them. In my further teaching practice, I would therefore like to pay more attention to developing strategies with my students together with the actual language knowledge.

The project had two main objectives. One was to take a closer look at memory and vocabulary teaching and learning and their implications for the classroom practice. The other was to design and carry out a course in memory strategies and vocabulary learning techniques which could show the learners alternative, more effective ways of learning English vocabulary. In both respects, the results of the project are satisfactory. Moreover, it has provided me with information and feedback, which will be used in my further teaching practice. I have found out that my students do not get enough opportunities from me to form a realistic view of their vocabulary knowledge, which could motivate them to study it more attentively. More testing, and directed vocabulary practice will therefore be needed. I have also realised how insufficiently I employ visual coding. Carefully spaced repetitions is another area deserving more attention and long-term lesson planning. Namely repetition of previous knowledge turned out to be important as the learners' textbook did not provide many ways of spaced repetition and the learners did not themselves revise enough. That is also where more effective ways of note-taking may help. In my further practice, I would therefore like to focus on the use of word cards, semantic maps and other alternative ways of note-taking and using these self-generated, individualised wordlists for effective revision (e.g. by using them as the basis for writing tasks, speaking activities, self-testing, etc.). One possible way could be creating a system of activities later arranged into a vocabulary portfolio and

serving the learners as a source of vocabulary knowledge as well as learning techniques and strategies. (An attempt to do so in this project may be seen in Appendices 11-24.)

However, despite the information the project did provide, there are still many questions to answer:

- 1) Which strategies are suitable for different levels of proficiency? And for learners of different ages, goals, needs and interests?
- 2) Which strategies should come first in the instruction?
- 3) To what extent should strategies be taught and controlled?
- 4) Will learners benefit more from being presented to more strategies on a shallower level or fewer strategies explored in depth?
- 5) Should I try to modify and refine the strategies the learners are already using or present new, more effective strategies?

I would like to try to find answers to these questions in my further teaching practice. Moreover, there are two techniques which I have become especially interested in: word cards and semantic maps. Appendices 23 and 24 were devoted to more detailed information about these techniques as I believe they deserve more attention. In future, I would like to study them further and use them in my practice.

BIBLIOGRAPHY

- BENESCH, H.: *Encyklopedický atlas psychologie*, Praha: Nakladatelství Lidové noviny, s.r.o., 2001. ISBN 80-7106-317-7
- BIRKENBIEHL, V.F.: *Nebojte se myslet hlavou*, Praha: Portál, 2002. ISBN
- BRENNAN, H.: *Ach ta paměť! Aneb jak se efektivně učit*, Praha: Amulet, s.r.o., 2000. ISBN 80-86299-52-X
- CARTER, R.; NUNAN, D.: *The Cambridge Guide to Teaching English to Speakers of Other Languages*, Cambridge: Cambridge University Press, 2001. ISBN 0-521-80516-3
- COADY, J.; HUCKIN, T.: *Second Language Vocabulary Acquisition*, Cambridge: Cambridge University Press, 1997. ISBN 0-521-56764-5
- CUNNINGHAM, S.; MOOR, P.: *Cutting edge Pre-Intermediate*, Harlow (UK): Pearson Education Limited, 2001. ISBN
- HATCH, E.; BROWN, C.: *Vocabulary, Semantics and Language Education*, Cambridge: Cambridge University Press, 1995. ISBN 0-521-47409-4
- HEDGE, T.: *Teaching and Learning in the Language Classroom*, Oxford: Oxford University Press, 2000. ISBN
- HILL, G.: *Moderní psychologie*, Praha, Portál, 2004. ISBN 80-7178-641-1
- LEWIS, M.: *The Lexical Approach*, Hove (UK): Language Teaching Publications, 1996. ISBN 0-906717-99-X
- NATION, I.S.P.: *Learning Vocabulary in Another Language*, Cambridge: Cambridge University Press, 2001. ISBN 0-521-804981
- NUNAN, D.: *Language Teaching Methodology*: Prentice Hall International (UK) Ltd, 1991. ISBN
- SCRIVENER, J.: *Learning Teaching*, Oxford: Heinemann Publishers (Oxford) Ltd, 1994. ISBN
- SCHMITT, N.; MCCARTHY, M.: *Vocabulary: Description, Acquisition and Pedagogy*, Cambridge: Cambridge University Press, 1997. ISBN 0-521-58551-1
- SPRINTHAL, N.S.; SPRINTHALR, C.: *Educational Psychology*, New York: McGraw-Hill, Inc., 1990. ISBN 0-07-060541-6
- STERNBERG, R.J.: *Kognitivní psychologie*, Praha: Portál, 2002. ISBN 80-7178-376-5
- SUCHÁNKOVÁ, H.: *Využití typů paměti při osvojování a upevňování slovní zásoby cizího jazyka*, Disertační práce (PhD.), Praha, Pedf UK: 2004.
- UR, P.: *A Course in English Teaching*, Cambridge: Cambridge University Press, 1996. ISBN
- VESELÝ, R.: *Cizí jazyky*, 33/5, p196. ISSN
- WALLACE, M.: *Teaching Vocabulary*, Oxford: Heinemann Educational Books Ltd, 1988. ISBN 0-432-28974-8
- WENDEN, A.; RUBIN, J.: *Learner Strategies in Language Learning*, Hemel Hempstead (UK): Prentice Hall International Ltd, 1987. ISBN 0-13-527110-X

Website sources:

- WIKIPEDIA, The Free Encyclopaedia. *Memory*, [on-line]. Available on WWW: <<http://en.wikipedia.org/wiki/Memory>>. [cit. 31.1.2007]
- MCCARTHY, B.: *Learning Styles and the 4MAT System: A Cycle of Learning*, [on-line] Available on WWW: <<http://volcano.und.edu/vwdocs/msh/llc/is/4mat.html>>. [cit. 31.1.2007]

Interview

APPENDICES

	Subject 1	Subject 2	Subject 3
1. Have you studied the new vocabulary?	YES	YES	YES
2. What did you study?			
3. How many times did you study it?			
4. How long did you study it?			
5. How did you study it?			
6. Did you study the words from your notebook?	YES	YES	YES
7. ... your textbook?	YES	YES	YES
8. ... a dictionary?	YES	YES	YES
9. Did you review them?	YES	YES	YES
10. Did you understand them?	YES	YES	YES
11. Did you use them often?	YES	YES	YES
12. Did you do anything else to learn the words?	YES	YES	YES

Interview:

	subject 1	subject 2	subject 3
1. Have you studied the new vocabulary? <i>WHAT ELSE? ENOUGH?</i>	YES/NO <i>SOC.</i>	YES/NO <i>a little no time NOT E.</i>	YES/NO
2. When did you study?	<i>Su</i>	<i>Su, Mo</i>	<i>weekend</i>
3. How many times did you study it? <i>ENOUGH?</i>	<i>1x</i> <i>NO</i>	<i>2x</i> <i>NO</i>	<i>ne uholo 2x</i>
4. How long did you study it? <i>ENOUGH?</i>	<i>20 min jen sknidly</i>	<i>15+20 min (15 min)</i>	<i>15 min 30-15 hod = 6R vyhledávání VOC - najít</i>
5. How did you study it? <i>EFFECT. ENOUGH</i> <i>Spok jak to si do dalek.</i>	<i>ok rychlou cestou ale 1x NE</i>	<i>15 min 2 hod do slov. a vichy ypran sly det of -> H</i>	<i>hust doba, sroum prum om u setitu (nablas) Y</i>
6. Did you study the words from your notebook? <i>notebook</i>	YES/NO <i>ne</i>	YES/NO <i>blame</i>	YES/NO <i>um j jak jdm a scer</i>
7. ...your textbook? <i>ne u do ku?</i>	YES/NO <i>ne ne raven - H 0</i>	YES/NO <i>obas</i>	YES/NO
8. ...a dictionary? <i>what kind?</i>	YES/NO <i>no whole of -> H final -> H</i>	YES/NO <i>ne 0: A/T</i>	YES/NO <i>PC 1-2 vraci</i>
9. Did you rewrite them? <i>(notebook)</i>	YES/NO	YES/NO	YES/NO <i>vyhledávání</i>
10. Did you underline them? <i>(notebook) textbook?</i>	YES/NO	YES/NO <i>highlight no code</i>	YES/NO <i>Hobas!</i> <i>p/6 6: 6R</i>
11. Did you add information? <i>noteb. text.</i>	YES/NO	YES/NO	YES/NO
12. Did you do anything else to learn the words?	YES/NO <i>film -> H</i>	YES/NO <i>poslech CI</i>	YES/NO <i>200 min x min zap -> H NEMO 1000 prpomni podm!</i>

*6:R > VOC
2:251*

changes for better - změny k lepšímu
to worse - k horšímu

Personal department - personální oddělení

For human Resources - lidské zdroje

tried - zkoušel

Insurance company - ~~sp.~~ pojistovna zde, halty

contract - smlouva

muscle - sval

~~to~~ - cca

wild - divoký

at mother - u matky

wow - vyhrdla [wan]

Salt - solná

snow - sníh

candle - svíčka

sal

clout of. tad - poručení

She didn't fail

Spa - lázeň

shall we - pojďme

compare - porovnat

les - les

much more - mnohem víc

a bit more - o trochu víc

name of (str. to) want to share with individual
no. nice common delict dotu v dypla
pracyu me co. uedict
nabo hadam uedelay

insurance company - popstam rd.
healthy +

doctors tould me
my (fould)
(komey to vlogy)

main - blaum (ceca)
Byrnce ma lly men

spa - laend

compare - poroundu (compar)
/as - mane

much more + moken cre

+ las + mene

a bit les - o trochu mene

waiting - cl. vedaw

I would scart-like - ja'pya neprehe
rada --

meet friends - sept se sproteri

3.1. pu.

str. 48/2. 6 strich

Are you planning to have --

48/1 (

going to -> pro punit / nice v.
(going to phone) blkelino ~~at~~
budoucori.

planning to - tetet uej som se rocheda
nere udelat (ue' no
faindm savorat)

I'd prefer to - da'iat pcednot

I'd like to - rada yed nede
I'd like to go on

I'd prefer to win ~~the~~ mountain bike.

(see realize by nepredji rypud
horne' loco)

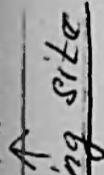
10.1.04.

pu - 48/2 odpovedit prde, pany
(Aloude' veig)

'idachu' drolena' spalna' drolena'

naucit' scou'la, pu 49 ramedech (oddid' 2

STAVANISKE



• the hotel has views of a building site

• there are lots of shops

cupboard

shaper - trar

pear shaped - homogeneity / trar

take life easy - pohoda, trar zivot smadher to be busy

SOVIET ARCHIVES

take it easy - lyt v klidu

take life easy - zivot bare v klidu

MOPOLE 6/1, 2, 6ab), 10

your plane is delayed

latadlo ma' spordov' / zivg / plaj zivka

• ~~the~~ the place you visit is lively and full of people

zmeritena' (voin)

• the water is too polluted to swim in

personal' / zameritama' / neprijem' / achrab' / noomety' / stov' / rub'

• the hotel staff are rude and unhelpful

• the food in the hotel is disgusting

disgusting

• there are views of the city from your hotel room

• there is no entertainment or nightlife

zabava / polidny' (miraklid)

• the atmosphere is peaceful and relaxing

• the weather's wet and windy

• the weather's really hot

Cutting Edge Pre-Intermediate, Module 6, page 49

Date:

TASK 1

Translate these into English:

CZECH	ENGLISH	COMMENTS
1. volný čas	free time	
2. živel (aktivní člověk)	active people	
3. lenoch, povaleč	potato	
4. předsevzetí		BD
5. neočekávaně	unexpectedly	
6. uklidit, uklízet	clean	
7. třídít, roztrídít	separate	
8. ležet	light	
9. setkat se s přáteli	meet friends	
10. opravit kolo	correct bicycle	
11. soutěž		BD
12. členství		BD
13. poznávací zájezd		BD
14. dovolená na kole	hicycle holiday	
15. dovolená na pláži	beach holiday	

COMMENTS:

- A... vůbec si nevzpomínám, to jsme opravdu probírali?
 B... kdybych toto slovo viděl/a v angličtině, poznala bych ho
 C... vzpomínám si, že jsme toto slovo probírali
 D... vím, kde se toto slovo nachází v mém sešitě/učebnici
 E... pamatuji si jen první písmeno
 F... pamatuji si, že toto slovo je dlouhé/krátké
 G... vlastní poznámka

Cutting Edge Pre-Intermediate, Module 6, page 49

Date:

TASK 2

Translate these into Czech:

ENGLISH	CZECH	COMMENTS
1. a beach holiday	dovolená na pláži	
2. a competition		D - opravdivost? X
3. a couch potato	lenoch	
4. a cycling holiday	dovolená na kole	
5. a live wire	aktivní člověk	
6. a resolution		D - výsledek, ale v CZ to myslí X
7. a sightseeing holiday	poznávací zájezd	
8. membership	členství	
9. time off	volný čas	
10. to lie	ležet	
11. to meet friends	setkání s přáteli	
12. to mend a bike	opravit kolo	
13. to sort out		A
14. to tidy		C a nic, nečistota to spánek
15. unexpectedly		A

COMMENTS:

- A... vůbec si nevzpomínám, to jsme opravdu probírali?
 B... vím, kde se toto slovo nachází v mém sešitě/učebnici
 C... vzpomínám si, že jsme toto slovo probírali
 D... připomíná mi.....
 E... vlastní poznámka

module 6

Time off

► Intentions and wishes: *going to, planning to, would like to, would prefer to*

► Vocabulary: holidays

► Predictions: *will and won't*

Task: plan your dream holiday

Language focus 1

Intentions and wishes: *going to, planning to, would like to, would prefer to*

1 Discuss with other students.

- Are you usually free at the weekend, or do you have to do a lot of work or study?
- How many weeks holiday from work or school do you have every year? Is it enough?
- Do you think people in your country have enough free time, generally? (Think about people in different types of job.)

2 Do you like to keep busy or do you prefer to take life easy? Do the quiz with a partner to find out.

3 What do your partner's answers show about him/her? Do you ever make resolutions about your free time? Give examples.

He is a workaholic

Live wire or couch potato?



Bath

- 1 Unexpectedly, you have two or three hours off work/school this afternoon, are you going to:
- PREDSTAVL SI*
- a tidy your desk, sort out your papers and answer some letters? *URJ BITE*
 - b phone a couple of friends or send a few e-mails?
 - c lie on the sofa and watch an old film on TV?
- 2 Next weekend, are you planning to:
- a meet a few friends, and do a bit of shopping?
 - b decorate your bedroom, make a new dress or mend your motorbike?
 - c sleep?
- 3 You enter a competition. Which of the following would you prefer to win? *SOUTE Z*
- a a Jacuzzi for your bathroom
 - b a really good mountain bike
 - c a year's membership of a health club
- 4 What kind of holiday would you least like to go on?
- a a sightseeing holiday in a busy city
 - b a cycling, climbing and camping holiday
 - c a beach holiday with nothing else to do

Cutting Edge Pre-Intermediate, Module 6, SB page 51, WB page 37
TASK 4

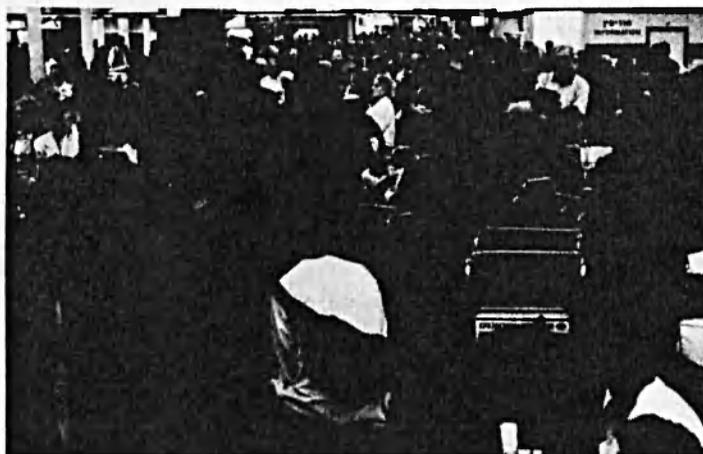
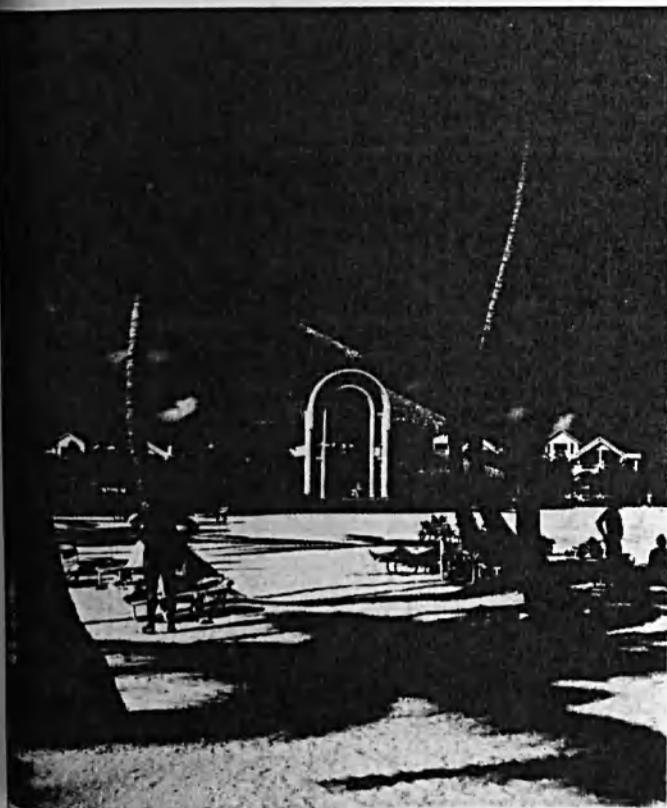
Translate these into English:

CZECH	ENGLISH	COMMENTS
1. ubytování	ACOMODATION	
2. poznávací dovolená	SIGHTSEEING	
3. příšerný, děsný	HORRIBEL	
4. zpožděný	DELAYD	
5. znečištěný		
6. živý (ulice, dítě)	LÆIVE	
7. neochotný	RUDE	
8. odporný	DISGASTING	
9. výhled		
10. staveniště	BUILDING	
11. přečpaný, přelidněný	CROWDED	
12. mokrý, deštivý	X WET	
13. poklidný, uklidňující	RELAXING	
14. velmi horký, vřelý	HOT BOIL	
15. luxusní	LUXURIOUS	

Cutting Edge Pre-Intermediate, Module 6, SB p51. WB p37
TASK 5

Translate these into Czech:

ENGLISH	CZECH	COMMENTS
1. sightseeing	CHOZ-PO PAMÁTKÁCH	
2. delayed	ZPOZDĚNÍ	
3. lively	ŽIVÝ, RUŠNÝ	
4. unhelpful	ZNEUČINNÝ NEOCHOTNÝ	
5. a view of	VÝHLED	
6. awful		
7. disgusting	ODPORNÝ	
8. a building site	STAVENIŠTĚ	
9. polluted		
10. crowded	PLNÝ	
11. wet	MOKRÝ	
12. boiling	VARÍCÍ	
13. peaceful	POKLIDNÝ	
14. luxurious	LUXUSNÍ	
15. rude	HRUBÝ ČLOVĚK	



Vocabulary and speaking

Holidays

1 a) Which of these are most important to you on holiday? Discuss.

- the weather
- the food
- accommodation
- shops
- sightseeing/culture
- the scenery
- the nightlife
- who you go with

b) What can you see in the photos above? Do they show positive or negative things about holidays?

2 a) **MD**. If necessary, check the meaning and pronunciation of the words in bold below. Divide the ideas into the following groups.

ideal holiday **SPATNA** awful holiday not sure/neither

- your plane is **delayed**
- the place you visit is **lively** and full of people
- the water is too **polluted** to swim in **SPINAVA!**
- the hotel staff are **rude and unhelpful**
- the food in the hotel is **disgusting**
- there are **views** of the city from your hotel room
- there's no **entertainment** or **nightlife**
- the atmosphere is **peaceful** and relaxing
- the weather's wet and windy
- the weather's really hot
- the hotel has views of a **building site**
- there are lots of shops

b) Compare answers in pairs or small groups. Explain your answers if necessary. Can you add any other ideas to each group?

3 a) Tell your partners about a holiday you have had that was either really good, or awful. Use some of the phrases above.

b) Listen to your partner's story: has anything similar ever happened to you?

and 2) I hope that "my holiday" will be like

HOW TO REMEMBER DIFFICULT OR PROBLEMATIC WORDS 1

1. DECOMPOSITION

- a) Divide the words **UNEXPECTEDLY** and **MEMBERSHIP** into parts (stem, affixes, endings). —
- b) What meanings or what functions do the parts have? Which parts are the most important to help you with the meaning?

UN-	NE	MEMBER	LEN
EXPECT	CEKAT	-SHIP	"SIVI"
-ED	MAH PRUJAH		
-LY	PE/SLOVCE		

- c) Can you do the same with the words:

UNHELPFUL

DISGUSTING

UNHAPPINESS

UNFRIENDLINESS

UNBREAKABLE

EXCITEDLY

- d) Did it help you remember the meaning of the words?
e) Comments:

2. SENTENCE MAKING

- a) Write true sentences about yourself and use these words in them (sentences for each word):

E.g. **RESOLUTION**

Many people make New Year's **RESOLUTIONS** but I don't.

✓ **RESOLUTION** / *SOMETIMES MAKE NEW YEAR'S RESOLUTIONS.*

+ **TO LIE**

+ **TO TIDY**

- b) Did it help you remember the meaning of the words?
c) Comments:

HOW TO REMEMBER DIFFICULT OR PROBLEMATIC WORDS 2

3. IMAGERY - VISUALIZATION

o VIVID MEMORIES

a) Tell your partner about a special moment in your life when you:

- **TIDIED** something
- something happened **UNEXPECTEDLY**

b) Did it help you remember the meaning of the words?

c) Comments:

o MENTAL IMAGES

a) Try to imagine as vividly as possible and in three different situations:

- a person who could be called a **LIVE WIRE** (who is it?, what is he/she doing?)
- **LYING DOWN** somewhere (where?, why?, when?)

b) Did it help you remember the meaning of the words?

c) Comments:

HOW TO REMEMBER DIFFICULT OR PROBLEMATIC WORDS 3

4. ANALOGRAMS

- a) Look at the example of an analogram and explain what the words in lines (compete, radio, game, etc.) have in common with the word COMPETITION

C O M P E T E
 R A D I O
 G A M E
 P R I Z E
 E N T E R - *ZAPSAT SE*
 T E S T
 W I N
 T V
 F I R S T
 L O S E - *ZTRATTI, PROH-RAT*
 N E W S P A P E R

- b) Here is another type of analogram. Can you finish it by making true sentences about yourself?

In 2007 I am not going to	R E A D	books in English.
In 2007 I am not going to	E A T	sweets.
In 2007 I am not going to	S A V E	<i>ON MY HOLIDAY</i>
In 2007 I am not going to	O R G A N I Z E
In 2007 I am not going to	L E A R N	<i>ENGLISH</i>
In 2007 I am not going to	U S E
In 2007 I am not going to	T E L L T H E T R U T H / L I E S
In 2007 I am not going to	I M P R O V E	<i>IN ENGLISH</i>
In 2007 I am not going to	O V E R E A T / O V E R S L E E P
In 2007 I am not going to	N E G L E C T / N I B B L E	<i>MY ENGLISH</i>

- c) Make your own analogram for the word ENTERTAINMENT.

TELEVISION
INTERNET
TV
RELAX
READING
TENNIS
REST - RESTAURANT
COOKING
TV NEWS
M
EXERCISING
N
T

WORD LISTS – MEMORY ENHANCING, EFFECTIVE ORGANIZATION

1) LEARNING WORDS IN CONTEXT

- a) Do you remember when we used the words below? What did we speak about? Add words before or after the words below to form expressions and phrases from your students' book.

FR	DELAYED	FLIGHT	BUS	TRAM
	LIVELY	CHILDREN	DISCO	
	POLLUTED	WATER		
	RUDE	STAFF		
	UNHELPFUL	STAFF	PERSON	
	DISGUSTING	FOOD	DINNER	
	VIEWS OF	MONTHS	SEA	
	PEACEFUL	ATMOSPHERE		
	RELAXING	WEEKEND	HOLIDAY	
	WET AND WINDY	WEATHER	DAY	

- b) Can you add more words to form similar expressions?

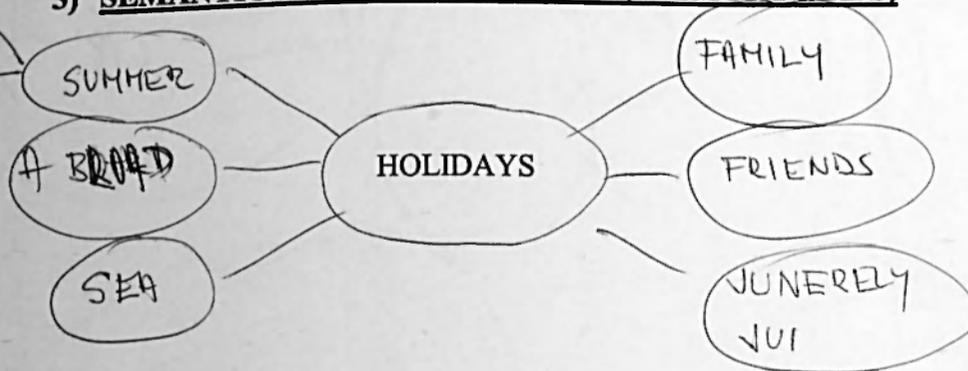
2) GROUPING

- a) Divide these words into two groups. Give each group a headline. Add more words to each group.

- 1 A SIGHTSEEING HOLIDAY 1 TO MEET FRIENDS 2 TO DECORATE A ROOM
 1 A CYCLING HOLIDAY 2 TO SORT OUT YOUR PAPERS 1 A CLIMBING HOLIDAY
 2 TO TIDY YOUR ROOM

- 1) RELAXING
 2) WORK

3) SEMANTIC MAPS (SPIDER GRAMS, MEMORY MAPS)



In summer I'll go after holiday

4) LINKING NEW WORDS WITH PREVIOUS KNOWLEDGE

a) OPPOSITES – write the opposites of the following words:

ENTER	7/2	LEAVE
TAKE LIFE EASY		TO BE BUSY
LEAST <i>nejmańe</i>		THE MOST
SALT		SUGER
A LIVE WIRE		COUCH POTETO

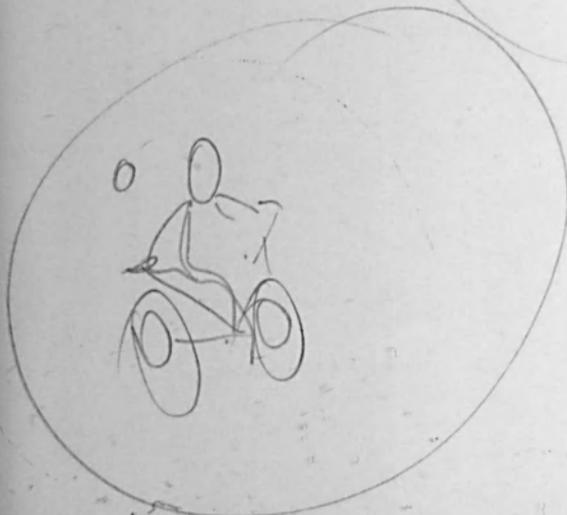
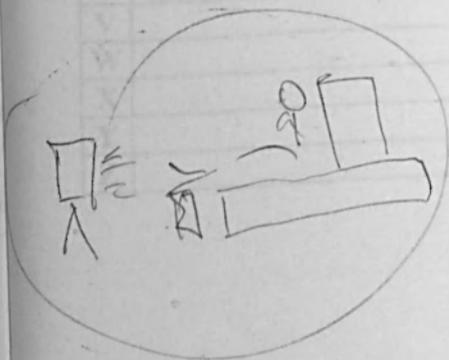
b) SYNONYMS – write the synonyms or words with similar meaning of the following words:

to ENTER		CAME IN
to MEND <i>opranit</i>		REPAIR
to TIDY <i>uklizet</i>		CLEAN
POLLUTED <i>znečistit</i>		DIRTY
DISGUSTING (food) <i>hrozo nechutny</i>		HORRIBLE

5) IMAGERY – PICTURES

a) On separate pieces of paper draw pictures of the things/people below. Let your partner guess the original word. Then compare your pictures with other students' pictures.

A COUCH POTATO PERFUME A SIGHTSEEING HOLIDAY
CYCLING HOLIDAY CLIMBING



6) **ARCHIVES**

It is also possible to arrange words in the alphabetical order. Can you add more words from the appropriate modules or your own words into the table?

	SPECIAL OCCASIONS (MODULE 4)	APPEARANCE (MODULE 5)	HOLIDAYS (MODULE 6)	(MODULE 7)	(MODULE 8)
A	anniversary		accommodation		
B	birthday		beach holiday		
C	celebration		cycling/climbing		
D		dark hair			
E					
F					
G		good-looking			
H					
I					
J					
K					
L					
M			mountain bike		
N					
O					
P					
Q					
R					
S			sightseeing		
T					
U					
V					
W					
X					
Y					
Z					

WORD LISTS – MEMORY ENHANCING, EFFECTIVE ORGANIZATION

1) LEARNING WORDS IN CONTEXT

- a) Do you remember how we used the words below? What did we speak about?
Add words to form expressions and phrases from your Students' book.

DELAYED = zpožděný e.g. a delayed flight, bus, train	DISGUSTING = odporný lunch, tea, water
LIVELY = živý, živoucí atmosphere	A VIEW OF = výhled na sea, building
POLLUTED = znečištěný water, hotel	PEACEFUL = klidný, mírumilovný teacher, person
RUDE = hrubý person, boss	RELAXING = odpočinkový holiday, weekend
UNHELPFUL = neochotný shop assistant, person	WET AND WINDY = mokrý a deštivý weekend, day

- b) Can you add other words to form more expressions?

2) GROUPING

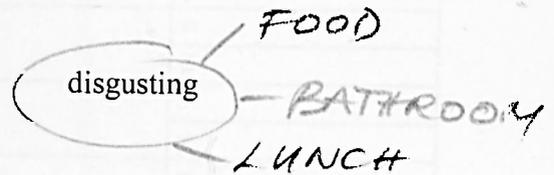
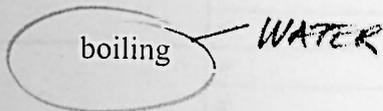
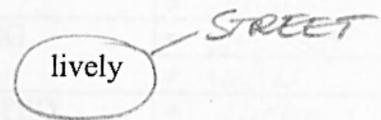
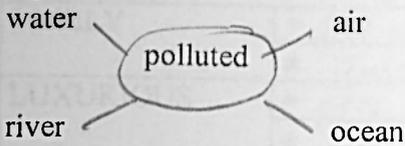
Divide these words into two to three groups and write them in the table below. Give each group a name. Add more words to each group.

wet and windy luxurious	first class hurricane	peaceful lively	disgusting boiling
weather wet and windy hurricane boiling	accommodation first class luxurious peaceful lively	food disgusting boiling	

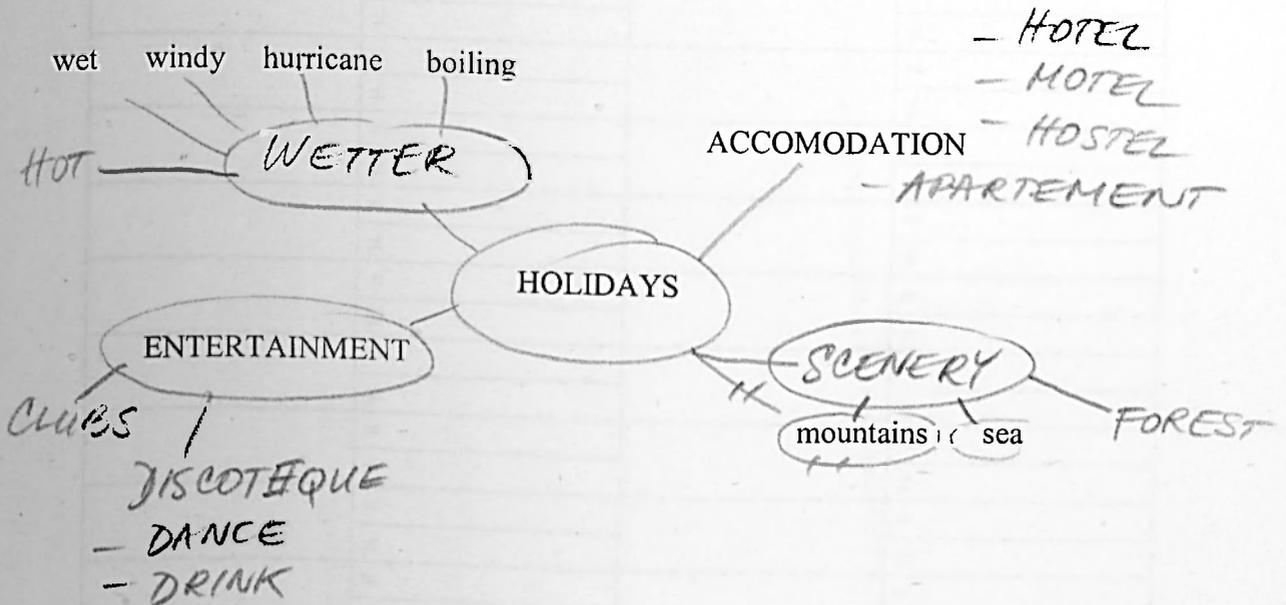
3) SEMANTIC MAPS (SPIDER GRAMS, MEMORY MAPS)

a) WORD MAPS - create word maps by adding words that associate with the word in the central bubble

e.g.



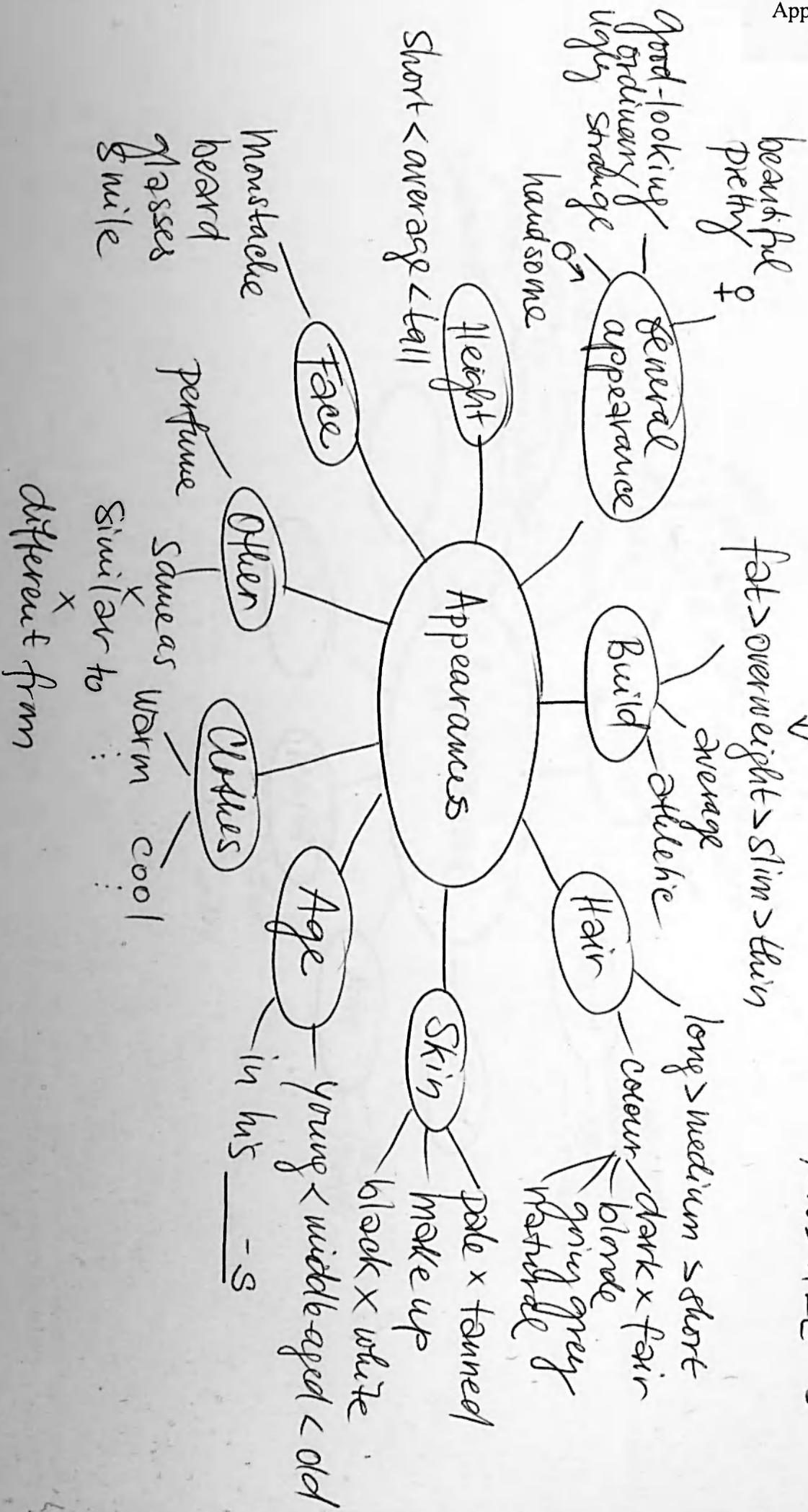
b) SEMANTIC MAPS - fill in the semantic map of the vocabulary connected to *holidays* from your Students' book pages 49 and 50.

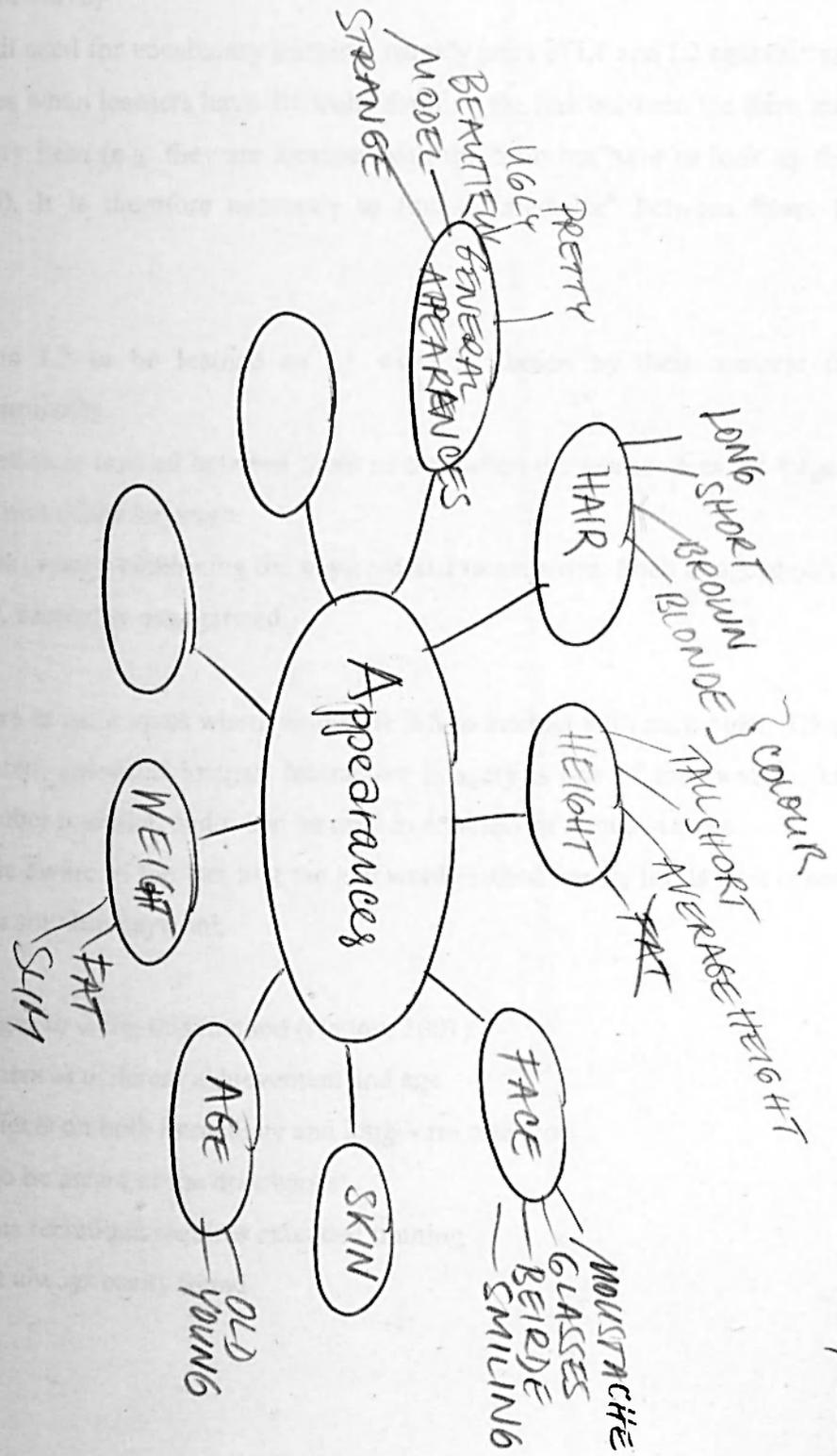


diets
↓

fat > overweight > slim > thin

MODULE 5





Module 5

THE KEYWORD METHOD (cf. 3.3.5.1)
(Coady, Huckin, 1997:214-218)

Appendix 22

This method can be well used for vocabulary learning, namely pairs of L1 and L2 equivalents. It is most useful in cases when learners have difficulty forming the link between the form and meaning of a vocabulary item (e.g. they are familiar with the form but have to look up the meaning several times). It is therefore necessary to find a “mediator” between them. It comprises three stages:

- For the word in L2 to be learned an L1 word is chosen by their acoustic or orthographical similarity.
- A strong association is created between them so that when the learner sees the target word it reminds him of the keyword.
- A visual image is created combining the keyword and target word. Such image should be quite unusual, bizarre or exaggerated.

Interactive imagery refers to techniques where words are left to interact with each other. They are connected in animated, colourful images. Interactive imagery is one of the most useful ways to learn and remember material, and it can be used in a variety of circumstances.

Learners should be made aware of the fact that the key word method has its limits as it is not always possible to find a suitable keyword.

There are many advantages to using this method (Nation, 2001):

- it works for learners of different achievement and age
- it has positive effects on both immediate and long-term retention

Yet it is also necessary to be aware of the drawbacks:

- to be effective this technique requires extended training
- keywords are not always easily found

Word cards are small, easily carried cards on which the learner writes a foreign word on one side and its first language translation on the other. Instead of translations pictures or second language definitions can be used as well. A sample sentence or collocations may be also added to help with the use of the word.

For the preparation and effective use of word cards Nation (2001: 303-310) suggests these steps to be taken:

Choosing words to learn	learn useful words
	avoid interference
Making word cards	put the word on one side and the meaning on the other to encourage recall
	use first language translations
	use pictures where possible
	keep the cards simple
	suit the number of words in a pack to the difficulty of the words
Using the cards	use recall
	learn receptively, then productively
	keep changing the order of the cards in the pack and put difficult words near the beginning
	say the words aloud to yourself
	put the word in a phrase or sentence with some collocates
	process the word deeply and thoughtfully

There are many advantages to using word cards:

- it encourages retrieval (form and meaning are not seen simultaneously)
- can be used for both productive and receptive learning
- it allows learners to control (and space) repetition
- can be used both for high- and low-frequency words
- it is possible to change the order of the words (put the most difficult or most important items at the beginning to give them more attention)
- it is possible to exclude known words and insert new items
- it is possible to change the size of the pack

Yet it is also necessary to be aware of the drawbacks:

- some aspects of knowing a word are not covered by learning through word cards (constraints of use, full range of collocations, grammatical patterns, variety of referents, related morphological forms).

Semantic mapping is a way of organizing and recording vocabulary in a non-linear way. When creating semantic maps, teachers and learners should work together to make a visual framework of ideas and connections between them. Semantic maps can be created after reading a story, when speaking about a film the class watched together, to sum up a unit from the textbook or a general vocabulary topic, e.g. housing.

Semantic mapping can be used for increasing both receptive and productive vocabulary. If it is aimed at productive vocabulary it should have some of these features:

- teacher and learners work together
- teacher encourages students to produce the target vocabulary. He/she helps learners retrieve the words by providing suitable cues like paraphrases, L1 equivalents, first letters or rhyming words
- learners have to explain, justify and increase connections between items in the map in order to:
 - repeat and rehearse the target vocabulary
 - encourage use in new contexts
 - allow the teacher to correct mistakes and misinterpretations
 - explore the meaning of the vocabulary

A RANGE OF ACTIVITIES FOR VOCABULARY LEARNING

(cf. 3.2.2, 3.3.2.2, 3.3.4)

(Nation, 2001:99 verbatim)

GOAL		ACTIVITIES	
Form	Spoken form	Pronounce the words	
		Read aloud	
	Word form	Word and sentence dictation	
		Finding spelling rules	
	Word parts	Filling word part tables	
		Cutting up complex words	
		Building complex words	
		Choosing a correct form	
	Meaning	Form-meaning connection	Matching words and definitions
Discussing the meaning of phrases			
Drawing and labelling pictures			
Peer teaching			
Riddles			
Concept reference		Finding common meanings	
		Choosing the right meaning	
		Semantic feature analysis	
		Answering questions	
		Word detectives	
Associations		Finding substitutes	
		Explaining connections	
		Making word maps	
		Classifying words	
		Finding opposites	
		Suggesting causes or effects	
		Suggesting associations	
		Finding examples	
Use		Grammar	Matching sentence halves
			Putting words in order to make sentences
		Collocates	Matching collocates
	Finding collocates		
	Constraints on use	Identifying constraints	
		Classifying constraints	

CLASSIFICATION OF VOCABULARY EXERCISES

(cf. 3.3.4.3)

(Paribakht and Wesche in Coady, Huckin, 1997:182-185)

SELECTIVE ATTENTION	advance organizers	boldfacing, italicizing	least demanding exercises
		circling, underlining, colouring and other visual marking in text	
		lists of words given to the learners prior to reading and successive underlining them in the text	
RECOGNITION	both form and meaning are provided	matching the target word and its synonym or definition	do not require thorough knowledge of target words
		multiple choice exercises	
		picture labelling with a choice of words provided	
		translating words from L2 into L1	
MANIPULATION	rearrange and organize given elements	derivation exercises	using their knowledge of morphology and grammar
		combining stems and affixes to form words	
INTERPRETATION	analyze meanings of words with respect to other words in given context	odd one out exercises in a series of collocationally related words	
		multiple choice cloze exercises	
		guessing the meaning from context	
PRODUCTION	produce the target words in appropriate contexts	open cloze exercises	most demanding exercise type
		labelling pictures	
		answering questions requiring the target word	
		translation from L1 to L2, or providing synonyms of L2 words	