

The Nexus Between Teaching Methods and Learning Styles in L2 Vocabulary Acquisition

A study of techniques to enhance vocabulary retention of students in ESL/EFL classes

MA Thesis

MA Linguistics: English Language and Linguistics

By

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ABSTRACT

In this research, three prominent teaching methods, i.e. content-based instruction (CBI), task-based learning (TBL) and visual learning (VL), in which a verbal, physical response and visual mnemonic strategy are integrated respectively, were compared in order for the effects on pupils' retention of English vocabulary items to be examined. It is imperative for students to recall words, as having a large and rich vocabulary is a requirement for a successful completion of their final examination, namely reading comprehension. Hence, the objectives of this study were (1) to ascertain which of the aforementioned teaching methods yielded the best test results in terms of the students' retention of English vocabulary items, as well as (2) to determine to which extent the pupils perform better if their dominant learning style correlates with their method of instruction.

The research subjects (61) were three intact groups of students who are in the fourth year of the higher general secondary education. The participants were given a vocabulary test one week prior to the class treatments to assess their lexical knowledge of the targeted words. On the day of the treatment, the students completed a learning style test to discover what type of learner they are, specifically visual, auditory or kinaesthetic. Each group of students was then explicitly taught the same set of words by means of one of the previously mentioned approaches (CBI, TBL or VL). This was done to establish whether the success or failure of a specific method was related to the pupils' individual learning styles. The immediate post-test was given at the end of each treatment and the delayed post-test was given after a lapse of two weeks. This approach enabled the number of words the subjects retained through one of the methods to be determined.

The findings have shown that the experimental group who received instruction through the visual method had the highest scores on both the immediate- and delayed post-test. The results also revealed that, overall, the subjects did significantly better when their favoured learning styles matched their mode of instruction. This paper, therefore, concludes that the implementation of a correlated learning style lesson positively influences the pupils' retention of vocabulary items.

Keywords: L2 Vocabulary Acquisition (Word Retention), Teaching Methods, Learning Styles

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LIST OF ABBREVIATIONS

CBI	Content-Based Instruction
CLIL	Content and Language Integrated Learning
EFL	English as a Foreign Language
EG	Experimental Group
ESL	English as a Second Language
FonF	Focus on Form
FonM	Focus on Meaning
HAVO	Hoger Algemeen Voortgezet Onderwijs (Dutch) Higher General Secondary Education (English)
L1	First Language
L2	Second Language
LTM	Long-Term Memory
PP	PowerPoint
SLA	Second Language Acquisition
SLLT	Second Language Learning and Teaching
STM	Short-Term Memory
TBL	Task-Based Learning
VAK	Visual, Auditory and Kinaesthetic
VL	Visual Learning

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CHAPTER 1: INTRODUCTION

In this introductory chapter the thesis outline, definition of terms, statement of the problem, purpose, background and delimitations of the study as well as the research questions, including their hypotheses, are discussed.

1.1 Purpose of the Study

The purpose of this research is to compare three renowned teaching methods, namely content-based instruction (CBI), task-based learning (TBL) and visual learning (VL), in which the verbal, physical response and visual mnemonic techniques are incorporated respectively, in order to examine their effects on students' retention of English vocabulary items. In addition, the students' dominant learning styles, i.e. visual, auditory or kinesthetic, will be taken into account by means of linking each learning style to one of the three aforementioned methods.

1.2 Background Information

According to Read (2004), research on the lexicon began to flourish during the 1990s and in the early 2000s. It is now commonly accepted that the acquisition of vocabulary plays a pivotal role in students' mastery of an L2, as lexical knowledge is the fundamental skill that contributes to the receptive as well as the productive skills in a language (Toogood et al., 2002). Wilkins (1972) even states that "without grammar very little can be conveyed, but without vocabulary nothing can be conveyed" (p. 111).

In light of the importance of word retention to learners' overall academic success, many studies (e.g. Oxford, 1990) have been conducted to ascertain the most effective ways to facilitate pupils in acquiring vocabulary. Researchers have found that the rate of learning and retaining L2 vocabulary through an implicit approach is actually very low (Sokmen, 1997; Hill & Laufer, 2003). This has led several scholars to become avid advocates of the explicit method of vocabulary learning. Those in favour of this intentional learning approach, such as Schmitt (1997), believe that paying attention to new lexical items is necessary for vocabulary acquisition to occur. Yet in language classes the focus on explicit vocabulary teaching to enhance the learners' retention skills is often neglected for the sake of grammar (French, 1983), which in my opinion causes a vocabulary deficiency that is detrimental to a learners' educational

achievement. This was my observation prior to this study, as it became apparent that my students struggled during their language skills activities, such as reading comprehension, due to a lack of vocabulary knowledge. Witte et al. (2008) underpin this notion by proclaiming that this problem affects approximately half of the pupils who are matriculated in the fourth year of higher general secondary education (p. 20). Furthermore, it could be noted that to date students have been forced to cram lists of words in a self-confined environment, a strategy that is known to prevent them from storing these lexical items in their long-term memory.

Since this traditional mode of rote memorization, several new and approved approaches to vocabulary learning have surfaced. Quite a few of these methods, in which vocabulary can be integrated and taught explicitly, e.g. CBI, have gained prominence and are now incorporated into many syllabuses. However, utilizing innovative methods that are more appealing to the learners cannot serve as the sole criterion for implementing a new approach. Additional research is necessary in order to measure the effectiveness of these approaches. For this reason, this thesis aims to explore the nexus between teaching methods and learning styles in L2 vocabulary acquisition, which is generally a study of techniques to enhance vocabulary retention of students in the context of ESL/EFL classes.

1.3 Statement of the Problem

Through my experience as an instructor, I have noticed that teachers always face in-field issues. Edge (1992) affirms that teachers need practical solutions for the daily issues they come across in a classroom setting. As stated in the previous section, one of the most significant problems encountered by my students when learning English is vocabulary. As testing the students' vocabulary knowledge is a major part of the curriculum, my first priority in finding a solution to this issue is my professional development since good teaching methods, as Underhill (2004) insists, positively affect students' learning, which is the ultimate educational objective. In light of this, teachers should be well equipped with multiple teaching techniques and approaches to help facilitate their students' learning needs and experience. Therefore, the objective of this study is to test how certain theories concerning vocabulary learning, i.e. CBI, TBL and VL, can be applied in a classroom setting in an attempt to find the most suitable

strategies which adapt to the context of my students so as to introduce adequate learning strategies that are conducive to them having successful learning outcomes.

1.4 Research Questions and Hypotheses

This study investigates which explicitly employed teaching method affects the students' retention of English vocabulary items most favourably. Moreover, this research hopes to determine whether the students would attain better test scores if their learning style matched their method of instruction. The following two research questions, along with their hypotheses, will be addressed in this study:

(Q1) Which employed teaching method yields the best test results in terms of the students' retention of English vocabulary items?

(H1) The visual learning approach is expected to produce the best outcomes on the subjects' recall, as research have shown that the majority of learners are visual (as stated in section 2.3.2).

(Q2) Do the students perform better if their dominant learning styles correlate with their mode of instruction and if so, to which extent?

(H2) The results are expected to reveal that the participants will do significantly better when their dominant learning style relates to their instructional method (Gilakjani, 2012, p. 108).

In addition to providing answers to the two research questions, I will also briefly look into classroom application and add my recommendation to the conclusion (section 5.3).

1.5 Delimitations of the Research

This research is limited in numerous ways. Firstly, it is circumscribed to three intact groups of students who are in the fourth year of the higher general secondary education at the Comenius College in The Netherlands. Secondly, the duration of the study is confined to a period of approximately four weeks due to availability constraints within the students' time schedule. Thirdly, only one type of test concerning vocabulary will be

given to the students, which means that only one kind of word knowledge gains will be obtained, namely breadth of knowledge (see 1.6). As a result, the assessment method restricts us to a one-dimensional illustration of what is happening as a consequence of the applied treatments. Finally, the research is limited to the effects of three explicitly employed methods on the students' retention of English vocabulary items. The students' learning style preferences will also play a role in the process. Notwithstanding, the limitations mentioned allow this study to be narrowly focussed to meet the research objectives.

1.6 Definition of Terms

(1) L2 Vocabulary Acquisition (Word Retention)

In the context of this study, the term 'L2 Vocabulary Acquisition (Word Retention)' is used to refer to Dutch students learning and recalling new English words through direct instruction. The focus is mainly on the students' acquisition of breadth word knowledge, which is based on learning the meaning of the words (Shen, 2008).

(2) Teaching Methods

McCormack, Gore and Thomas (2006) asserted that teachers should practically apply the theories presented to them during their education on their field teaching experience in order to examine their effectiveness on the students' learning. In accordance with McCormack et al., this study chose three teaching methods, combined with mnemonics, from a list of language learning theories the author studied during the 'Second Language Learning and Teaching (SLLT)' course at Leiden University to carry out this research. As is stated in the purpose of the study, the approaches in question are CBI, TBL and VL, complemented by the visual, verbal and physical response techniques. These teaching methods are selected, because of their suitability for the objective of this study (see 3.3).

(3) Learning Styles

The term 'Learning Styles' can be defined as the manner in which an individual typically acquires, retains and retrieves data (Felder & Henriques, 1995). There

are several inventories that are utilized to assess learning styles, e.g. Kolb's framework (Nilson, 2010). For this research, the VAK learning style model will be used to ascertain the students' preferred learning style. The VAK-model is chosen as it divides learning into three modalities, i.e. visual (V), auditory (A) and kinaesthetic (K), as cited by Weinberg (2009), which makes the concept of linking one of each learning style to one of the applied teaching methods a reality (see 3.2.1).

A more detailed analysis of the terms mentioned above can be found in chapter two.

1.7 Overview of the Thesis

This thesis is distributed into five chapters, which is as follows: chapter one covers the introduction of the topic and rationale of the study. The second chapter provides a review of the relevant literature that relates to L2 vocabulary acquisition, the teaching and mnemonic methods used as well as the learning styles. In the third chapter, an exposition of the theoretical point of departure for the present study is presented. Chapter four, in turn, presents the results and the quantitative data collected in the research. The concluding remarks are discussed in chapter five, which also comments on pedagogical limitations and offers suggestions for further research.

CHAPTER 2: LITERATURE REVIEW

This chapter, which is divided into three sections, provides a broad review of the literature that centres on the key aspects relating to the topic of the present study. The first section discusses several elements of vocabulary acquisition, i.e. its definition, the approaches and vocabulary teaching strategies involved as well as the process of vocabulary acquisition. The second part addresses both the empirical and theoretical facets of the employed teaching methods: content-based instruction, task-based instruction and visual learning. The third and final section covers relevant information concerning learning styles. The literature review also highlights previous research done on the various aspects pertinent to this study.

2.1 Second Language Acquisition

In his book *Second Language Learning and Language Teaching*, Cook (2008) postulates that the term second language acquisition (SLA) includes “all learning of languages other than the native tongue, in whatever situation or for whatever purpose” (p. 12). In the field of SLA, the teaching and learning of vocabulary have been undervalued throughout its varying stages and up to this present day (Zimmerman, 1997, p. 5). However, Harley (1995) reports that “emphasis on the importance of the lexicon in language acquisition, use, and education is growing in second language... As documented by Meara (1987, 1992), the past decade has witnessed exponential growth in lexically oriented L2 research” (p. 1). A number of researchers have made outstanding contributions to SLA. Nation (1990, 2001), in particular, has contributed tremendously to the field of vocabulary acquisition and instruction with his on-going research. His books *Teaching and Learning Vocabulary* as well as *Learning Vocabulary in Another Language* are useful tools for language teachers, learners and all other acquisition specialists. Therefore, his work is included in this study. Section 2.1.1 will provide a more in-depth explication of L2 vocabulary learning.

2.1.1 L2 Vocabulary Acquisition

Vocabulary acquisition is “the process of learning the words of a language” (Nordquist, 2014, para. 1). A relatively similar and more extensive description is given by Coady (1997a), who refers to the term ‘vocabulary’ as the body of words used in a particular

language, which serves as a valuable and fundamental tool for communication as well as acquiring knowledge. He asserts that word knowledge is an indispensable element of communicative competence, and it is essential for production and comprehension in a second language (L2). Therefore, vocabulary acquisition is at the heart of mastering a foreign language (Rubin & Thompson, 1994, p. 79). Taylor (1992) is in concurrence with Rubin and Thompson, opining that “vocabulary permeates everything language learners or language teachers do in an English language class, whichever skill or language point is being practised” (p. 30). Consequently, language learners with a large and rich vocabulary knowledge improve their receptive skills (listening and reading), productive skills (speaking and writing) and their thinking abilities (Smith, 1998, p. xv). On the contrary, students with a restricted vocabulary are likely to be limited in their educational development.

With regard to the term ‘acquisition’, Ellis (1985) broadly defines it as “the internalization of rules and formulas which are then used to communicate in the L2” (p. 292). In comparison, Krashen (1987) describes the word ‘learning’ as “conscious knowledge of a second language, knowing the rules, being aware of them, and being able to talk about them”, which includes “formal knowledge of a language, or explicit teaching” (p. 10). In this sense, the terms ‘acquisition’ and ‘learning’ can be viewed as being synonymous with each other and it is for this reason that the concepts as well as terms vocabulary acquisition and vocabulary learning are utilized interchangeably throughout this thesis.

2.1.2 Implicit Versus Explicit Vocabulary Learning Approaches

According to Schmitt (2000), there is no ‘right’ or ‘best’ approach to vocabulary learning (p. 142). However, it could be noted that the best practice for vocabulary acquisition, in any situation, will most likely depend on a number of factors, e.g. the type of learner, the targeted words, the school system and syllabus. Researchers, such as Nation (1990, p. 2), Rubin and Thompson (1994, p. 79) as well as Richek et al. (1996, p. 203) suggest two main approaches dealing with vocabulary acquisition, namely the direct vocabulary learning approach and the indirect vocabulary learning approach. These approaches correspond respectively to the intentional-incidental debate, which is that of explicit versus implicit vocabulary acquisition.

'Direct' or 'explicit' vocabulary learning encompasses conscious learning processes, in which language learners acquire vocabulary explicitly, either in context or in isolation, through direct instruction in both the meanings of individual words and word-learning strategies (Liangpanit, 2013, pp. 110-111). This is what Hulstijn (2001) perceives as intentional vocabulary acquisition, which is "any activity geared at committing lexical information to memory" (p. 271). It suffices to say that the focal point of this approach is to teach vocabulary directly to students in order to enhance the chance of new vocabulary acquisition.

'Indirect' or 'implicit' vocabulary learning, on the other hand, is concerned with the unconscious processes of learning through reading or listening without necessarily being aware of the goals of learning: new words are procured incidentally while reading extensively on your own or they are attained from listening to stories, movies, television or the radio (Liangpanit, 2013, p. 111). This is in line with Hulstijn's classification of incidental vocabulary acquisition, which is the "learning of vocabulary as the by-product of any activity not explicitly geared to vocabulary learning" (Hulstijn, 2001, p. 271). Thus, in this approach students absorb vocabulary simply from being exposed to rich language.

Most scholars concur that both approaches are a necessity in vocabulary acquisition (Paribakht and Wesche, 1997). For instance, a classroom-study piloted by Zimmerman (1994) among three groups of ESL students has shown a significant increase in the vocabulary knowledge of the L2 learners who were exposed to both interactive vocabulary teaching (explicit) and self-selected reading (implicit) in comparison to the pupils who were solely exposed to self-selected reading or no treatment. Moreover, all the research subjects indicated that classroom activities as well as reading were beneficial to their vocabulary learning process. Although a combination of both approaches is essential, this study exclusively centres on words acquired explicitly through direct instruction, as this approach is more suitable and accessible to accurately measure the number of words the students recall as a result of being exposed to the three applied teaching methods (section 2.2).

2.1.3 The Process of L2 Vocabulary Acquisition

In recent decades, numerous L2 vocabulary researchers, e.g. Nation (1990; 2001), Chapelle (1998), Henriksen (1999) and Qian (2002), have proposed several but

complementary frameworks in order to define what it means to know a word. While reviewing all their models, one notices a clear consensus among these scholars that vocabulary acquisition involves various levels of knowledge and that this lexical knowledge should at least contain two primary dimensions, namely breadth, or quantity, and depth, or quality of vocabulary knowledge. The definitions of the terms 'breadth' and 'depth' are respectively "the number of words the meaning of which a learner has at least some superficial knowledge" and "a learner's level; knowledge of various aspects of a given word, or how well the learner knows this word" (Shen, 2008, p. 136).

In terms of lexical knowledge, Schmitt (2008) opines that "most vocabulary tasks focus their attention almost solely on introducing the meaning of new words" (p. 343). Nation (2001) advocates that if the meaning of a new word is conveyed by an L1 translation, which is short and draws directly on familiar experience, learning will be faster (p. 66). Accordingly, the research subjects in this study will be assessed on whether they know the meaning of the targeted words by way of translation. Laufer (1998) advises that the vocabulary items be tested in isolation to circumvent confusing results. This manner of testing fits Coxhead's (2006) classifications of reliability, practicality and validity. It is reliable due to its objective nature. Its practicality lends to the fact that it is easy to prepare, grade and will take a relatively short amount of time for students to complete. Additionally, it is valid as it assesses exactly what it is supposed to and the students do not have to portray other language skills or elements while making the test (Coxhead, 2006, p. 135). Therefore, in the present context, vocabulary acquisition or learning refers more to the acquisition of a broad word knowledge, which is only the required meaning of the word, rather than the comprehensive acquisition of all lexical characteristics of the word: in-depth knowledge. The depth of vocabulary knowledge covers components such as pronunciation, spelling, additional word meanings, register, frequency, and morphological, syntactic, as well as collocational properties (Qian, 1999).

To further elaborate on the process of the broad word knowledge as cited in the previous section, Nation's framework will be discussed. Nation (2001) examined teaching activities that could be utilized to communicate word meanings to learners. He detected four "psychological conditions that need to occur in order for vocabulary learning to take place", namely (1) the learning goal of the activity, (2) what

psychological conditions the activity uses to help achieve the learning goal, (3) the observable signs of learning and (4) the design features of the activity which set up the conditions for learning (p. 60). This study focuses solely on the first two conditions, as they are directly linked to the way in which L2 vocabulary is taught.

In order to uncover what the specific learning goal of a vocabulary activity is, instructors must cogitate all the aspects involved in knowing a word, which according to Nation (2001) are form, meaning and use at the most general level (p. 27, p. 62). They can then decide which of these is the learning objective of the activity. For instance, the aim could be to learn the spelling of the targeted words, their pronunciation or their meaning. In doing so, it is best to consider one learning goal at a time (p. 62). Determining the aim of the activity is a requirement for the second condition, which as mentioned in the previous paragraph is the psychological condition the activity uses to help realize the learning goal.

Achieving the learning goal, as quoted by Nation (2001), hinges on “three important general processes that may lead to a word being remembered”, which are noticing (through formal instruction), retrieval and creative (generative) use (p. 63). Noticing a word is the initial stage of acquiring it, which involves decontextualisation. Decontextualisation takes place when learners pay attention to a language item as a part of the language as opposed to as a part of a message. There are many ways in which this can occur, e.g. while listening, reading, during classroom discussions by means of dictionary usage or deliberate study (pp. 63-66). The following process that could lead to word retention is retrieval, which can be either receptive or productive (section 2.1.1). The former includes “perceiving the form and having to retrieve its meaning when the word is met in listening or reading”, whilst the latter encompasses the students’ need “to communicate the meaning of the word and having to retrieve its spoken or written form as in speaking or writing” (pp. 66-67). The final phase is creative or generative use, which is an essential factor in L1 as well as in L2 vocabulary acquisition. It occurs when learners apply a word in a manner that is different from the previous encounter with the word. This forces the pupils to reconceptualise the word meanings and as a result leads to a better word retention (pp. 68-69).

It is difficult to specify how much exposure to a word learned incidentally, is necessary for a student to be able to retain it, since vocabulary learning is influenced by many factors, e.g. noticing as cited in the previous paragraph. As such, the viewpoints of

various researchers concerning the number of repetitions that are needed will vary, but a consensus is upheld that five to twenty encounters of new words will suffice. Moreover, it should be noted that if the new words are not reiterated shortly after the first encounter, they will more than likely be forgotten. This is an indication that the time spent on the lexical items would have been fruitless, as each new encounter will be as if the words were met for the first time (Nation, 2001; Coxhead, 2006). For that reason, an effective vocabulary learning program should include repeated exposures to the same words over reasonably short time spans (Waring & Nation, 2004, p. 18). The repetitions have to be frequent at the outset, which should be followed by longer interims. This considerably enhances the chances of a word being remembered, especially if the words are retrieved in activities after they are initially noticed in the course of the input part of learning (Wesche & Paribakht, 2000; Nation, 2001; Coxhead, 2006). Nation (2001, p. 35) further posited that explicit learning programs should have activities that encompass “depth of processing through the use of images, elaboration, and deliberate inferencing”. What is more, Laufer and Hulstijn (2001) state that incidental vocabulary learning is successful if supplemented by tasks that are created to induce student involvement. The aforementioned was taken into consideration while planning the lessons for this study.

2.1.4 Strategies Employed in Vocabulary Teaching

Researchers such as Campillo (1995) and Frisby (1957) are in agreement that some form of vocabulary teaching is favourable in conveying the meanings of new words and advocate for the use of various strategies as well as types of tasks. Frisby (1957) underscores that it is teachers’ duty to be proficient and innovative in the application of methodologies for vocabulary instruction (p. 98). This is particularly significant since students have diverse learning styles and as a result respond differently to the same activity (Harmer, 2004, pp. 45-51). Thus, it is safe to say that instructors of ESL/EFL classes should apply different strategies to vocabulary teaching, so that students could enhance their vocabulary repertoire more effortlessly.

Scrivener (2011) asserts that teachers should employ the most common technique termed the presentation-practice route if they want to quickly convey the meaning of one or more lexical items. In the presentation stage, educators are to offer cues, pictures or information about the target words and elicit the items from students

or model them themselves. In the process, the instructors are to check whether the pupils have understood how the target words are formed, what they mean and how they are utilized. This is followed by the practice phase, in which the learners practice the words in different activities, e.g. by repeating them, using them in a short dialogue, etcetera (p. 189). In order for the presentation-practice route to be implemented successfully, it is essential for teachers to know how many vocabulary items to present in the course of one lesson. This is closely connected with several factors: the level of the students (beginners, intermediate etcetera), their familiarity with the pre-selected words, the difficulty of the items, whether the words can be easily illustrated and if realia or pictures can be used to elicit vocabulary (Thornbury, 2002, pp. 75-76). It may be impossible to be dogmatic in selecting the lexical items. However, Gairns and Redman suggest an average of eight to twelve new words as a reasonable input, the lower figure being more suitable for primary school students and the higher one for the more advanced classes (as quoted by Campillo, 1995, p. 43). Since the focal point of this study is based on students eliciting the meaning of the target words, the presentation-practice route will be incorporated when designing the lessons. In doing so, the researcher will also take Gairns and Redman's recommendation into account by pre-selecting twelve items for the treatments.

Another strategy worth mentioning is the use of mnemonics. 'Mnemonics' are basic kinds of associations or strategies that learners utilize to upsurge the retention and retrieval of lexical items (Hatch & Brown, 1995). Thompson (1987) places these mnemonic strategies into five categories, i.e. linguistic, spatial, visual, verbal and physical response methods. The latter three are the mnemonic techniques used in this study, as they clearly relate to the learning styles of the VAK model, which is explicated in section 2.3.2.

According to Amiryousefi and Ketabi (2011), visual mnemonics comprise 'pictures' and 'visualization or imagery'. In vocabulary acquisition new words are often paired with their meanings or equivalents. However, if these words are paired with the two aforementioned visual mnemonic tools, they can be better recalled. Utilizing pictures, in particular, can be useful for portraying concrete words. Conversely, abstract words can be acquired through visualization or mental imagery. In visualization or mental imagery, the learner envisions a picture or scene which is related to the target word (p. 180). To date, numerous studies have proved the value of the previously

mentioned visual techniques in teaching vocabulary, which comes as no surprise as “psychologically, 83 percent of all learning begins through the eyes” (Green, 1984, as cited in Kupsch & Graves, 1993, p. 7). Researchers at the University of Wisconsin, for example, discovered that learning improved up to 200 percent when visual aids were applied in teaching lexical items. Likewise, studies conducted at Harvard as well as Columbia revealed that audio-visuals improved retention from 14 to 38 percent over presentations where no visuals were utilized (Kupsch & Graves, 1993). Those findings were similarly supported in the study done by McCormack and Pasquarelli (2010). They maintain that in many instances the easiest and most effective way to present a new word to learners is through an optical aid (p. 76). It suffices to note that pictures should not be inadmissible when presenting vocabulary items in a classroom setting and the teaching staff should always seek out new methods and visual technologies to enrich the learning environment and retention of their class participants. A more detailed explanation of visual learning, including more research advocating the use of visual mnemonics, is provided in section 2.2.3.

The verbal mnemonic technique that this study adopts is ‘story-telling or the narrative chain’. This is classified as a method in which the learner initially reads a text out loud and then connects the targeted words with a new topic or multiple subject matters, and later links them together by creating a story featuring the words. This strategy is suitable for advanced students. The new topics are entirely selected by the pupils, which makes the task interesting for them and doing the additional assignment challenges the students, which is necessary for learners at every educational level (Amiryousefi & Ketabi, 2011, p. 180; Scrivener, 2011, p. 326). In part 2.1.3, it was discussed that each new encounter of a word brings about its retrieval, and in this section its significance and relation to the verbal strategy ‘story-telling or the narrative chain’ will be highlighted. When a word is only met through a reading or listening activity, the retrieval is receptive, which indicates that only the receptive knowledge of the learner is strengthened. Contrarily, if the subsequent activities require productive retrieval, e.g. by querying the student to produce the targeted words in a task, productive knowledge will be strengthened (Wesche & Paribakht, 2000). Although it is generally known that learners have more receptive than productive knowledge in vocabulary learning, one would concur that lexical items that are known productively are better recalled than those that are known receptively (Schmitt, 2000). Laufer (1998)

strengthens this claim by affirming that it requires more effort for a pupil to produce output, which causes deeper processing and this, in turn, results in better retention of the new words. In sum, the generative use of the target words, in this case creating a story with the items, will be beneficial for the students and should be considered when planning, for example, a CBI lesson.

In the physical response method, which is the final mnemonic tool used in this study, the student should move his or her body or a part of it in a certain way that exemplifies the definition of the word (Amiryousefi & Ketabi, 2011, p. 180). This is identified as a demonstration or miming technique which uses actions, gestures or facial expressions to illustrate new vocabulary items (Klippel, 1994). Thompson (1987) underlines that if the information of a lexical item or a sentence is enacted, these words can better be recalled. It is for this reason that the game 'Charades', in which acting out the language items is a prerequisite when playing the game, was selected, as it was applicable to this particular mnemonic device. The explication on the benefits of playing games in a classroom setting, including which factors teachers should take into account when choosing a game, is provided in fragment 2.2.2A.

A few studies done on mnemonic devices have consistently indicated that the usage of mnemonic tools considerably boosts higher levels of retention in immediate and delayed recall of L2 vocabulary words in comparison to other learning strategies (Raugh & Atkinson, 1975; Carlson, Kincaid, Lance & Hodgson, 1976; Roediger, 1980; as cited by Amiryousefi & Ketabi, 2011, p. 181). Nevertheless, such memory strategies should not substitute other teaching methods, but rather complement them (Amiryousefi & Ketabi, 2011, p. 181). In view of this, the three selected mnemonic techniques were each integrated into one of the three teaching methods employed in this research. This is noted in greater detail in sections 2.2 and 2.3.1.

2.1.5 Further Research on L2 Vocabulary Acquisition

This research centres on words acquired explicitly through formal instruction. Thus, only prior works that are of relevance to this topic will be discussed.

Section 2.1.2 argues that a combination of both the direct and indirect approaches to vocabulary learning and teaching is necessary. However, more attention should be paid to intentional vocabulary acquisition, as this approach "almost always leads to greater and faster gains, with a better chance of retention and of reaching

productive levels of mastery” (Schmitt, 2008, p. 341). In three of her studies, Laufer (2005), as cited by Schmitt (2008), reported that explicit vocabulary assignments led to approximately 70% of the lexical items being remembered by the students on immediate receptive post-tests. Even though the students’ test scores decreased to 21-41% on the two-week delayed post-tests, she claimed that the results exceeded those that were reported from incidental learning (p. 341). Likewise, in Smith’s study, the results showed that the targeted words, which were utilized and focussed upon in interactive exercises on an internet chat program, were recalled very well, i.e. 80-90% (2004, as quoted by Schmitt, 2008, p. 341). Overall, these findings, along with Schmitt’s statement, clearly indicate the necessity of having an explicit component in vocabulary teaching. Therefore, the teaching methods used to instruct the lexical items explicitly are presented and contrasted in the following chapter.

2.2 Teaching Methods

The term ‘teaching method’ is used in most cases as “a broad cover term for the different activities that go on in language teaching” (Cook, 2008, p. 235). Selecting an instructional method that is ‘right’ for a particular lesson depends on various aspects, such as the students’ developmental level, the subject-matter content, the objective of the lesson and material resources. Theoretically, there is no one ‘right’ method for vocabulary teaching, but there are some criteria that apply to each method that can help an instructor make the best decision possible (Nisha, 2006, p. 115). The three teaching methods that are correlated to this research, namely content-based instruction (CBI), task-based learning (TBL) and visual learning (VL), in which the verbal, physical response and visual mnemonic techniques (section 2.1.4) are incorporated respectively, will be elucidated in the following sections: 2.2.1, 2.2.2 and 2.2.3. The explanation of the teaching methods will be ensued by relevant information concerning learning styles and their applicability in this study (section 2.3).

2.2.1 Content-Based Instruction

Content-based instruction (CBI) is described by Van de Crean (2001) as “any form of language education in which subject matter is taught in a second or a foreign language”. CBI is tantamount to CLIL, which is the acronym for content and language integrated learning (pp. 209-210). The CBI or CLIL teaching method is a fast growing phenomenon

in Europe as well as in the rest of the world. School organizations all over Europe have adopted one or more of the CBI models¹ (Van de Craen, Ceuleers & Mondt, 2007).

CBI can be an effective approach to second or foreign language instruction at all educational stages, from elementary school to university level. Both Short (1994) and Stoller (2004) approve of this proclamation by stating that students who were taught through CBI completed their course with improved language skills and content-area knowledge gains.

The CBI method affords content-based language surroundings where contexts exhibit the practical value of the target words. In a synthesis of research studies carried out by Coady (1997b), evidence was accumulated that exposure to meaningful as well as comprehensible language improves vocabulary knowledge. Coady stated that “if the language is authentic, rich in content, enjoyable, and above all, comprehensible, then learning is more successful” (p. 286). In terms of authenticity and enjoyment, Scrivener (2011) proposes selecting a text, in which the words are incorporated, from relevant up-to-date sources, such as websites, songs, magazines and movies among others (p. 326). Hence, it is prudent to come up with or select a story that relates and caters to the students’ interests for a CBI lesson.

A. The Models of Content-Based Instruction

According to Snow (2001), and as mentioned in the previous section (2.2.1), content-based models can be encountered in both foreign and second language settings. These models vary in implementation due to a number of factors, such as educational setting, program objectives, and target audience. Nonetheless, they all share a common point of departure, which is the integration of language teaching goals with subject matter instruction. ‘Immersion’ is perhaps the most renowned model, in which learners study math, science, social studies, and other school subjects in the target language, thereby acquiring academic content and language simultaneously. Another CBI model is the ‘sheltered model’, which is commonly found in ESL programs. The academic courses are in the target language, but they are specifically tailored for groups of L2 learners, who are said to be sheltered from having to compete with native speakers during class. There is also the ‘adjunct model’, in which the students concurrently enrol in an academic program taught in the foreign language and a special language course that

¹View section 2.2.1A.

helps strengthen the academic content. The final model is the ‘theme-based model’, in which selected topics or themes provide the content from which instructors extract language learning exercises(pp. 303-309). The theme-based prototype is the CBI model used in this study.

The theme-based model is the most prevalent CBI model in foreign language classrooms at the secondary school level. Practically all major foreign language textbooks used in these classroom settings are now arranged, at least partially, around specific topics. In the chapters or units of these theme-based course books, vocabulary items are also presented in theme-related clusters e.g. family, sports, music and travel. Even though the words are grouped by topic, it is the teacher’s responsibility to introduce these vocabulary items in a manner that contextualizes them and assists students in learning their meaning. The ways in which this can be done are explicated as follows: (1) utilize the word in real-life contexts related to the learners’ experience,(2) ask simple questions in which the word is used, (3) have as many repetitions of the word as possible (Bateman, n.d., pp. 1-3).

Bateman (n.d.) offers an explanation of the first technique by means of an example. He suggests that if ‘mountain’ is the word the students should procure, then the teacher can mention the names of famous mountains or discuss various activities that can be done in the mountains (p. 2). To expound on the second strategy, Ray and Seely (2004) posit that “if the word is a noun, ask if a student likes it. If it is a verb, ask if s/he does it” (p. 36). The questions that the teacher asks will differ depending on the type of words the students are to learn. The third approach is a combination of the previous two tactics, in which the words are to be repeated as many times in real-life contexts. What is more, repetition helps store the word meaning in the students’ minds. To conclude, it can be noted that theme-based activities should be taught in the L2 and have a real-life communicative purpose entailing three modes: the interpersonal mode, as the learners are to interact with the instructor and each other about the theme; the interpretive mode, as students have to read or listen to topic related texts; and the presentational mode, as pupils are to prepare verbal or written expositions on the subject matter in the target language (Bateman, n.d., pp. 3-5). Thus, when planning a lesson, those three practical points should be implemented.

B. Previous Research on Content-Based Instruction

Research done by Xanthou (2010) specifies the significance of learning vocabulary in context. In her study, which consisted of three groups of students, the CLIL group, which was taught through the L2, outperformed the group that was exposed to the traditional word list method² as well as the group that received instruction of the subject matter through the medium of L1. Her findings concerning the CLIL approach to vocabulary learning seem to verify the impact that CBI has on content and L2 vocabulary development, as her vocabulary test results revealed that by attaching words to their surroundings, the chances of comprehension and retention are increased.

2.2.2 Task-Based Learning

The task-based learning (TBL) teaching method, as quoted by Cook (2008, p. 17), “sees learning as arising from particular tasks the students do in the classroom and has been seen increasingly as a logical development from communicative language teaching”. He affirms that the TBL approach is predominantly learner-centred and that it contains two variants, namely ‘focus on meaning (FonM)’ and ‘focus on form (FonF)’. In FonM “the point of the task is not to master a specific language point, but to achieve a particular non-language goal”, whereas FonF “emerges out of a task rather than being its starting point or sole rationale” (Cook, 2008, pp. 257-259). Consequently, “in FonF a task is carried out and the explication takes place after the event rather than as it happens” (Cook, 2008, pp. 257-259).

In terms of the word ‘task’, Littlewood (2004) expresses the following: “definitions of ‘task’ range along a continuum according to the extent to which they insist on communicative purpose as an essential criterion” (p. 320). He notes that the continuum includes three viewpoints put forward by researchers. At one end of the spectrum, there are scholars who do not consider the communicative purpose to be an important criterion at all. Breen (1987), for instance, refers to tasks as learning activities ranging from the simplest and brief assignments to the more protracted and intricate exercises such as group problem-solving or reproductions as well as decision making (p. 23). Estaire and Zanon (1994) adhere to Breen’s broad classification, whilst differentiating two main categories of tasks within it, namely ‘communication tasks’ and ‘enabling tasks’. While carrying out communication tasks, the learner’s attention is

²Learning words accompanied by their translation from a wordlist (Xanthou, 2010).

focussed on meaning rather than form, whereas the focal point of enabling tasks is on linguistic aspects such as vocabulary, grammar, pronunciation, functions and discourse (pp. 13-20). Cook's description, which was alluded in the previous paragraph, is akin to Estaire and Zanon's definition, of which FonF, also termed enabling tasks, is the basis of the task-based part of this research.

Moving along to the centre of the scale, there are authors who do not solely classify tasks in communicative terms, but rather think of them as mainly involving communication. In compliance, Stern (1992) relates tasks to 'realistic language use' while declaring that "communicative exercises provide opportunities for relatively realistic language use, focusing the learner's attention on a task, problem, activity or topic, and not on a particular language point" (pp. 195-196).

Finally, at the other end of the continuum are the researchers who view a task as entailing only activities that involve communication. This perception is held by Willis (1996), who avowed that "tasks are always activities in which the target language is used by the learner for a communicative purpose in order to achieve an outcome" (p. 23). Ellis (2000) asserts that this communicative depiction now epitomizes a broad consensus among researchers and educationalists (p. 195).

A. The Task-Based Learning Framework

As cited by Cook (2008) in his book *Second Language Learning and Language Teaching*, Jane Willis (1996) has provided a useful framework for task-based learning, which comprises three key elements: the pre-task, the task cycle and the language focus (p. 260).

The pre-task is given at the commencement of the lesson, in which the teacher introduces the topic, clearly explicates the instructions concerning the task to the students and provides them with an example of the task. The following phase of the lesson is the task cycle. This phase is divided into three components, namely task, planning and report. Throughout the 'task' period, the students are executing the task in pairs or groups, whilst the instructor observes and encourages them. During the 'planning' stage, the pupils discuss the manner in which they will report their results to the instructor as well as their classmates and in 'report' they present their findings. Lastly, language focus takes place in the final phase of the lesson, during which two things occur: analysis and practice. In 'analysis', the educator briefly discusses the

outcome of the task with the students and in 'practice' the learners receive an additional assignment to ensure that they attained the required language feature (Frost, 2004; Cook, 2008, p. 260).

Richards and Rodgers (2001) theorise that the types of activities compatible with a communicative approach, such as TBL and its framework, are unlimited (p. 165). In spite of this, games and problem-solving assignments, which are task-based, are viewed as the most preferable communicative tasks, as they can help learners to utilize the language creatively (Saricoban & Metin, 2000). With reference to 'games, some scholars define them as "an activity with rules, a goal and an element of fun" (Hadfield, 1998). Games, involving all these components, offer a number of benefits for the purpose of teaching vocabulary, e.g. games are student-centred, they are stimulating and amusing for learners, they afford a lower-anxiety environment and they can help pupils concentrate more on what they are learning, as learning is not compelled (Ersoz, as cited in Azar, 2012; Friermuth, as cited in Uzun, 2009). Hence, a game, i.e. charades³, was selected for the TBL lesson. Deesri (2002) advances that in order to use games in class, it is of importance for teachers to clearly explain the rules of the game to the students and to make sure they understand them before playing. What is more, providing a demonstration of the game is beneficial to the learners. In addition, there are also several other factors that instructors should take into account when deciding which game to use. For instance, they should select a game that fits the students' language level as well as the purposes of the lesson. In planning the TBL lesson, all these aspects, along with Willis' framework, were considered. As the main focus of this dissertation is on the students' acquisition of vocabulary, only previous research that is relevant to this topic will be presented in the following section (B).

B. Previous Research on Task-Based Learning

Relatively few research projects have been carried out with respect to vocabulary acquisition from a task-based perspective (Lee, 2011, p. 15). A study conducted by M. de la Fuente (2006), in which the effects of three vocabulary methods (two task-centred and one traditional) were examined, has shown that the style of pedagogical approach had no influence on the direct retrieval of the targeted word forms. The results did, nevertheless, reveal a link between the type of pedagogical method and the long-term

³A game in which students try to guess which word is written on a card by watching a classmate act it out.

retrieval of targeted forms. Overall, the task-centred lessons were found to be more effective than the traditional lessons. The findings also suggest that the efficacy of the task-centred lessons is at variance due to the manner in which the modules were utilized in order to promote acquisition of word morphological features, as the task-centred lesson with an overt FonF element was more effective than the one in which this component was omitted. Moreover, the research concluded that the FonF module was more expedient if placed at the end of the lesson, rather than at the commencement of class (p. 263). The following section sheds light on the third employed teaching method.

2.2.3 Visual Learning

Studies on mnemonic techniques have been surfacing since the 1800s. However, in-depth research on visual-imagery techniques was not done until the early 1900s (Cohen, 1987; Higbee, 1979).

In visual mnemonics, the word, phrase or sentence in combination with its visual imagery serves as a mediator between what is known and what is to be acquired (Cohen, 1987, p. 44). Overall, vocabulary items in their written form are considered to be visually unattractive and so common to students that such items do not permit visual distinctiveness, which causes the written words and their definitions to be less memorable. As a result, pictures are frequently utilized in language classes, for they are perceptually richer than words and their “visual distinctiveness lends them an advantage in memory” (Oates & Reder, 2010).

Apart from the perceptual characteristics of images, e.g. shape and colour, learners additionally store a verbal marker, which “enriches the memory trace and provides redundancy” (Oates & Reder, 2010). Consequently, learners have two codes for an image rather than one, which automatically generates binary interpretations.

A. The Criteria for Visual Imagery

Researchers have devised several theories regarding the effective usage of visual imagery as far as vocabulary learning is concerned. Kirkpatrick (1894, p. 605), for example, proposes the use of vivid pictures, whereas Roth (1918) suggests utilizing images that are unusual as opposed to conventional ones (p. 9). Moreover, Roth (1918) posits that pictures should consist of two items rather than one (p. 23). Lorayne and

Lucas (1974) are in concurrence with their predecessors asserting that pictures should associate two objects in a clear and absurd manner (pp. 9-11). Higbee (1979) accumulates all the previously mentioned recommendations to formulate three criteria that will make pictorial associations as effective as possible: (1) create an image of two interacting objects, (2) make the picture as clear and vivid as possible and (3) utilize bizarre associations (p. 616). These three criteria were incorporated when selecting the pictures for the vocabulary items in the visual lesson in this study. A further explication on the criteria is given in the following paragraphs of this section.

With reference to the first criterion, Higbee (1979) itemizes a few studies that have indicated that interacting objects are better recalled than items that are illustrated alongside each other. He offers a case of two vocabulary items, namely a 'dog' and a 'broom', expressing that it would be preferable to portray the dog sweeping with the broom or flying on the broom, rather than merely sitting next to the broom (p. 617).

Pertaining to the second criterion, Higbee (1979) defines a vivid image as being "clear, distinct and strong" (p. 617). Thus, the image should be impressed upon one's mind and be depicted in more detail. A study piloted by Bower (1972) demonstrated that the research subjects who rated their images as being more vivid had a superior ability to retain them. Furthermore, Standing (1973) concluded from his research that photographs of a crashed aircraft were more easily recollected than photographs of a flying one. Hence, memory is facilitated by using vivid visual imagery.

Many scholars are in agreement with the first two criteria. Nevertheless, researchers tend to have opposing standpoints regarding the effects of 'bizarreness', which is the third and final criterion. According to Cohen (1987), the idea of creating bizarre images was initially promoted by Yates in 1966 and has since gained prominence (p. 46). In their study, Andreoff and Yarmew (1976) found that unusual imagery proved to be more effective in delayed recall. However, other studies, e.g. Wollen, Weber and Lowry (1972), have established that there is no substantial difference between bizarre and plausible images where effectiveness is concerned. In addition, Wollen et al. (1972) postulate that the positive outcome attributed to the bizarreness of pictures were likely caused by other factors, such as the interaction, uniqueness or vivacity of the imagery. Generally, these factors are often entwined with unusual pictures, meaning that bizarre images are usually more vivid and unique than the plausible ones. At any rate, the use of bizarre pictures have brought about equal or

better outcomes than plausible images in recall. Accordingly, it can be noted that the third criterion should not be disregarded too easily. Joshua Foer, the 2006 U.S.A. memory champion, concurs with the aforementioned statement, insisting that if you want to make a concept more memorable, you should make it crazy, weird, bizarre, sexy and stinky (Jackhalzen, 26th September 2011). Foer's remark, coupled with his success, are strong advocates of the final criterion. All of the above mentioned factors lend themselves to be suitable for the visual vocabulary lesson that was examined in this study.

B. Previous Research on Visual Learning

In their research, Pressley, Levin and Delaney (1982) discovered that visual mnemonic devices are more advantageous than verbal mnemonic devices. Kirkpatrick (1894) obtained comparable results: a few of his research subjects were presented with the names of objects, while the remaining participants were shown the actual objects; those who viewed the real items were able to immediately recall slightly more objects than their counterparts, which increased to seven times as much after a period of three days. Moore (1919) advances that the usage of real objects yielded better results than images of the same items. Nonetheless, utilizing actual objects is not always practical for language teachers, which is why pictorial devices are usually applied during lessons. Furthermore, these studies show why pictures should be paired with words to make the words more memorable.

The principles of effective visual imagery, which were expounded upon in section A, apply to mental as well as optical images. Yet, this raises the question as to whether one type of imagery exceeds the other. In a comparative study including children (1st and 2nd graders), older children (6th graders) and adults, it was revealed that the younger pupils faced more challenges while creating proper mnemonic associations in comparison to the older group (Pressley, Levin & McCormick, 1980), and the adults performed consistently well when producing their own interactive mental concepts as when they were given pictorial ones (Pressley, Levin & Delaney, 1982). Therefore, for the research subjects of this study, utilizing self-made mental images or constructed optical ones should have no impact on the results. That being said, the subjects receiving the VL instruction will complete vocabulary assignments with both pictures and mental imagery.

2.3 Learning Styles

Keefe and Ferrell (1990) describe the term 'learning style' as "the composite of characteristic cognitive, affective, and physiological factors that serve as relatively stable indicators of how a learner perceives, interacts with, and responds to the learning environment" (p. 59). A relatively comparable and more succinct classification is given by Felder and Henriques (1995), who define learning styles as "the ways in which an individual characteristically acquires, retains, and retrieves information" (p. 21). Smith and Renzulli (1984) suggest that these clarifications vary from "concerns about preferred sensory modalities (e.g. visual, auditory, tactile) to descriptions of personality characteristics that have implications for behaviour patterns in learning situations (e.g. the need for structure versus flexibility)" (p.45).

According to Gilakjani (2012), several researchers have endeavoured to create new avenues for the effectiveness of learning styles in the classroom, taking the variety of students' learning styles into consideration. As an example, Gilakjani(2012) posits the statement made by Dunn and Dunn (1978), claiming that if students are familiar with their preferred learning styles, they will attain higher scores, have more positive attitudes towards learning, and be more proficient if they are instructed in ways to which they can relate more easily (p. 108). Hence, it is beneficial to the instructor to teach students in their favoured style, rather than taking a one-size-fits-all approach to teaching. The development of Contract Activity Packages is one option teachers can make use of. These packages refer to educational plans that aid the learning process by means of utilizing a number of elements, e.g. multisensory resources that teach the necessary data and assignments through which the newly procured information can be used in a recreational manner. Moreover, a pre-test, self-test as well as a post-test can also be administered for evaluation purposes (Gilakjani, 2012, p. 108).

2.3.1 The VAK Model

There are numerous different models used to assess learning styles, e.g. frameworks by Fleming, Gardner, Kolb & Myers-Briggs (Nilson, 2010). Nevertheless, the most common type of learning style inventory divides learning into three types, namely visual, auditory and kinaesthetic, aptly known as the VAK model (Weinberg, 2009, p. 29).

The learning styles the VAK model comprises are explicated as follows: the visual learning style (V) focuses on the acquisition of knowledge presented through videos,

graphs and pictures, whereas the auditory learning style (A) places its emphasis on the obtaining of data through lectures, listening tasks (reading out loud in the classroom or storytelling) and discussions. The kinaesthetic learning style (K) is based on a hands-on approach to teaching, in which the best results are achieved when the learners interact with the physical world, i.e. problem solving through movement, e.g. role-play and acting (Gilakjani, 2012, pp. 105-106; Fewings, n.d.).

The VAK framework was established in 1920 by educationalists as well as psychologists, such as Fernald, Keller, Gillingham, Orton, Montessori and Stillman (Dunegan, 2008). It has proven to be a prevalent and guileless way to ascertain different learning styles. Dreeben (2010), for example, notes that the practical method of the VAK assessment, which includes inquiring learners about the manner in which they obtain information, is a strong motive for employing the model in the educational field. Byrnes (2010) is in agreement with Dreeben, stating that “the VAK model can be utilized to assist in incorporating different learning techniques into classroom instruction and activities” (p. 4).

2.3.2 Previous Research on Learning Styles

A study done by Dunn and Dunn (1979) using the VAK model showed that approximately 20-30% of their students are auditory learners, whilst 40 % of them are visual. The remaining research subjects, which ranged from 30-40%, are either kinaesthetic learners or an amalgam of the latter two learning styles (p. 240). Likewise, Gilakjani (2012) utilized the VAK theory in his research in order to discover the favoured learning style of EFL (English as a Foreign Language) learners at the Islamic Azad University of Lahijan, Iran. His results revealed that the majority of his research subjects, which is 50%, are visual learners, whereas 35% of the participants turned out to be auditory and the remaining 15% of the students are kinaesthetic. It is apparent from the findings in both studies that the visual learning style surpasses the other two.

2.4 Overview of Research Questions and Hypotheses

The purpose of this research is to examine which explicitly employed teaching method affects the students’ retention of English vocabulary items most favourably. The study also aims to determine whether the students would attain better test scores if their

learning style matched their method of instruction. This section offers a brief discussion on the research questions and hypotheses found in section 1.4.

- (Q1) Which employed teaching method yields the best test results in terms of the students' retention of English vocabulary items?
- (H1) As mentioned in section 2.2, three teaching methods will be under investigation, namely CBI (2.2.1), TBL (2.2.2) and VL (2.2.3). When comparing these three innovative approaches, CBI (the theme-based model) can be considered the most commonly applied method, since it is implemented in many schools. Accordingly, CBI is the instructional method that students are now accustomed to. TBL, on the other hand, is a student-centred approach, which developed from communicative language teaching. In TBL the students are responsible for their own learning process. Therefore, the instructor mainly coaches and guides the process. Then there is the VL method, in which pictures and videos are used to depict a real life situation. The VL method is becoming indispensable in classroom settings. Many teachers utilize a smart board to facilitate all three methods. However, it is unclear which approach is most effective.

It can still be hypothesized that the VL method will produce the best test results on the students' recall in this study, as research has shown that the majority of learners are visual (as stated in section 2.3.2) and due to the fact that visual aids such as PowerPoint will be used during the lessons in the present research. Moreover, Oates and Reder (2010) acknowledge that pictures should be frequently utilized in the classroom environment, as they are perceptually richer than mere words, further reiterating the advantage of the VL method over the CBI and TBL approaches.

- (Q2) Do the students perform better if their dominant learning styles correlate with their mode of instruction and if so, to which extent?

(H2) From research done for this paper on learning styles (section 2.3), it became evident that when instructors are aware of their students' preferred learning style, they should integrate different learning strategies into their teaching as well as into assignments they give to the students. In this manner, they would be catering to the needs of their pupils, rather than opting for a one-size-fits-all approach to teaching. In addition, Gilakjani (2012) advances that if students are aware of their preferred learning styles, they will attain higher scores, have more positive attitudes towards learning and be more proficient if they are taught in ways to which they can relate more easily. Doing so would facilitate greater learning outcomes and an enriched experience for participants when their dominant learning style relates to their instructional method.

CHAPTER 3: METHODOLOGY

This chapter focuses on the methodology employed to carry out the current study. The chapter includes a detailed account of the research subjects, the designs of the instruments, the data collection procedures as well as the methods of data analysis.

3.1 Participants

The research subjects that were selected for this study are students who are enrolled at the Comenius College in Capelle aan den IJssel, which is a secondary school located in the Netherlands. The students are all in their fourth year of higher general secondary education (HAVO 4) and their first language as well as their general medium of instruction is Dutch. Based on the number of lessons that were required for this research, three already existing intact groups were chosen, as they were the only classes that the researcher had access to, with students who are assumed to be at the same level of proficiency in the English language.

The initial number of students taking part in this research were 73 (EG1: 24, EG2: 26 & EG3: 23). However, participants that were absent during the class treatments or missed one or more assessments were excluded from the study. This measure was taken to guarantee that the conditions of this research would remain consistent and the findings reliable. Ultimately, the total number of research subjects comprised 61 students and the three different classes were randomly assigned to an instruction method as follows:

- (1) The first experimental group, EG1, encompassed 21 students who received the content-based instruction treatment in the form of the verbal method: story-telling or the narrative chain. The subjects in this group were mainly exposed to the auditory learning style method of learning.
- (2) The second experimental group, EG2, consisted of 20 students who received the task-based learning treatment in the form of the physical response method. The participants in this group were primarily exposed to the kinaesthetic learning style manner of learning.
- (3) The third experimental group, EG3, contained 20 students who received the visual learning treatment through visual mnemonics. The partakers of this group were mostly exposed to the visual learning style mode of learning.

3.2 Research Tools

This research relied on a three-group pre-test/post-test design utilizing the intentional vocabulary learning approach (Hulstijn, 2001). For the purpose of data collection, four instruments were used, namely a learning style questionnaire, a pre-treatment vocabulary test and an immediate- as well as a delayed post-test. In order to attain reliable results in this experimental study, homogenous testing was needed. If the same measurement tools were not applied, then comparing the findings would be fruitless. Consequently, all of the research subjects were assessed in the same manner. The aforementioned research tools were meant to provide accurate representations of the participants' achievements and as a calculable analysis of these research instruments was conducted, it suffices to say that this study adopted a quantitative research approach.

3.2.1 The Learning Style Questionnaire

In this study, the VAK learning style test, entitled 'Discover Your Preferred Learning Style', presented by John Fewings(n.d.) on his website www.brainboxx.co.uk, was utilized to identify the students' favoured learning style. The VAK learning style test is a diagnostic tool that places learners into one of three learning modalities, i.e. visual, auditory, or kinaesthetic. As this research employs three teaching methods, the notion of fitting one of each learning styles with one of the teaching approaches could be realized. It is for this reason that the VAK model was chosen, for it appeared to be the most suitable choice for collecting and examining the necessary data. What is more, the VAK learning style test is an evaluative instrument that is well advocated in the educational field (Byrnes, 2010; Dreeben, 2010; as cited in section 2.3.2). Byrnes (2010) posits that the results are used to create an awareness amongst the pupils themselves as well as the teachers. In addition, he opines that the findings also provide an avenue in which certain curricular aspects, including instruction, can be modified (p. 77). Thus, it could be noted that the selected VAK learning style test is a successful instrument. Moreover, it is practical and relatively easy for students to fill in. Instructors who support the 'Accelerated Learning' techniques recognise the test's simplicity (Fewings, n.d.).

The learning style test comprised of 18 questions, in which one of three choices could be made for each question (see Appendix A, p. 59). The students were to read the

three options per question and select the one that suited them best. During the treatments, the subjects were given 10 minutes to complete the questionnaire. As the learning style test was in the target language, words that the researcher thought would be problematic for the students' understanding of the questions were noted next to the 10-minute timer on the PowerPoint presentation (see Appendix H-J, pp. 72-111). The students handed in the questionnaire and the researcher personally examined the questionnaires for the results after the treatments. This was done to ensure that there was no tampering with the results amongst the students as the marking sheet was only seen by the instructor.

3.2.2 Pre-Treatment Vocabulary Test

Prior to the experiment, a vocabulary test was prepared to assess which of the selected vocabulary items the students were completely unfamiliar with. Hulstijn (2003) claims that a pre-test carried out at least one week prior to the experimental treatment will not influence the investigation process (p. 370). Accordingly, the pre-treatment test was given to the research subjects one week before the lessons. The pre-treatment test consisted of thirty words, in which the pupils were queried to provide the Dutch to English translation of each item (see Appendix C, p. 65). This confirms that only the students' broad word knowledge was tested. Furthermore, Laufer's (1998) recommendation that the vocabulary items should be tested in isolation to circumvent confusing results (section 2.1.3) was taken into account when constructing the test. The researcher opted for lexical items that would be suitable to employ in the treatments, e.g. words that the learners were able to act out. All the words were chosen from chapters five and six of the students' textbook, namely *'Of Course'*, as the students were required to study the vocabulary items of the mentioned chapters for their vocabulary examination in the upcoming test week. The aforementioned indicates that the factors put forward by Thornbury, e.g. the students' educational level (section 2.1.4) were amply considered during the selection of the lexical items to add depth and structure to the study.

3.2.3 The Immediate and Delayed Post-Test

The immediate post-test was given at the end of the treatments and the delayed post-test took place after a period of two weeks. Both tests were uniform and they were identical in appearance, format as well as context (see Appendix D, p. 66).

With regard to the number of words that should be presented in a lesson, Gairns and Redman's (as quoted by Campillo, 1995, p. 43) proposal (illustrated in section 2.1.4) was taken into consideration to help guide the research and to examine the findings. In-keeping with the allotted time of the treatments, the immediate- and the delayed post-tests encompassed twelve Dutch words requiring the equivalent English translations. The twelve lexical items were selected from the results of the pre-treatment vocabulary test. Like the pre-test, these vocabulary items were presented in isolation, so that the students' broad word knowledge could easily be measured. It should be noted that the twelve chosen words were items that were either completely unfamiliar to the students before the treatments or items that they provided a literal and incorrect translation for. There was one word that most of the subjects gave the correct meaning for, i.e. 'buitenaards', meaning 'alien'. This word was still utilized, as it is necessary for the students to acquire both English translations of the word (also 'extra-terrestrial') as both words are noted in their course book (see Appendix D, p. 66).

3.3 The Procedure of the Teaching and Mnemonic Methods Applied

Three teaching methods were employed in this study: content-based instruction (CBI), task-based learning (TBL) and visual learning (VL). These methods were selected as they fit the following criteria: (1) they are non-traditional methods that are suitable for vocabulary learning and teaching, (2) they allow instructors as well as learners to be creative, (3) they promote interactive activities, which induces student involvement and (4) the applied mnemonic techniques as well as the learning styles of the VAK model could each be integrated into each one of them.

This section gives a brief description of how each lesson was structured. The duration of each treatment was 50 minutes and the treatments were all conducted on the same day, during the students' regular class time. All the participants completed the learning style test at the commencement of the lessons and the immediate post-test at the ending. In order to obtain reliable results, the students were required to do all the assessments, including the pre-test (one week before the treatment) and delayed post-

test (two weeks later) individually. As the researcher had access to a smartboard, a PowerPoint presentation was used as an aid to instruct the students (see Appendices H-J, pp. 72-111). The pupils also received a worksheet for specific tasks (see Appendices E-G, pp. 68-71).

In the following sections 3.3.1, 3.3.2 and 3.3.3, it will be illustrated that the inclusion of the learning techniques in the instructional process that were conferred in section 2.1.4 of the literature review, i.e. the presentation-practice route (see also appendices H-J, pp. 72-111) and the mnemonic strategies, are prominent factors in the design of the lessons. Another aspect that is noticeable in the construction of the material is repetition of the target words, which was acquired through assignments containing the vocabulary items that the students revisited through class activities as stated in the final paragraph of section 2.1.3.

3.3.1 Content-Based Instruction: Verbal Method

The CBI lesson was designed to be taught in an auditory manner. The students were first shown an overview of the lesson and then divided into random groups of three⁴. Afterwards, the researcher provided the pupils with a text, in which 12 targeted words were incorporated into a sufficient amount of context in order for the pupils to deduce meaning. I created the text and included elements from movies, such as Dr Evil, etcetera, as Scrivener (2011) advised (section 2.2.1) to make the story more interesting for the students. The text was read once collectively and then in separate groups. The students briefly discussed what they thought the meaning of the words was and wrote their answers on their answer sheets. When the discussion phase was over, the researcher asked questions concerning the words to see if the students deduced their meaning correctly. Two additional exercises were given to the students for repetition purposes. As a final challenge and to check their lexical knowledge, the groups had to write a story incorporating the targeted words to provide meaningful context. The purpose of this research application strategy was to strengthen the students' productive knowledge of the new vocabulary items (as seen in section 2.1.4). In conclusion, a member from each group read their story, while the other groups evaluated their usage of the words. Accordingly, they were to comment on the stories and elaborate on misused words. This

⁴The students were numbered from 1 to 7 (3x). All the pupils with the same number were to form a group.

was done to assess if the students successfully deduced the correct meaning of the words.

3.3.2 Task-Based Instruction: Physical Response Method

The focal point of the task-based lesson was for the students to acquire the required words kinaesthetically. At the outset, the pupils were presented with an outline of the lesson. In the following phase of the treatment, the task, along with its guidelines, was introduced to the students. Subsequently, an example of the task was provided to ensure that the students understood what they were expected to do. The students were placed into two groups and they, in turn, performed the task under the supervision of the researcher, who encouraged them during the process and monitored the allotted time set per word as well as the score. The goal of the task was for the pupils to recall 12 lexical items by way of role-play. The name of the task, which was a game, was 'Charades: Guess My Word!'. Task cards containing the words with their definitions, in both the L1 and L2, were available for the actors/actresses (see Appendix I, p. 78). Each group had 10 members. However, as there were only 12 words, only 12 performers were needed (6 per group). The 4 (1x each) remaining group members were allowed to assist their teammates if necessary. The students numbered themselves prior to playing the game to avoid unnecessary delays. In the final stage of the lesson, three assignments were given to the learners in order to test their vocabulary retention.

3.3.3 Visual Learning: Visual Mnemonics

Initially, the pupils were given a synopsis of the lesson. Thereafter, the term 'visual learning' was explained to the students and then a video by Jackhalzen (26 September 2011), in which Joshua Foer describes how images are made memorable, was presented to them (as indicated in section 2.2.3A). After the criteria for creating unforgettable pictures were clear to the learners, they were exposed to 5 images, each depicting 2 words for them to discover. Clues of each vocabulary item, in the target language, were provided as a helpline. These hints were only revealed if the students could not uncover the words associated with the pictures. The pupils also received 2 additional words, of which they had to create 1 mental image. A picture illustrating these 2 final words was shown afterwards. Overall, the learners had to recall 12 lexical items and they were requested to work in pairs. All the images were displayed once more to see if the

students could reiterate which words corresponded to a certain picture and the lesson concluded with the students completing three other exercises to assess their knowledge of the targeted words. The final assignments also included optical aids and since there was no visual assistance in the immediate- and post-test, the students were told to visualize the words based on the pictures they saw during the treatment. In this way, both visual techniques, which were pointed out in section 2.1.4, were used once more in the lesson.

3.4 Conducted Statistical Analyses

The quantitative analysis was carried out utilizing SPSS version 20 in order to ascertain the distribution and features of the answers needed for the research questions. A calculation of the mean scores and percentages was necessary for descriptive statistics and tables were designed to give a more clear illustration of the data. The Tukey HSD Post-Hoc Test in combination with the analysis of variance (ANOVA) was also applied to identify if the mean scores of groups throughout this study were significantly different from each other.

CHAPTER 4: RESULTS

This chapter commences with a demographic overview of the participants' data, which is depicted in Table 1. The chapter ensues with the results presented within the framework of the research questions, which is supported by tables to give a clear illustration of the findings.

Table 1: A Demographic Overview of the Participants' Data

		Experimental Group 1	Experimental Group 2	Experimental Group 3
Treatment	50 min.	CBI	TBL	VL
(1) Mnemonic Technique Applied		(1) Verbal	(1) Physical	(1+2) Visual
(2) Learning Style Applied		(2) Auditory	(2) Kinaesthetic	
General Medium of Instruction		Dutch	Dutch	Dutch
Comenius College	Class	H4c	H4b	H4a
Gender	Male	11	7	8
	Female	10	13	12
Group Total	61	21	20	20

*see Appendix L for an overview of the students' learning styles as well as their test scores for the immediate- and delayed post-tests. For privacy purposes, the students' names are not given.

As can be seen in table 1, the total number of subjects that took part in this research were 61 (EG1: 21, EG2: 20 & EG3: 20). The three experimental groups were randomly assigned to an instruction method, namely CBI, TBL or VL, in which the verbal (auditory), physical (kinaesthetic) and visual mnemonic strategies were incorporated respectively. The general language of instruction for the participants is Dutch. However, solely English was used for the treatments with the exception of the vocabulary tests (see Appendices C & D, pp. 65-67). Each experimental group was tested in its entirety. Therefore, no special attention was given to gender, albeit listed, as it was beyond the scope of this particular research.

4.1 Results of the Data Analyses Regarding the First Research Question

The first research question of the present study sought the answer to the question which employed teaching method, i.e. CBI, TBL and VL, yields the best test results in

terms of the students' retention of English vocabulary items. In order to provide an answer to this question, the mean scores of the immediate- and delayed post-test of the research subjects acquired through the VL, TBL and CBI methods were compared.

Table 2: Descriptive Statistics of the Mean Scores of the Teaching Methods

	ImmediatePost-Test		Delayed Post-Test	
	N	Mean	N	Mean
VL	20	9,010	20	7,105
TBL	20	6,725	20	5,575
CBI	21	7,638	21	6,752

Table 2 shows the overall average scores of the immediate- and delayed post-test, in which it is indicated that in both tests the mean values of the VL group (test 1: M=9,0/ test 2: M=7,1) are higher than the average scores of the TBL group (test 1: M=6,7/test 2: M=5,6) and the CBI group (test 1: M=7,6/test 2: M=6,8).

Nevertheless, only comparing the mean scores of the immediate- and delayed post-test is not sufficient to demonstrate if there is a statistically significant difference between the average scores of the VL-, TBL- and CBI groups. An analysis of variance (one-way ANOVA) test was needed to disclose whether a substantial change occurred. As Lee (2013) states, "the one-way ANOVA is an extension of the independent sample *t* test in that it compares averages across two or more subgroups of a categorical variable (p. 1)." Accordingly, one-way ANOVA was used, as it was suitable for comparing the outcomes of the 3 experimental groups in the context of this study. It should be noted that in all the statistical analyses carried out during this research, the statistical significance level was $p < .05$ for all the sample findings. The results of the ANOVA test are given in the following table.

Table 3: A One-Way ANOVA Analysis of the Teaching Methods

		Sum of Squares	df	Mean Square	F	Sig.
Immediate Post-Test	Between Groups	52,937	2	26,468	11,089	,000
	Within Groups	138,445	58	2,387		
	Total	191,382	60			
Delayed Post-Test	Between Groups	25,751	2	12,875	3,518	,036
	Within Groups	212,259	58	3,660		
	Total	238,010	60			

In table 3, the one-way analysis of variance (ANOVA) showed a statistically significant difference at the $p < .05$ level in the immediate post-test scores for the three experimental groups: $F(2, 58) = 11.09, p = .000$. The same observation can be made in relation to the scores of the delayed post-test: $F(2, 58) = 3.52, p = .036$. As the F-test in the ANOVA table (2) only demonstrates that the conditions are significantly different and not which specific conditions are referred to (Lowry, 2013), a computation of a post-hoc test was required. The Tukey HSD test was selected, as this post-hoc test stipulates which specific conditions means differ from other condition means (Lowry, 2013). The Tukey HSD test results are illustrated in Table 4.

Table 4: Multiple Comparisons – A Tukey HSD Analysis of the Teaching Methods

Dependent Variable	(I) TM Codes	(J) TM Codes	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Immediate Post-Test	1.00	2.00	2.285*	,489	,000	1,11	3,46
		3.00	1.372*	,483	,017	,21	2,53
	2.00	1.00	-2.285*	,489	,000	-3,46	-1,11
		3.00	-,913	,483	,150	-2,07	,25
		3.00	1.00	-1.372*	,483	,017	-2,53
Delayed Post-test	1.00	2.00	,913	,483	,150	-,25	2,07
		3.00	1.530*	,605	,037	,07	2,99
	2.00	1.00	-,353	,598	,826	-1,09	1,79
		3.00	-1.530*	,605	,037	-2,99	-,07
		3.00	-1,177	,598	,129	-2,62	,26
	3.00	1.00	-,353	,598	,826	-1,79	1,09
		2.00	1,177	,598	,129	-,26	2,62

*. The mean difference is significant at the 0.05 level.

According to Table 4, there is a significant difference between the mean scores of 1.00 'the VL group' and 2.00 'the TBL group' ($p = .000$) as well as between 1.00 'the VL group' and 3.00 'the CBI group' ($p = .017$) concerning the immediate post-test. However, no significant difference was found in the mean scores between 2.00 'the TBL group' and 3.00 'the CBI group', as their significant level falls above .05 ($p = .150$). This confirms that the means of 1.00 'the VL group' are indeed significantly higher than the means of 2.00 'the TBL group' and 3.00 'the CBI group'. This result is in agreement with Dunn and Dunn (1979) as well as Gilakjani's (2012) research projects, in which they found that the scores of the VL group exceeded those of the other groups (section 2.3.2). In the case

of the delayed post-test, a salient variance among means was only detected between 1.00 'the VL group' and 2.00 'the TBL group' ($p = .037$).

4.2 Results of the Data Analyses Regarding the Second Research Question

The second research question of the present study sought an answer to the following question: do the students perform better if their dominant learning styles correlates with their mode of instruction and if so, to which extent? In order to address this question, a calculation of the learning style test results was carried out through SPSS version 20. This was done to determine which learning style is predominant as a whole as well as per experimental group (section 4.2.1). Furthermore, a descriptive statistics analysis was completed to discover the mean scores of the immediate- and delayed post-test per learning style in each experimental group. A one-way ANOVA was then piloted to discern whether there are any significant variances in the mean scores of the subjects for the immediate- and delayed post-test across the three groups of learning styles per treatment. If any noteworthy differences were observed, a Tukey HSD post-hoc test was conducted to explain where these significant changes occurred (section 4.2.2).

4.2.1 Learning Style Preferences

The overall results of the learning style tests based on the VAK model are presented in Table 5.

Table 5 The Overall Learning Style Test Results

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	28	45,9	45,9	45,9
	K	15	24,6	24,6	70,5
	V	18	29,5	29,5	100,0
	Total	61	100,0	100,0	

The findings revealed that 29,5% (18) of the research subjects favoured the visual learning style, whereas 45,9% (28) of the partakers exhibited a preference for the auditory learning style and the remaining participants, 24,6% (15), turned out to be kinaesthetic learners. Thus, the majority of the subjects in this study were auditory learners, which contradicts the findings of previous studies claiming that the most learners adhere to the visual learning style (as cited in section 2.3.2).

In addition to observing the learning style preferences of the subjects as a whole, this study also focussed on the prevalent preferred learning styles per group. The results per group are illustrated in tables 6 (the VL treatment), 7 (the TBL treatment) and 8 (the CBI treatment). For expediency of reference, a clearer overview of the results is graphically presented in Figure 1.

Table 6: The Learning Style Test Results of the VL Treatment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	7	35,0	35,0	35,0
	K	5	25,0	25,0	60,0
	V	8	40,0	40,0	100,0
	Total	20	100,0	100,0	

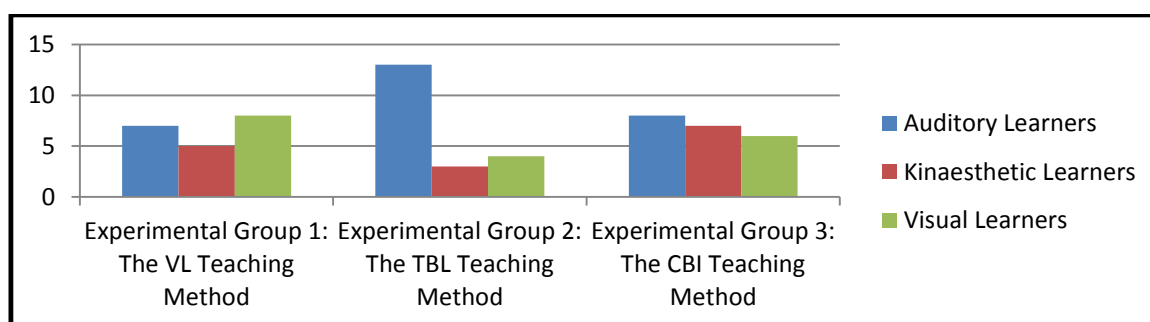
Table 7: The Learning Style Test Results of the TBL Treatment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	13	65,0	65,0	65,0
	K	3	15,0	15,0	80,0
	V	4	20,0	20,0	100,0
	Total	20	100,0	100,0	

Table 8: The Learning Style Test Results of the CBI Treatment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A	8	38,1	38,1	38,1
	K	7	33,3	33,3	71,4
	V	6	28,6	28,6	100,0
	Total	21	100,0	100,0	

Figure 1: An Overview of the Subjects' Preferred Learning Style per Group



As can be viewed in Figure 1, the prevailing learning style for the group of students (20) who received instruction through the VL teaching method is visual (8 = 40.0%), which is followed by auditory (7 = 35.0%) and then kinaesthetic (5 = 25.0%). The dominant learning style in the group of participants (20) that were taught through the

TBL teaching method is auditory (13 = 65.0%), which is succeeded by visual (4 = 20.0%) and then kinaesthetic (3 = 15.0%). The leading learning style in the group of subjects (21) who underwent the CBI treatment is auditory (8 = 38.1%), which is shadowed by kinaesthetic (7 = 33.3%) and then visual (6 = 28.6%).

4.2.2 Mean Scores With Regard to the Learning Style Preferences

In this section, the average scores of the immediate- and delayed post-test were divided based on the learning styles and teaching methods.

A. The VL Method – Experimental Group 1

In Table 9 below the overall mean scores of the immediate- and delayed post-test obtained through the VL method showed that in both tests the mean values of the visual learners (test 1: M=9.7/test 2: M=8.3) are higher than the average scores of the kinaesthetic (test 1: M=7.8/test 2: M=5.5) and auditory learners (test 1: M=9.1/test 2: M=6.9).

Table 9: Descriptive Statistics of the Mean Scores of the VL Method

	VL					
	A		K		V	
	N	Mean	N	Mean	N	Mean
Immediate Post-Test	7	9,057	5	7,840	8	9,700
Delayed Post-Test	7	6,914	5	5,480	8	8,288

Statistical testing (one-way ANOVA) was applied to determine if any significant differences occurred between the three learning style groups for the immediate- as well as the delayed post-test. The statistical significance level was $p < .05$. The results of the ANOVA test are portrayed in table 10.

Table 10: A One-Way ANOVA Analysis of the VL Method

		Sum of Squares	df	Mean Square	F	Sig.
Immediate Post-Test	Between Groups	10,669	2	5,334	13,125	,000
	Within Groups	6,909	17	,406		
	Total	17,578	19			
Delayed Post-Test	Between Groups	24,644	2	12,322	9,485	,002
	Within Groups	22,085	17	1,299		
	Total	46,730	19			

Table 10 depicts a statistically significant difference at the $p < .05$ level in the immediate post-test scores: $F(2, 17) = 13.13, p = .000$. The same conclusion can be made concerning the scores of the delayed post-test: $F(2, 17) = 9.49, p = .002$. Therefore, a computation of a Tukey HSD post-hoc test was necessary. The results are illustrated in Table 11.

Table 11: Multiple Comparisons – A Tukey HSD Analysis of the VL Method

Dependent Variable	(I) LS Code	(J) LS Code	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Immediate Post-Test	1.00	2.00	1.860*	,363	,000	,93	2,79
		3.00	,643	,330	,156	-,20	1,49
	2.00	1.00	-1.860*	,363	,000	-2,79	-,93
		3.00	-1.217*	,373	,012	-2,17	-,26
		3.00	1.00	-,643	,330	,156	-1,49
Delayed Post-test	1.00	2.00	1.217*	,373	,012	,26	2,17
		3.00	2.808*	,650	,001	1,14	4,47
	2.00	1.00	1,373	,590	,079	-,14	2,89
		3.00	-2.808*	,650	,001	-4,47	-1,14
		3.00	1.00	-1,434	,667	,110	-3,15
	3.00	2.00	-1,373	,590	,079	-2,89	,14
		2.00	1,434	,667	,110	-,28	3,15

*. The mean difference is significant at the 0.05 level.

In keeping with Table 11, there is a significant difference between the mean scores of 1.00 'the visual learners' and 2.00 'the kinaesthetic learners' ($p = .000$) as well as between 2.00 'the kinaesthetic learners' and 3.00 'the auditory learners' ($p = .012$) regarding the immediate post-test. However, no significant difference was found in the mean scores between 1.00 'the visual learners' and 3.00 'the auditory learners, as their significant level surpasses .05 ($p = .156$). In the matter of the delayed post-test, a salient variance among means was only identified between 1.00 'the visual learners' and 2.00 'the kinaesthetic learners' ($p = .001$). Thus, the mean scores of the visual learners are indeed greater than the average scores of the kinaesthetic learners and the auditory learners.

B. The TBL Method – Experimental Group 2

In the following Table (12), the overall mean scores of the immediate- and delayed post-test gained by way of the TBL method revealed that in both tests the mean values of the kinaesthetic learners (test 1: $M=9.7$ /test 2: $M=9.2$) are higher than the average scores of the auditory (test 1: $M=5.8$ /test 2: $M=4.8$) and visual learners (test 1: $M=7.5$ /test 2: $M=5.4$).

Table 12: Descriptive Statistics of the Mean Scores of the TBL Method

	TBL					
	A		K		V	
	N	Mean	N	Mean	N	Mean
Immediate Post-Test	13	5,792	3	9,733	4	7,500
Delayed Post-Test	13	4,800	3	9,167	4	5,400

A one-way ANOVA test was employed to establish if any significant variance took place between the three learning style groups for the immediate- as well as the delayed post-test. The outcomes of the ANOVA test are illustrated in Table 13.

Table 13: A One-Way ANOVA Analysis of the TBL Method

		Sum of Squares	df	Mean Square	F	Sig.
Immediate Post-Test	Between Groups	40,862	2	20,431	10,463	,001
	Within Groups	33,196	17	1,953		
	Total	74,057	19			
Delayed Post-Test	Between Groups	46,631	2	23,315	9,298	,002
	Within Groups	42,627	17	2,507		
	Total	89,258	19			

As can be seen in Table 13, a significant difference among means was found at the $p < .05$ level in the immediate post-test scores: $F(2, 17) = 10.46$, $p = .001$. The same could be said about the scores of the delayed post-test: $F(2, 17) = 9.30$, $p = .002$. As a result, a Tukey HSD post-hoc test had to be carried out. The results are demonstrated in Table 14.

Table 14: Multiple Comparisons – A Tukey HSD Analysis of the TBL Method

Dependent Variable	(I) LS Code	(J) LS Code	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Immediate Post-Test	1.00	2.00	-2,233	1,067	,121	-4,97	,50
		3.00	1,708	,799	,112	-,34	3,76
	2.00	1.00	2,233	1,067	,121	-,50	4,97
		3.00	3,941*	,895	,001	1,64	6,24
		3.00	-1,708	,799	,112	-3,76	,34
Delayed Post-test	1.00	2.00	-3,941*	,895	,001	-6,24	-1,64
		3.00	-3,767*	1,209	,016	-6,87	-,66
	2.00	3.00	,600	,905	,788	-1,72	2,92
		1.00	3,767*	1,209	,016	,66	6,87
		3.00	4,367*	1,014	,001	1,76	6,97
	3.00	1.00	-,600	,905	,788	-2,92	1,72
		2.00	-4,367*	1,014	,001	-6,97	-1,76

*. The mean difference is significant at the 0.05 level.

Tukey's method for multiple comparisons in Table 14 revealed that only the mean scores of 2.00 'the kinaesthetic learners' and 3.00 'the auditory learners' ($p = .001$) were significantly different from one another in terms of the immediate post-test. No other significant pair-wise differences were detected. However, there were two significant variances in the delayed post-test, which were between 1.00 'the visual learners' and 2.00 'the kinaesthetic learners' ($p = .016$) as well as between 2.00 'the kinaesthetic learners' and 3.00 'the auditory learners' ($p = .001$). Consequently, the mean scores of the kinaesthetic learners are indeed higher than the average scores of the auditory as well as the visual learners.

C. The CBI Method – Experimental Group 3

In Table 15, the overall mean scores of the immediate- and delayed post-test accumulated via the CBI method exhibited that in both tests the mean values of the visual learners (test 1: $M=8.4$ /test 2: $M=7.5$) are slightly higher than the average scores of the auditory (test 1: $M=7.9$ /test 2: $M=7.2$) and kinaesthetic learners (test 1: $M=6.7$ /test 2: $M=5.6$).

Table 15: Descriptive Statistics of the Mean Scores of the CBI Method

	CBI					
	A		K		V	
	N	Mean	N	Mean	N	Mean
Immediate Post-Test	8	7,925	7	6,671	6	8,383
Delayed Post-Test	8	7,213	7	5,600	6	7,483

In order to ascertain if any statistically significant differences could be recorded between the three learning style groups for the immediate- as well as the delayed post-test, a one-way ANOVA test was administered. The results of the ANOVA test are represented in the table 16.

Table 16: A One-Way ANOVA Analysis of the CBI Method

		Sum of Squares	df	Mean Square	F	Sig.
Immediate Post-Test	Between Groups	10,532	2	5,266	2,613	,101
	Within Groups	36,278	18	2,015		
	Total	46,810	20			
Delay test 1	Between Groups	14,195	2	7,098	2,058	,157
	Within Groups	62,077	18	3,449		
	Total	76,272	20			

No significant pair-wise differences were identified in the ANOVA test, as the significance level for both the immediate- ($p = .101$) and delayed test ($p = .157$) exceeds .05. Subsequently, no further testing was required.

The findings in the aforementioned sections A, B and C display that overall the students who were taught in their favoured learning style performed better than their counterparts, affirming the claim that the use of learning styles is essential to the students' academic success (Gilakjani, 2012).

CHAPTER 5: DISCUSSION AND CONCLUSION

The objectives of this thesis were to establish which of the applied teaching methods yielded the best test results in terms of the students' retention of English vocabulary items, as well as to determine to which extent the pupils perform better if their dominant learning style correlates with their mode of instruction in vocabulary learning sessions. Emerging from the data analysed in the previous chapter, a number of conclusions can be made. This chapter provides an explication of the results per research question and offers a way in which a correlated learning style lesson can be implemented in the classroom. The chapter also sheds light on the limitations of the study and provides implications for further research.

5.1 The Teaching Method That Yielded the Best Test Results

The methods used in this research are Content-Based Instruction, Task-Based Learning and Visual Learning, in which the verbal, physical as well as the visual mnemonic techniques were incorporated respectively. The three experimental groups in this study were exposed to the same research parameters, although they each received a different instructional approach. Overall, the subjects that were taught through the VL method produced the best test scores on the immediate- and delayed post-test, which is in line with what was hypothesized in section 1.4.

Nevertheless, this finding is ambiguous when taking the number of vocabulary items recalled by the research subjects after a lapse of two weeks into account. The results of the delayed post-test were compared to the results of the immediate post-test, which served as the reference point, to examine the percentages of the number of lexical items retained by the participants. All three groups attained lower marks on the delayed post-test, which was expected. The only facet that could not be predicted was the degree in which this occurred. Correspondingly, experimental group 1 (CBI) recollected 88.4% (test 1: 7.6/test 2: 6.7), group 2 (TBL) 82.9% (test 1: 6.7/test 2: 5.6) and group 3 (VL) 78,9% (test 1: 9.0/test 2: 7.1) of the vocabulary items after the delayed post-test. These findings show that the CBI group remembered the most words. Therefore, the definite answer to the first research question on which employed teaching method yields the best test results in terms of the students' retention of English vocabulary items is rather complex.

Based on this particular research, one could argue that of the two approaches, i.e. VL and CBI, the VL method seemed to best suit the research subjects as evidenced by them attaining higher overall scores in both tests. Oates and Reder (2010) underpin this finding. Their study found that visual distinctiveness gives pupils an advantage since visual aids are perceptually richer than words (as cited in section 2.4). Notwithstanding, since I am the one who taught each method, I am aware that the outcome may have been different, if they were applied by different researchers. It is also my realization that, in practice, all the employed techniques can be of value, as they all produced positive results. All things considered, a principle factor is which method is given the greatest emphasis when planning a vocabulary lesson, rather than the implementation of a whole new approach. This research asserts that teachers should apply all of the methods and techniques mentioned in this study to teach vocabulary, as long as they support the teaching purposes and identified learning needs of the class participants. Accordingly, instructors should take into account that the effectiveness and appropriacy of each approach hinges on many different aspects, such as; the teachers' competency, the students' ability or proficiency in the target language, class size, the nature of each vocabulary item and the allocation of time.

In accordance with this researcher's teaching experience and research conducted for this study, the following can be said: although the students were assessed on their broad word knowledge, which is the meaning of the vocabulary items, it was discovered that when planning a lesson based on vocabulary it is quite difficult to achieve the word meaning goal without including the form and use aspect of knowing a word (Nation, 2001, as cited in section 2.1.3). In the CBI treatment, for instance, in which the mnemonic technique 'story telling' was incorporated, it was impossible to avoid the 'form' (pronunciation by reading out loud) and 'use' (creating a story with the target words) element. What is more, the 'form' component was present in the input part of the TBL treatment, in which the physical response strategy was incorporated, as the students had to guess the target words by way of an acting game called 'Charades'. This stems from the fact that spelling clues and pronunciation were major parts of the game. The activities that followed the presentation phase for practice as well as for repetition purposes in all three treatments, also to some extent contained the 'form' and 'use' elements, but in context. Consequently, it is essential for teachers to cogitate all three of the features, i.e. form, meaning and use, put forward by Nation (2001) when creating

any type of vocabulary lesson in order to get the new vocabulary across to students effectively. This may be time consuming to many teachers, but by doing so, the learners will benefit a lot from the instructor's efforts and the lesson will be regarded as a success, especially if the pupils are able to retain and use the target words in and outside the classroom in future encounters.

5.2 The Correlation Between the Learning style and Mode of Instruction

A number of statements can be made regarding the correlation between the subjects' preferred learning style and their mode of instruction in this study. For instance, the visual learners in the VL treatment recalled the most lexical items in both the immediate and delayed post-test. This was also the case for the kinaesthetic learners in the TBL group. However, in the CBI approach, it was the visual learners and not the auditory learners who retained the most vocabulary items. As the findings fail to show a statistically significant variance between the visual and auditory learners, it is sufficient to theorize that visual learners do not necessarily benefit more from the CBI method than the auditory learners. Very often, student textbooks relate to the CBI way of teaching. As a result, the students have already adapted to the 'theme-based' type of instruction (most popular CBI model), which could also be the reason why all of the participants in the CBI group had similar scores. All in all, it can be concluded that the students do perform better if there is a link between their learning style and the method of instruction, which corresponds to the hypothesis listed in section 1.4.

5.3 A Correlated Learning Style Lesson

This section discusses a possible way in which a correlated learning style lesson could be carried out in a classroom setting by means of a follow-up lesson to the treatments employed in this research. It is well suited for a normal class hour of 50 minutes. In preparation, the learning style test results are needed to appoint the students to a group that fits their learning style (orientation phase). Once the pupils are assigned to appropriate groups, they should be given a task that is connected to their learning style (preparation phase). This should be followed by each group presenting their work to the class. Afterwards, the class should complete a quiz about the target words (implementation phase) to see if they have acquired the words. Finally, the students should be given the opportunity to give feedback on the lesson (reflection phase). A

PowerPoint presentation with added videos and pictures should be used to incorporate the VL method. The assignments should be based on a theme, to integrate the CBI model and the TBL approach will also be included as the students will be completing the assignments with minor help from the instructor. View Appendix K (p. 112-117) for an example by way of a PowerPoint presentation.

5.4 Limitations of the Research

This study, like all others, has its limitations and four of these will be discussed. Firstly, only 61 subjects from one school, namely Comenius College, took part in this research and all of them are in their fourth year of the higher general secondary education. The study would have been more comprehensive if students from other schools with various grades and educational levels had been included. Secondly, the research was carried out in a short time span. It would have been interesting to see if the results would have altered if the study had been conducted over a longer time frame. Thirdly, this research has solely focused on assessing the students' broad vocabulary knowledge (word meaning). Nevertheless, lexically-minded researchers, such as Nation (2001) and Scrivener (2011) among others, have acknowledged that knowing a word requires much more than merely understanding its meaning (section 2.1.3). In light of this as well as the difficulty of setting up treatments without integrating all three components i.e. form, meaning, use, it suffices to say that this study called attention to the need to develop activities and testing instruments which are more profound to the degrees of vocabulary acquisition. Finally, the study would have been more exhaustive if the participants had all been exposed to all three of the teaching methods, but this, however, was beyond the scope of this thesis at this present time.

5.5 Implications for Further Research

Several important factors and opportunities should be considered for further research. A starting point should be to conduct a more in-depth research to uncover how the correlation of the teaching methods with the learning styles could best be implemented into a classroom setting as this study has shown that students perform better if there is a link between their learning style and the method of instruction (section 5.2). In turn, a program to train teachers should be developed. Furthermore, research should be carried out to offer alternative learning resources to students who do not fit any of the

approaches used in this study. Additionally, as this research was solely based on quantitative findings, it would be conducive to conduct a future study using a mixed method approach, with quantitative (test scores) as well as qualitative (student and teacher opinion by way of surveys and interviews) characteristics, concerning the topic of this study. This would greatly enhance the quality of this type of research, as interviews with the subjects along with a vocabulary test that focuses on form, meaning and use could provide valuable insights regarding the classroom-based vocabulary instruction.

5.6 Concluding Remarks

All in all, this research concludes that it is of high importance to put special emphasis on vocabulary teaching in upper-secondary English classes, albeit a time consuming process, as vocabulary is at the heart of learning a language. There is also a clear need to focus on the development of productive vocabulary knowledge as it not only essential for students to know the meaning of words in order to retain them e.g. through reading and listening, but learners should be able to pronounce and use them as well. In closing, it is not at all suggested that the methods and techniques used in this study would provide a complete solution to the problems teachers face when teaching vocabulary. The application of the approaches in the correct manner, however, could somewhat lead to a possible solution or at least a step in the right path. The data obtained in this study will hopefully be of practical value in planning future developments in terms of vocabulary learning and teaching.

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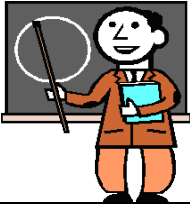
Appendix A:


DISCOVER YOUR PREFERRED LEARNING STYLE


This questionnaire will help you discover what kind of learner you are.


Read each row and tick the ONE option that is most like you.

<p>1</p> 	<p>I prefer lessons where we can discuss things.</p> <p><input type="checkbox"/></p>	<p>I prefer lessons where there is something to look at (like a picture, chart, diagram or video) or something to draw.</p> <p><input type="checkbox"/></p>	<p>I prefer lessons where we can do something practical – or at least move around.</p> <p><input type="checkbox"/></p>
<p>2</p> 	<p>I often fiddle with things in class (a pen, paper clip or rubber band.)</p> <p><input type="checkbox"/></p>	<p>I often sing or hum to myself in class.</p> <p><input type="checkbox"/></p>	<p>I often doodle in class.</p> <p><input type="checkbox"/></p>
<p>3</p> 	<p>When learning a new skill, I prefer to just get on with it.</p> <p><input type="checkbox"/></p>	<p>When learning a new skill, I prefer someone to explain to me how to do it.</p> <p><input type="checkbox"/></p>	<p>When learning a new skill, I prefer to watch someone else show me how to do it.</p> <p><input type="checkbox"/></p>
<p>4</p> 	<p>When the adverts come on the telly – I like to watch them.</p> <p><input type="checkbox"/></p>	<p>When the adverts come on the telly – I get up and do something.</p> <p><input type="checkbox"/></p>	<p>When the adverts come on the telly – I like to sing along with them.</p> <p><input type="checkbox"/></p>
<p>5</p> 	<p>I would prefer to listen to a story.</p> <p><input type="checkbox"/></p>	<p>I would prefer to see a comic strip of a story.</p> <p><input type="checkbox"/></p>	<p>I would prefer to act out a story.</p> <p><input type="checkbox"/></p>
<p>6</p> 	<p>I am good at learning physical skills.</p> <p><input type="checkbox"/></p>	<p>I have a good memory for people's names.</p> <p><input type="checkbox"/></p>	<p>I have a good memory for faces.</p> <p><input type="checkbox"/></p>

<p>7</p> 	I prefer teachers who use diagrams to show us things.	I prefer teachers who get us to do something.	I prefer teachers who explain things to us.
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

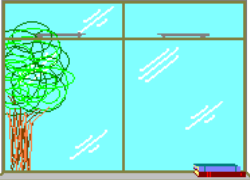
<p>8</p> 	If I get in trouble in class, it's for talking.	If I get in trouble in class, it's for drawing on the desk or all over my books.	If I get in trouble in class it's for fidgeting.
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>


<p>9</p> 	On a long journey I like to look at the scenery or read a book.	On a long journey I can't wait until we stop so I can walk around.	On a long journey I like to listen to music or talk to the other travellers.
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>


<p>10</p> 	I use my hands a lot when I am talking.	When I am discussing something, I sometimes use words my friends don't know.	When I am discussing something, I like to doodle.
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>


<p>11</p> 	If I could be famous, I would be a sports-person (or dancer).	If I could be famous, I would be a film-star.	If I could be famous, I would be a singer.
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

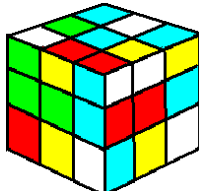
<p>12</p> 	I would rather go outside and play.	I would rather watch my favourite TV programme.	I would rather listen to my favourite music.
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

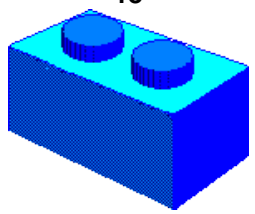
<p>13</p> 	I get distracted in class if I can see something outside the window.	I get distracted in class if I can hear something happening outside.	I lose concentration if I have to sit still for a long time.
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<p>14</p> 	I am good at drawing.	I am good at making things.	I am a good listener.
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<p>15</p> 	Out of these 3 jobs - I would prefer to be a radio DJ (or presenter).	Out of these 3 jobs - I would prefer to be a mechanic.	Out of these 3 jobs - I would prefer to be an artist (or designer).
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>







<p>16</p> 	In my spare time I would prefer to do something physical, such as sport or dancing.	In my spare time I would prefer to watch TV or a video.	In my spare time I would prefer to listen to music or chat with friends.
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

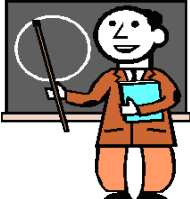
<p>17</p> 	The type of puzzle I would prefer is "Spot the difference".	The type of puzzle I would prefer is "Name that tune".	The type of puzzle I would prefer is "Rubik's cube".
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>


<p>18</p> 	If I needed to build a Lego model, I would get someone to explain how or to read the instructions to me.	If I needed to build a Lego model, I would try to work out which bits fit together.	If I needed to build a Lego model, I would follow the diagram or the picture on the packet.
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>


B R A I N B O X X


Appendix B:
**DISCOVER YOUR PREFERRED LEARNING STYLE
 MARKING SHEET**


<p style="text-align: center;">1</p> 	I prefer lessons where we can discuss things.	I prefer lessons where there is something to look at (like a picture, chart, diagram or video) or something to draw.	I prefer lessons where we can do something practical – or at least move around.
	A	V	K
<p style="text-align: center;">2</p> 	I often fiddle with things in class (a pen, paper clip or rubber band.)	I often sing or hum to myself in class.	I often doodle in class.
	K	A	V
<p style="text-align: center;">3</p> 	When learning a new skill, I prefer to just get on with it.	When learning a new skill, I prefer someone to explain to me how to do it.	When learning a new skill, I prefer to watch someone else show me how to do it.
	K	A	V
<p style="text-align: center;">4</p> 	When the adverts come on the telly – I like to watch them.	When the adverts come on the telly – I get up and do something.	When the adverts come on the telly – I like to sing along with them.
	V	K	A
<p style="text-align: center;">5</p> 	I would prefer to listen to a story.	I would prefer to see a comic strip of a story.	I would prefer to act out a story.
	A	V	K
<p style="text-align: center;">6</p> 	I am good at learning physical skills.	I have a good memory for people's names.	I have a good memory for faces.
	K	A	V


<p>7</p> 	I prefer teachers who use diagrams to show us things.	I prefer teachers who get us to do something.	I prefer teachers who explain things to us.
	V	K	A

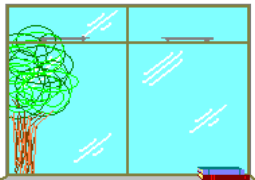
<p>8</p> 	If I get in trouble in class, it's for talking.	If I get in trouble in class, it's for drawing on the desk or all over my books.	If I get in trouble in class it's for fidgeting.
	A	V	K


<p>9</p> 	On a long journey I like to look at the scenery or read a book.	On a long journey I can't wait until we stop so I can walk around.	On a long journey I like to listen to music or talk to the other travellers.
	V	K	A


<p>10</p> 	I use my hands a lot when I am talking.	When I am discussing something, I sometimes use words my friends don't know.	When I am discussing something, I like to doodle.
	K	A	V


<p>11</p> 	If I could be famous, I would be a sports-person (or dancer).	If I could be famous, I would be a film-star.	If I could be famous, I would be a singer.
	K	V	A

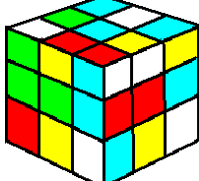
<p>12</p> 	I would rather go outside and play.	I would rather watch my favourite TV programme.	I would rather listen to my favourite music.
	K	V	A

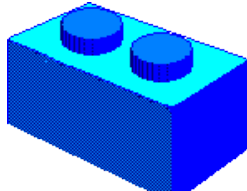
<p>13</p> 	I get distracted in class if I can see something outside the window.	I get distracted in class if I can hear something happening outside.	I lose concentration if I have to sit still for a long time.
	V	A	K

<p>14</p> 	I am good at drawing.	I am good at making things.	I am a good listener.
	V	K	A

<p>15</p> 	Out of these 3 jobs - I would prefer to be a radio DJ (or presenter).	Out of these 3 jobs - I would prefer to be a mechanic.	Out of these 3 jobs - I would prefer to be an artist (or designer).
	A	K	V

<p>16</p> 	In my spare time I would prefer to do something physical, such as sport or dancing.	In my spare time I would prefer to watch TV or a video.	In my spare time I would prefer to listen to music or chat with friends.
	K	V	A

<p>17</p> 	The type of puzzle I would prefer is "Spot the difference".	The type of puzzle I would prefer is "Name that tune".	The type of puzzle I would prefer is "Rubik's cube".
	V	A	K

<p>18</p> 	If I needed to build a Lego model, I would get someone to explain how or to read the instructions to me.	If I needed to build a Lego model, I would try to work out which bits fit together.	If I needed to build a Lego model, I would follow the diagram or the picture on the packet.
	A	K	V

B R A I N B O X X

**Appendix C:
Pre-Treatment Vocabulary Test**

Translate the following words into English!!!

1. Rechtop: _____
2. Hebzuchtig; Inhalig: _____
3. Bruikbaar: _____
4. Merk: _____
5. Valkuil: _____
6. Benadrukken: _____
7. Ineenstorting: _____
8. Bulderend gelach: _____
9. Buitenaards: _____
10. Handicap: _____
11. Koorts: _____
12. Optreden (eenmalig): _____
13. Verzameling : _____
14. Geleerde: _____
15. Ouderwets: _____
16. Krimpen: _____
17. Benzine: _____
18. Tijdschrift: _____
19. Spieren: _____
20. Kiekje: _____
21. Buigzaam: _____
22. Meten: _____
23. Geconfronteerd worden met: _____
24. Bankrekening: _____
25. Nadoen: _____
26. Knijpen: _____
27. Failliet: _____
28. Verslaving: _____
29. Rijkdom: _____
30. Zorg: _____

Appendix D:

Immediate & Delayed Posttest: Translate the following words into English!!!

1. Rechtop:

2. Hebzuchtig; Inhalig:

3. Bruikbaar:

4. Valkuil:

5. Benadrukken:

6. Ineenstorting:

7. Bulderend gelach:

8. Buitenaards:

9. Geleerde:

10. Kiekje:

11. Buigzaam:

12. Geconfronteerd worden met:

Answer Key: Pre-Treatment Vocabulary Test

- | | |
|----------------------------|------------------|
| 1. Upright | 16. Shrink |
| 2. Greedy | 17. Petrol |
| 3. Handy | 18. Magazine |
| 4. Brand | 19. Muscles |
| 5. Pitfall | 20. Snapshot |
| 6. Highlight | 21. Flexible |
| 7. Meltdown | 22. Measure |
| 8. Roaring laughter | 23. Face |
| 9. Alien/Extra-Terrestrial | 24. Bank account |
| 10. Disability | 25. Copy |
| 11. Fever | 26. Pinch |
| 12. Gig | 27. Broke |
| 13. Collection | 28. Addiction |
| 14. Scholar | 29. Riches |
| 15. Old-fashioned | 30. Care |

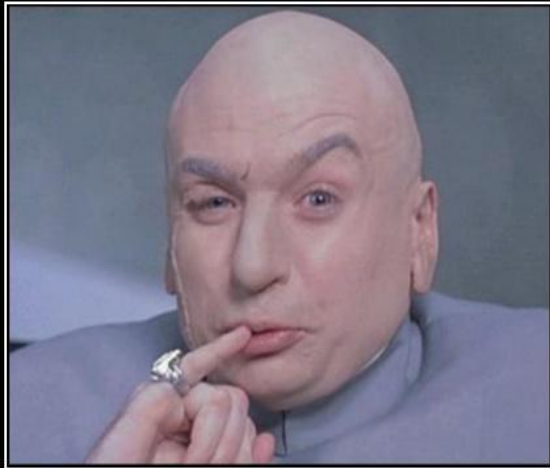
Answer Key: Immediate- & Delayed Post-Test

- | | |
|--------------|----------------------|
| 1. Upright | 7. Roaring laughter |
| 2. Greedy | 8. Extra-terrestrial |
| 3. Handy | 9. Scholar |
| 4. Pitfall | 10. Snapshot |
| 5. Highlight | 11. Flexible |
| 6. Meltdown | 12. Face |

Appendix E:
STUDENT WORKSHEET CBI

Task 1: Read the story and provide the definition or translation of the underlined words.

Task 2: Create a story using the 12 words. What is the theme of your story? Mine is News!



DR. EVIL

He Wants One Meellion Dollars.

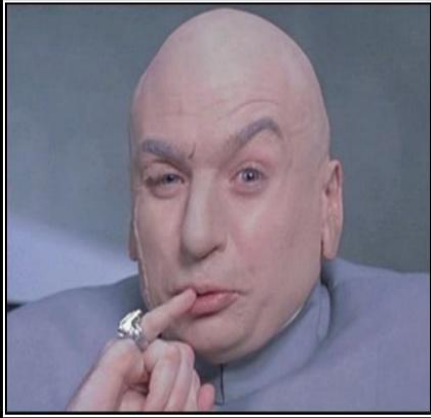
ICANHASCHEEZBURGER.COM

BREAKING NEWS:
RENOWNED SCIENTIST
ROBS A BANK

In today's headlines, New York City Police Department reports the shocking news of a bank robbery said to be committed by none other than the famous scholar Dr. Evil. He is best known for his research on the existence of extra-terrestrial life and has won many awards for his work. His book 'E.T.' has been highlighted as the most handy piece of literature for alien fanatics. Sources close to the suspect claim that he recently suffered an emotional and financial meltown after his new book 'The Others' did not sell as he thought it would. His failure to produce a high number of book sales has caused him to face a lot of criticism from the press. For the first time in his career, he was experiencing the pitfalls of fame. Although he has been under a great deal of stress, no one could have expected what happened yesterday afternoon at 4 P.M. Dr. Evil was seen walking into the Barclay's Bank, armed with a rifle, screaming at the bank teller to open the vault. Scared for her life, the bank teller opened the vault with a flexible object and tossed the money into a garbage bag. After grabbing the bag of money from the woman, Dr. Evil let out a roaring laughter and tried to escape from the scene. However, minutes after he fled the scene he was caught by the police. The paparazzi was there to get snapshots of the entire event. When questioned later on in the day at the police station, Dr. Evil sat upright, slammed his fist on the table and shouted "All my riches are gone and those greedy bastards at the bank are swimming in money".

Appendix F: **STUDENT WORKSHEET TBL**

TASK: Unscramble the underlined/bold words to complete the text! Translate them as well. Write your answers above (E) and under (D) the word. Which Duo will finish first? Success!



DR. EVIL

He Wants One Meellion Dollars.

IGANNRSCHRECKBURGER.COM


**BREAKING NEWS: REKNOWNED
SCIENTIST ROBS A BANK**

In today's headlines, New York City Police Department reports the shocking news of a bank robbery said to be committed by none other than the famous **larscho** Dr. Evil. He is best known for his research on the existence of **traex-trialrester** life and has won many awards for his work. His book 'E.T.' has been **lighthighed** as the most **yhand** piece of literature for alien fanatics. Sources close to the suspect claim that he recently suffered an emotional and financial **downmelt** after his new book 'The Others' did not sell as he thought it would. His failure to produce a high number of book sales has caused him to **cefa** a lot of criticism from the press. For the first time in his career, he was experiencing the **fallspit** of fame. Although he has been under a great deal of stress, no one could have expected what happened yesterday afternoon at 4 P.M. Dr. Evil was seen walking into the Barclay's Bank, armed with a rifle, screaming at the bank teller to open the vault. Scared for her life, the bank teller opened the vault with a **bleiflex** object and tossed the money into a garbage bag. After grabbing the bag of money from the woman, Dr. Evil let out a **ingroarterlaugh** and tried to escape from the scene. However, minutes after he fled the scene he was caught by the police. The paparazzi was there to get **shotssnap** of the entire event. When questioned later on in the day at the police station, Dr. Evil sat **rightup**, slammed his fist on the table and shouted "All my riches are gone and those **dygree** bastards at the bank are swimming in money".













Appendix G:

STUDENT WORKSHEET VL

Task: Complete the story with the missing words! Use only 1 word per picture.
Provide the translation of the words as well... Which Duo will finish first? Success!



BREAKING NEWS: REKNOWNED
SCIENTIST ROBS A BANK

In today's headlines, New York City Police Department reports the shocking news of a bank robbery said to be committed by none other than the famous  Dr. Evil. He is best known for his research on the existence of  life and has won many awards for his work. His book 'E.T.' has been  as the most  piece of literature for alien fanatics. Sources close to the suspect claim that he recently suffered an emotional and financial  after his new book 'The Others' did not sell as he thought it would. His failure to produce a high number of book sales has caused him to  a lot of criticism from the press. For the first time in his career, he was experiencing the  of fame. Although he has been under a great deal of stress, no one could have expected what happened yesterday afternoon at 4 P.M. Dr. Evil was seen walking into the Barclay's Bank, armed with a rifle, screaming at the bank teller to open the vault. Scared for her life, the bank teller opened the vault with a  object and tossed the money into a garbage bag. After grabbing the bag of money from the woman, Dr. Evil let out a  and tried to escape from the scene. However, minutes after he fled the scene he was caught by the police. The paparazzi was there to get a  of the entire event. When questioned later on in the day at the police station, Dr. Evil sat , slammed his fist on the table and shouted "All my riches are gone and those  bastards at the bank are swimming in money".

Appendix H

THE CBI METHOD

Today's lesson

- Learning-style test
- Task
- Practice
- Final Challenge
- Test

Learning-style test



Learning-style test



- Prefer - voorkeur hebben voor
- Fiddle - spelen met
- Doodle - tekenen
- Skill - vaardigheid
- Adverts - reclame
- Telly - televisie
- Physical - fysiek
- Fidgeting - (te veel) bewegen
- Scenery - landschap/omgeving
- Distracted - afgeleid worden

TASK

~~~~~TEXT~~~~~

THEME: ***BREAKING NEWS - Renowned Scientist Robs a Bank***

In today's headlines, New York City Police Department reports the shocking news of a bank robbery said to be committed by none other than the famous scholar Dr. Evil. He is best known for his research on the existence of extra-terrestrial life and has won many awards for his work. His book 'E.T.' has been highlighted as the most handy piece of literature for alien fanatics. Sources close to the suspect claim that he recently suffered an emotional and financial meltdown after his new book 'The Others' did not sell as he thought it would. His failure to produce a high number of book sales has caused him to face a lot of criticism from the press. For the first time in his career, he was experiencing the pitfalls of fame. Although he has been under a great deal of stress, no one could have expected what happened yesterday afternoon at 4 PM. Dr. Evil was seen walking into the Barclay's Bank armed with a rifle, screaming at the bank teller to open the vault. Scared for her life, the bank teller opened the vault with a flexible object and tossed the money into a garbage bag. After grabbing the bag of money from the woman, Dr. Evil let out a roaring laughter and tried to escape from the scene. However, minutes after he fled the scene he was caught by the police. The paparazzi was there to get snapshots of the entire event. When questioned later on in the day at the police station, Dr. Evil sat upright, slammed his fist on the table and shouted "All my riches are gone and those greedy bastards at the bank are swimming in money".

Task: 5 minutes

3:59

1. Read the text (groups of 3!)
1. Try to guess the meaning of the 12 underlined words by considering the context (Worksheet!)
1. Provide the correct definition or translation (Dutch) of the 12 words (Worksheet!)

THEME:

BREAKING NEWS: Renowned Scientist Robs a Bank

In today's headlines, New York City Police Department reports the shocking news of a bank robbery said to be committed by none other than the famous scholar Dr. Evil. He is best known for his research on the existence of extra-terrestrial life and has won many awards for his work. His book 'E.T.' has been highlighted as the most handy piece of literature for alien fanatics. Sources close to the suspect claim that he recently suffered an emotional and financial melt-down after his new book 'The Others' did not sell as he thought it would. His failure to produce a high number of book sales has caused him to face a lot of criticism from the press. For the first time in his career, he was experiencing the pitfalls of fame. Although he has been under a great deal of stress, no one could have expected what happened yesterday afternoon at 4 PM. Dr. Evil was seen walking into the Barday's Bank, armed with a rifle, screaming at the bank teller to open the vault. Scared for her life, the bank teller opened the vault with a flexible object and tossed the money into a garbage bag. After grabbing the bag of money from the woman, Dr. Evil let out a roaring laughter and tried to escape from the scene. However, minutes after he fled the scene he was caught by the police. The paparazzi was there to get snapshots of the entire event. When questioned later on in the day at the police station, Dr. Evil sat upright, slammed his fist on the table and shouted "All my riches are gone and those greedy bastards at the bank are swimming in money".

Practice

Exercise 1

Match the words (left column) with the correct definition (right column):

1) (to) Face	A. Draw special attention to.
2) Meltdown	B. Convenient to handle or use; useful.
3) Snapshot	C. Confront and deal with or accept.
4) Handy	D. An informal photograph taken quickly.
5) Greedy	E. A disastrous collapse or breakdown.
6) (to) Highlight	F. Having or showing an intense and selfish desire for wealth or power.

Exercise 1

Match the words (left column) with the correct definition (right column):

1) (to) Face	A. Draw special attention to.
2) Meltdown	B. Convenient to handle or use; useful.
3) Snapshot	C. Confront and deal with or accept.
4) Handy	D. An informal photograph taken quickly.
5) Greedy	E. A disastrous collapse or breakdown.
6) (to) Highlight	F. Having or showing an intense and selfish desire for wealth or power.

Exercise 2

Fill in the blanks with the correct word!

- A. Dr. Patricia King is a _____ who travels around the world for research purposes.
- B. The mother enjoys holding her baby _____.
- C. _____ is another term for LOL.
- D. A synonym for _____ life is alien life.
- E. Many biblical stories are warnings about the _____ of life (of not walking a straight line).
- F. A _____ schedule allows an employee to work hours that differ from the normal company start and stop time.

Exercise 2

Fill in the blanks with the correct word!

A = Scholar

B = Upright

C = Roaring laughter

- A. Dr. Patricia King is a _____ who travels around the world for research purposes.
- B. The mother enjoys holding her baby _____.
- C. _____ is another term for LOL.
- D. A synonym for _____ life is alien life.
- E. Many biblical stories are warnings about the _____ of life (of not walking a straight line).
- F. A _____ schedule allows an employee to work hours that differ from the normal company start and stop time.

D = Extra-terrestrial

E = Pitfalls


F = Flexible

Final Challenge!!!

(groups of 3 - 10 min.)

4:46

Challenge:

- Create a story using the 12 words from the right column 
- Choose a suitable theme and title for your story.
- Choose 1 group member to read the story to the class.

"Success and may the best story win!"




1. Scholar
2. Extra-terrestrial
3. (to) Highlight
4. Handy
5. Meltdown
6. (to) Face
7. Pitfall
8. Flexible
9. Roaring laughter
10. Snapshot
11. Upright
12. Greedy

Story Presentations

- Group 1
- Group 2
- Group 3
- Group 4
- Group 5
- Group 6
- Group 7

Test



Test



THE END!!!

Appendix I

THE TBL METHOD

Today's lesson

- Learning-style test
- Task
- Practice
- Test

Learning-style test



Learning-style test



- Prefer - voorkeur hebben voor
- Fiddle - spelen met
- Doodle - tekenen
- Skill - vaardigheid
- Adverts - reclame
- Telly - televisie
- Physical - fysiek
- Fidgeting - (te veel) bewegen
- Scenery - landschap/omgeving
- Distracted - afgeleid worden

Task

GAME: "CHARADES-GUESS MY WORD!"



#LearnByDoing

Instructions for: *Guess my word!*

The aims of the game (hints/charades) are:

- To guess the word your groupmate is acting out before the timer runs out
- To remember the words that were in the game.

Method:

- You will be placed into two groups: group A and group B.
- Six members from each group has to act out a word. Decide which members and in what order! Group A: 1-3-5-7-9-11 and group B: 2-4-6-8-10-12. *Remaining groupmembers: acting helpline if needed.*
- When the teacher calls out your number, it's your turn to come in front of the class to act out a word. *Your number will also appear in the empty coloured box on the powerpoint slide.*
- The teacher will show you the card with the word you have to act out. Don't forget to read the definitions (English and Dutch) of the word, especially if you don't know the word. Have fun, try to be creative and act out your word without speaking.
- A "HINT" will appear on the powerpoint slide as a helpline for your groupmates to guess your word.
- When one team is finished, the other team will be given a turn and so on, until the game ends.

Rules for: *Guess my word!*

- You have to "GUESS THE WORD" within 30 seconds.
- When the time is up, you will hear a buzzer.
- Your group will receive 10 points for every correct answer. When you hear the buzzer and your group has not guessed the word as yet, the teacher will reveal the definitions (English and Dutch) of the word to you. If your team guesses the correct word within 3 seconds, your group will receive 5 points.
- If your group's answer is incorrect, your team will receive 0 points. The other team will get a chance to answer. If the other team answers correctly, they receive 5 points.
- If the team member speaks while he/she is acting out a word, 5 points will be subtracted from the score of their team. (-5 points)
- If a member of the other team speaks when it is not their turn, 5 points will be subtracted from the score of their team. (-5 points)
- The group with the most points at the end of the game wins.

The teacher will keep track of the scores!!!

HOW TO PLAY → AN EXAMPLE FOR THE ACTORS/ACTRESSES

THE WORD YOU HAVE TO ACT OUT →

Definition:
"To move your body to the rhythm of music."

DANCE

Dutch definition:
"Ritmisch bewegen op muziek."



HOW TO PLAY → AN EXAMPLE FOR THE REST OF THE CLASS



GUESS MY WORD!



HINT:


D [] [] C []

HOW TO PLAY → AN EXAMPLE FOR THE REST OF THE CLASS


O

Definition:
"To move your body to the rhythm of music."

Dutch definition:
"Ritmisch bewegen op muziek."



GUESS MY WORD!



HINT: D C

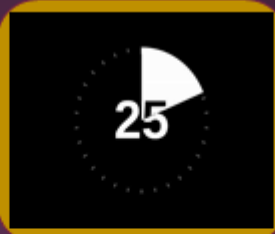
HOW TO PLAY → AN EXAMPLE FOR THE REST OF THE CLASS

O


Definition:
"To move your body to the rhythm of music."

DANCE

Dutch definition:
"Ritmisch bewegen op muziek."



GUESS MY WORD!

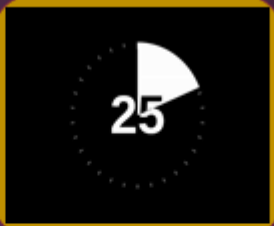


HINT: D A N C E


GUESS MY WORD!



1



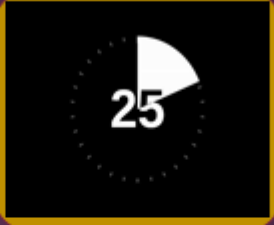
GUESS MY WORD!




HINT: R _ _ _ Y

1

Definition:
"Having or showing an intense and selfish desire for wealth and power."



GUESS MY WORD!



Dutch definition:
"Mateloos naar geld, vermogen of bezit trachtend."

HINT: R _ _ _ Y

1

Definition:
"Having or showing an intense and selfish desire for wealth and power."

Greedy

Dutch definition:
"Mateloos naar geld, vermogen of bezit trachtend."




GUESS MY WORD!




HINT: G R E E D Y

GUESS MY WORD!




2




HINT: [] A [] [] Y

GUESS MY WORD!



2




HINT: [] A [] [] Y


Definition:
"Convenient to handle or use; useful."

Dutch definition:
"Nuttig, eenvoudig in het gebruik."

GUESS MY WORD!



2



HINT: [] H [] A [] N [] D [] Y

Definition:
"Convenient to handle or use; useful."

HANDY

Dutch definition:
"Nuttig, eenvoudig in het gebruik."

3

25

GUESS MY WORD!

HINT:

F X E

3

Definition:
"Capable of bending easily without breaking."

25

GUESS MY WORD!

HINT:

F X E

Dutch definition:
"In staat te buigen."

3

Definition:
"Capable of bending easily without breaking."

FLEXIBLE

Dutch definition:
"In staat te buigen."


25

GUESS MY WORD!


HINT:

F L E X I B L E

GUESS MY WORD!




4




HINT: [] [] [] E

GUESS MY WORD!



4

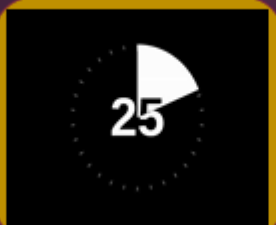
Definition:
"Confront and deal with or accept."



HINT: [] [] [] E

Dutch definition:
"Geconfronteerd worden met."


GUESS MY WORD!



4

Definition:
"Confront and deal with or accept."

(to) FACE




HINT: F A C E

Dutch definition:
"Geconfronteerd worden met."

5

25

GUESS MY WORD!



HINT:

R [] [] [] I [] []


[] [] U [] [] T [] []

5

Definition:
"Laugh Out Loud (LOL)."

25

GUESS MY WORD!



HINT:

R [] [] [] I [] []

[] [] U [] [] T [] []


Dutch definition:
"Een bulderend gelach."

5

Definition:
"Laugh Out Loud (LOL)."

25

GUESS MY WORD!



HINT:


R O A R I N G

L A U G H T E R


ROARING LAUGHTER

Dutch definition:
"Een bulderend gelach."

GUESS MY WORD!



6




HINT:

X R


T R T R L

GUESS MY WORD!



6

Definition:
"Occurring or existing beyond the earth's atmosphere."



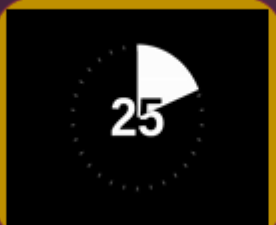
HINT:

X R

T R T R L


Dutch definition:
"Buitenaards."

GUESS MY WORD!



6

Definition:
"Occurring or existing beyond the earth's atmosphere."



HINT:

EXTRA

TERRESTRIAL


EXTRA-TERRESTRIAL

Dutch definition:
"Buitenaards."

7

25

GUESS MY WORD!




HINT: M _ _ T _ _ _ N

7

Definition:
"A disastrous collapse or breakdown."

25

GUESS MY WORD!



Dutch definition:
"Ineenstorting."

HINT: M _ _ T _ _ _ N

7


Definition:
"A disastrous collapse or breakdown."

MELTDOWN

Dutch definition:
"Ineenstorting."


25

GUESS MY WORD!




HINT: M E L T D O W N

GUESS MY WORD!




8




HINT: P [] [] F [] [] []

GUESS MY WORD!



8

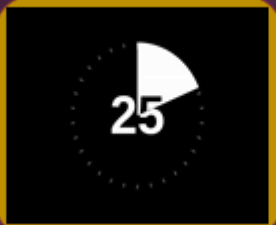
Definition:
"An unsuspected difficulty or danger."



HINT: P [] [] F [] [] []


Dutch definition:
"Een Valkuil."

GUESS MY WORD!



8

Definition:
"An unsuspected difficulty or danger."



HINT: P I T F A L L

PITFALL

Dutch definition:
"Een Valkuil."


9

25

GUESS MY WORD!

HINT:

S C L



9

Definition:
"A specialist in a particular branch of study."


25

GUESS MY WORD!

HINT:

S C L

Dutch definition:
"Een geleerde."



9

Definition:
"A specialist in a particular branch of study."

SCHOLAR


Dutch definition:
"Een geleerde."

25

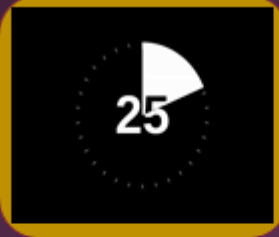
GUESS MY WORD!

HINT:


S C H O L A R



GUESS MY WORD!




10




HINT:

S _ _ P _ _ O _

GUESS MY WORD!



10




HINT:

S _ _ P _ _ O _


Definition:
"An informal photograph taken quickly, typically with a small handheld camera."

Dutch definition:
"Een kiekje/Amateurfoto."

GUESS MY WORD!



10



HINT:

S N A P S H O T

Definition:
"An informal photograph taken quickly, typically with a small handheld camera."

SNAPSHOT

Dutch definition:
"Een kiekje/Amateurfoto."


11

25

GUESS MY WORD!

HINT:

I L T



11

Definition:
"Draw special attention to."


25

GUESS MY WORD!

HINT:

I L T

Dutch definition:
"Extra aandacht leggen op iets (benadrukken)."



11

Definition:
"Draw special attention to."

25

GUESS MY WORD!

(to) HIGHLIGHT

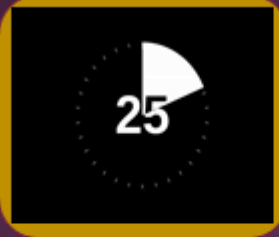
HINT:

H I G H L I G H T


Dutch definition:
"Extra aandacht leggen op iets (benadrukken)."



GUESS MY WORD!




12




HINT:

□ □ R G □ □

GUESS MY WORD!



12




HINT:

□ □ R G □ □


Definition:
"Sitting or standing with the back straight."

Dutch definition:
"Rechttop zitten of staan."

GUESS MY WORD!



12



HINT:

U P R I G H T

Definition:
"Sitting or standing with the back straight."

UPRIGHT

Dutch definition:
"Rechttop zitten of staan."



Practice

“How many words do you remember?”

Exercise 1: Unscramble the underlined/bold words to complete the text!

Think about the words from the game

BREAKING NEWS: Renowned Scientist Robs a Bank

In today's headlines, New York City Police Department reports the shocking news of a bank robbery said to be committed by none other than the famous **larscho** Dr. Evil. He is best known for his research on the existence of **traex-trialrester** life and has won many awards for his work. His book 'E.T.' has been **lighthighed** as the most **dyhan** piece of literature for alien fanatics. Sources close to the suspect claim that he recently suffered an emotional and financial **downmelt** after his new book 'The Others' did not sell as he thought it would. His failure to produce a high number of book sales has caused him to **cefa** a lot of criticism from the press. For the first time in his career, he was experiencing the **fallspit** of fame. Although he has been under a great deal of stress, no one could have expected what happened yesterday afternoon at 4 PM. Dr. Evil was seen walking into the Barclay's Bank, armed with a rifle, screaming at the bank teller to open the vault. Scared for her life, the bank teller opened the vault with a **bleiflex** object and tossed the money into a garbage bag. After grabbing the bag of money from the woman, Dr. Evil let out a **ingroar terlaugh** and tried to escape from the scene. However, minutes after he fled the scene he was caught by the police. The paparazzi was there to get **shotssnap** of the entire event. When questioned later on in the day at the police station, Dr. Evil sat **rightup**, slammed his fist on the table and shouted "All my riches are gone and those **dygree** bastards at the bank are swimming in money".

Exercise 1: BREAKING NEWS: Renowned Scientist Robs a Bank

In today's headlines, New York City Police Department reports the shocking news of a bank robbery said to be committed by none other than the famous **scholar** Dr. Evil. He is best known for his research on the existence of **extra-terrestrial** life and has won many awards for his work. His book 'E.T.' has been **highlighted** as the most **handy** piece of literature for alien fanatics. Sources close to the suspect claim that he recently suffered an emotional and financial **meltdown** after his new book 'The Others' did not sell as he thought it would. His failure to produce a high number of book sales has caused him to **face** a lot of criticism from the press. For the first time in his career, he was experiencing the **pitfalls** of fame. Although he has been under a great deal of stress, no one could have expected what happened yesterday afternoon at 4 PM. Dr. Evil was seen walking into the Barclay's Bank armed with a rifle, screaming at the bank teller to open the vault. Scared for her life, the bank teller opened the vault with a **flexible** object and tossed the money into a garbage bag. After grabbing the bag of money from the woman, Dr. Evil let out a **roaring laughter** and tried to escape from the scene. However, minutes after he fled the scene he was caught by the police. The paparazzi was there to get **snapshots** of the entire event. When questioned later on in the day at the police station, Dr. Evil sat **upright**, slammed his fist on the table and shouted "All my riches are gone and those **greedy** bastards at the bank are swimming in money".

Exercise 2

Match the words (left column) with the correct definition (right column):

1) (to) Face	A. Draw special attention to.
2) Meltdown	B. Convenient to handle or use; useful.
3) Snapshot	C. Confront and deal with or accept.
4) Handy	D. An informal photograph taken quickly.
5) Greedy	E. A disastrous collapse or breakdown.
6) (to) Highlight	F. Having or showing an intense and selfish desire for wealth or power.

Exercise 2

Match the words (left column) with the correct definition (right column):

1) (to) Face	A. Draw special attention to.
2) Meltdown	B. Convenient to handle or use; useful.
3) Snapshot	C. Confront and deal with or accept.
4) Handy	D. An informal photograph taken quickly.
5) Greedy	E. A disastrous collapse or breakdown.
6) (to) Highlight	F. Having or showing an intense and selfish desire for wealth or power.

Exercise 3

Fill in the blanks with the correct word!

- A. Dr. Patricia King is a _____ who travels around the world for research purposes.
- B. The mother enjoys holding her baby _____.
- C. _____ is another term for LOL.
- D. A synonym for _____ life is alien life.
- E. Many biblical stories are warnings about the _____ of life (of not walking a straight line).
- F. A _____ schedule allows an employee to work hours that differ from the normal company start and stop time.

Exercise 3

Fill in the blanks with the correct word!

A = Scholar

B = Upright

C = Roaring laughter

- A. Dr. Patricia King is a _____ who travels around the world for research purposes.
- B. The mother enjoys holding her baby _____.
- C. _____ is another term for LOL.
- D. A synonym for _____ life is alien life.
- E. Many biblical stories are warnings about the _____ of life (of not walking a straight line).
- F. A _____ schedule allows an employee to work hours that differ from the normal company start and stop time.

D = Extra-terrestrial

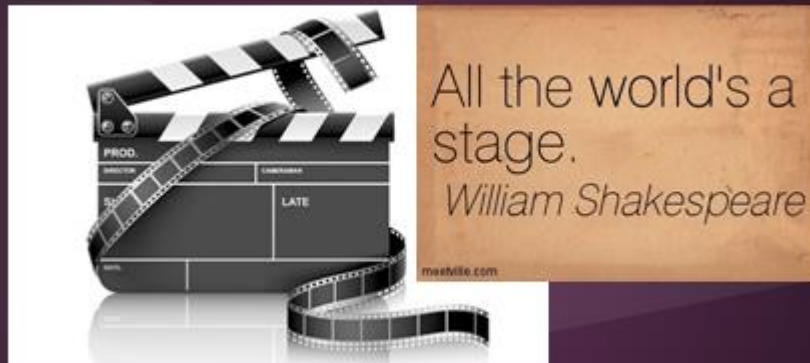
E = Pitfalls

F = Flexible

Test



Test



THE END!!!

Appendix J

THE VL METHOD

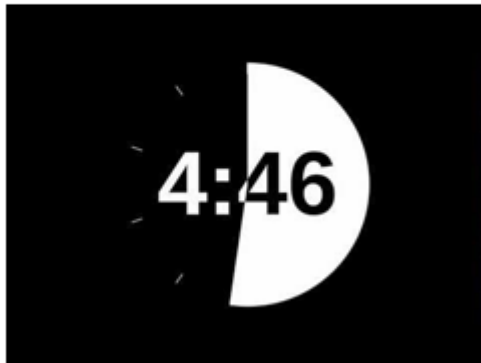
Today's lesson

- Learning-style test
- What is VL?
- Video
- Criteria VL
- Vocabulary (words to remember)
- Practice
- Test

Learning-style test



Learning-style test



- Prefer - voorkeur hebben voor
- Fiddle - spelen met
- Doodle - tekenen
- Skill - vaardigheid
- Adverts - reclame
- Telly - televisie
- Physical - fysiek
- Fidgeting - (te veel) bewegen
- Scenery - landschap/omgeving
- Distracted - afgeleid worden

Visual Learning

Visual Learning

In visual learning students gain knowledge and understanding through visual tools



Mental images

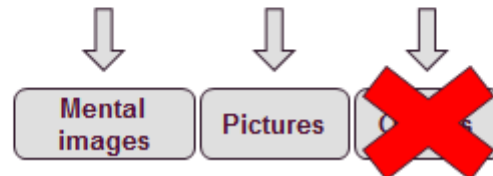
Pictures

Objects

Visual Learning

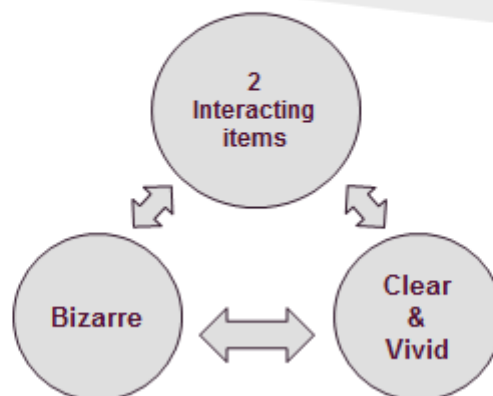
We will not use any objects in today's lesson!

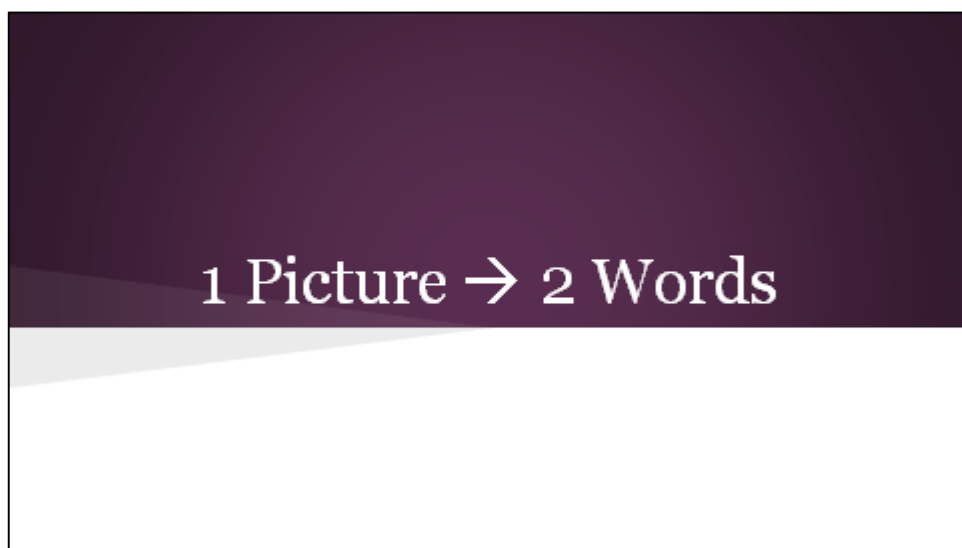
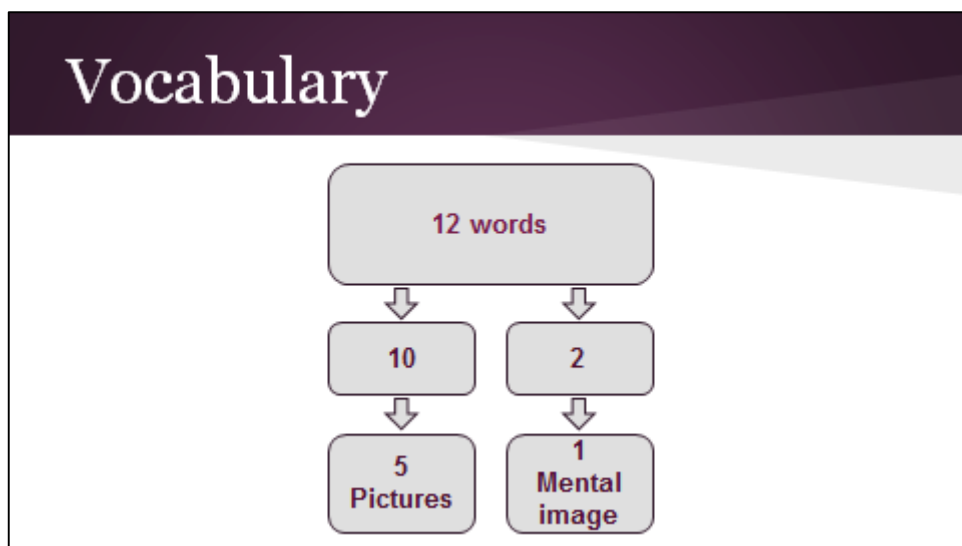
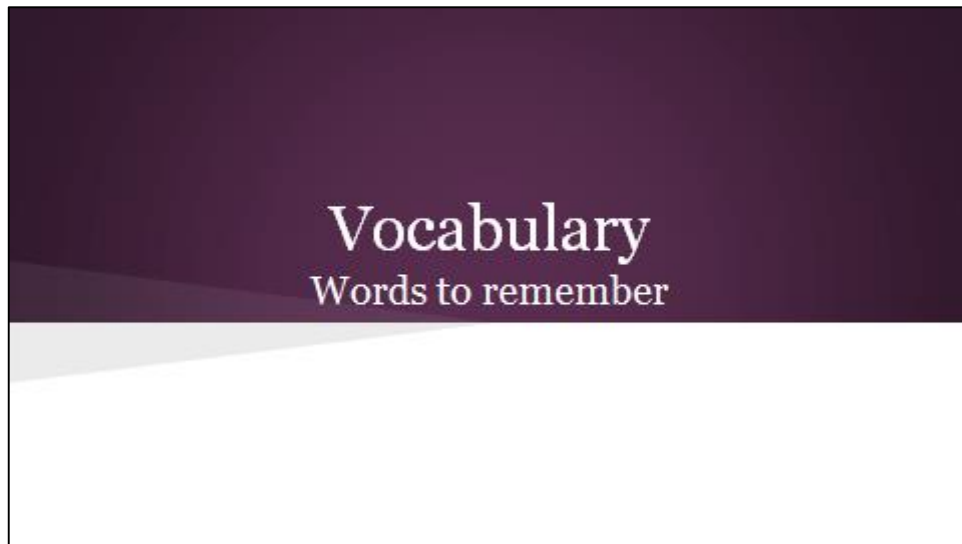
In visual learning students gain knowledge and understanding through visual tools

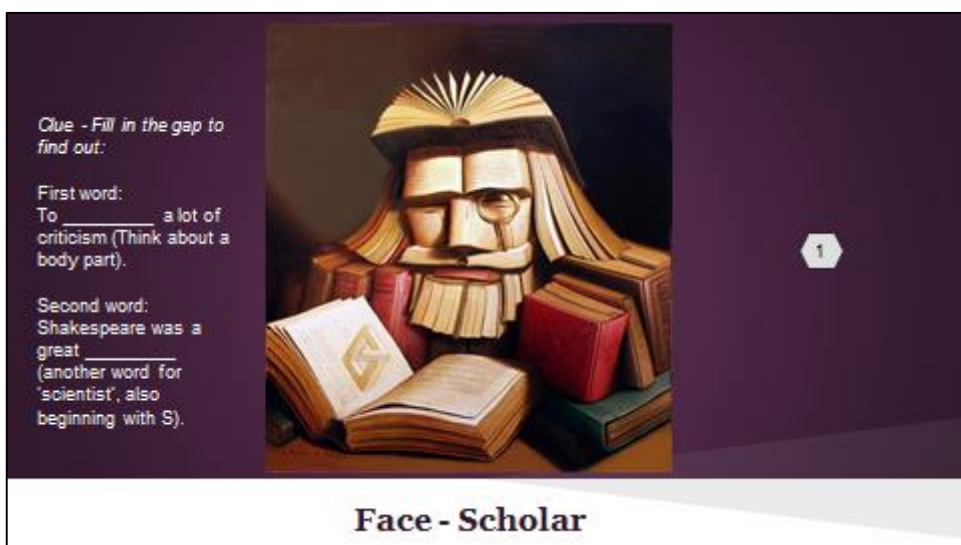
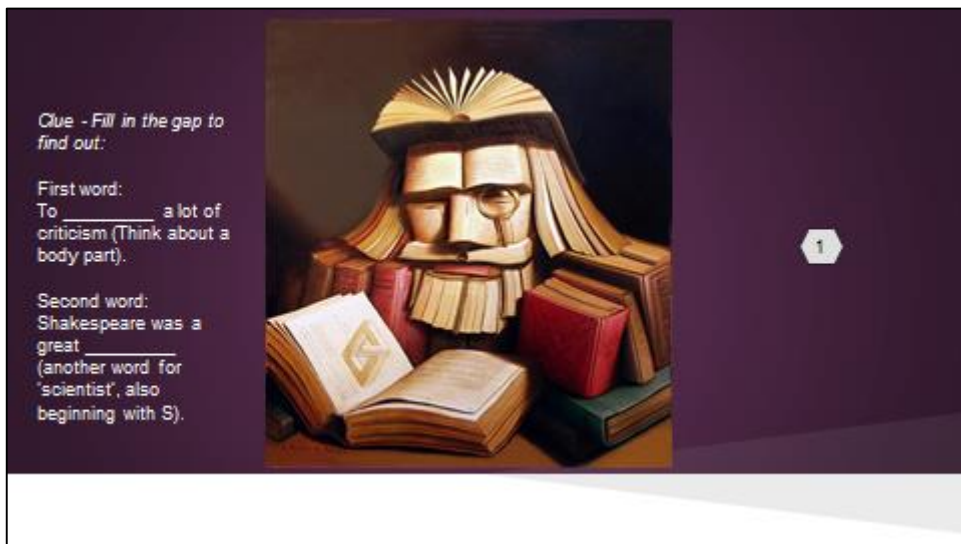
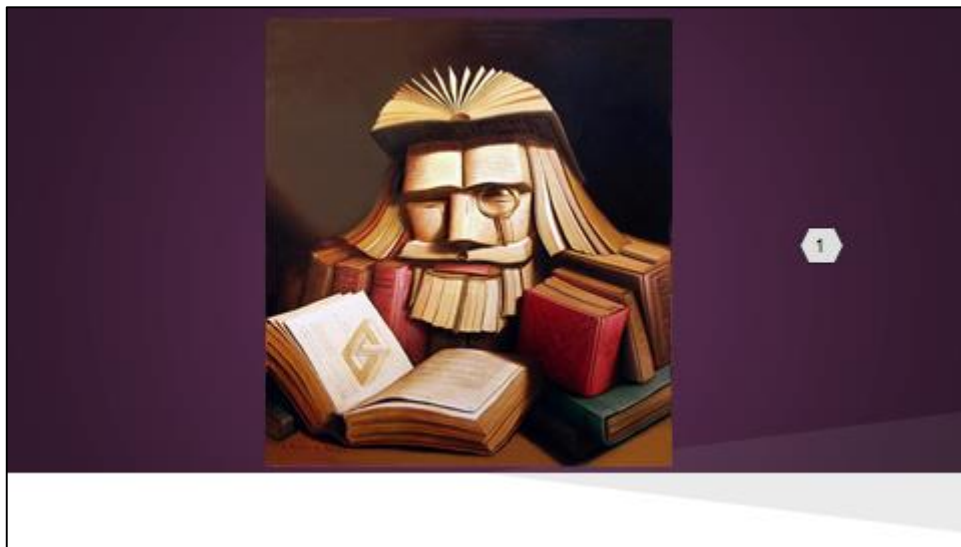


Video: What does Joshua Foer say about making words memorable?

Criteria for Mental Image







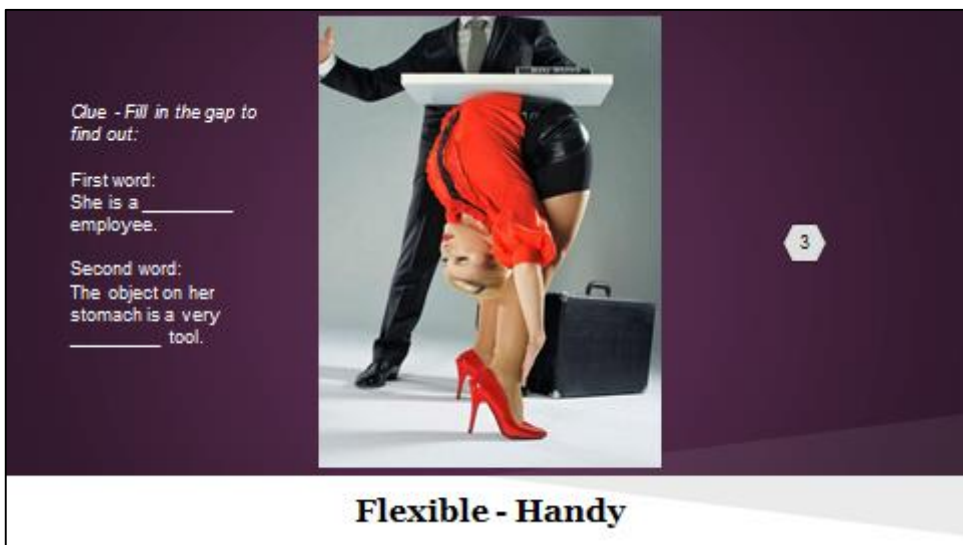




3



3



3

Flexible - Handy




4

Clue - Fill in the gap to find out:

First word:
E.T. is the acronym for _____ (the first word is a synonym of 'more').

Second word:
To _____ your skills (another word for 'emphasize').



4

Clue - Fill in the gap to find out:

First word:
E.T. is the acronym for _____ (the first word is a synonym of 'more').

Second word:
To _____ your skills (another word for 'emphasize').



4

Extra-Terrestrial - Highlight



5

Clue - Fill in the gap to find out:

First word:
A financial _____
(Think about what happens to ice!)

Second word:
What are the _____ when buying a car. (Rhymes with hit/tall).



5

Clue - Fill in the gap to find out:

First word:
A financial _____
(Think about what happens to ice!)

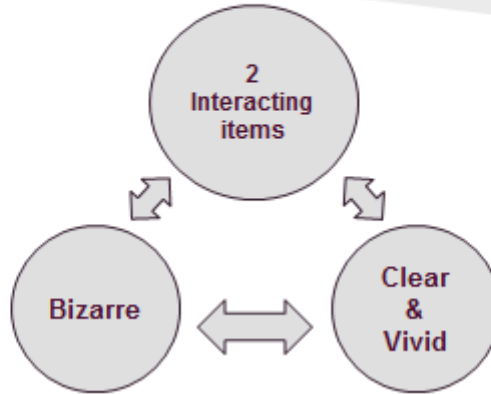
Second word:
What are the _____ when buying a car. (Rhymes with hit/tall).



5

Meltdown - Pitfall

Criteria for Mental Image



- Greedy
- Roaring
Laughter

Make a mental image of the two words (1 picture only).



6

Greedy - Roaring Laughter

Recap: Which two words belong to the picture?















		
Face Scholar	Extra-Terrestrial Highlight	Meltdown Pitfall
		
Flexible Handy	Snapshot Upright	Greedy Roaring Laughter

Practice

Exercise 1: Complete the story with the missing words! Use only 1 word per picture.

BREAKING NEWS: Renowned Scientist Robs a Bank




In today's headlines, New York City Police Department reports the shocking news of a bank robbery said to be committed by none other than the famous  Dr. Evil. He is best known for his research on the existence of  life and has won many awards for his work. His book 'E.T.' has been  as the most  piece of literature for alien fanatics. Sources close to the suspect claim that he recently suffered an emotional and financial  after his new book 'The Others' did not sell as he thought it would. His failure to produce a high number of book sales has caused him to  a lot of criticism from the press. For the first time in his career, he was experiencing the  of fame. Although he has been under a great deal of stress, no one could have expected what happened yesterday afternoon at 4 PM. Dr. Evil was seen walking into the Barclay's Bank, armed with a rifle, screaming at the bank teller to open the vault. Scared for her life, the bank teller opened the vault with a  object and tossed the money into a garbage bag. After grabbing the bag of money from the woman, Dr. Evil let out a  and tried to escape from the scene. However, minutes after he fled the scene he was caught by the police. The paparazzi was there to get  of the entire event. When questioned later on in the day at the police station, Dr. Evil sat , slammed his fist on the table and shouted "All my riches are gone and those  bastards at the bank are swimming in money".

Exercise 1: BREAKING NEWS: Renowned Scientist Robs a Bank

In today's headlines, New York City Police Department reports the shocking news of a bank robbery said to be committed by none other than the famous scholar Dr. Evil. He is best known for his research on the existence of extra-terrestrial life and has won many awards for his work. His book 'E.T.' has been highlighted as the most handy piece of literature for alien fanatics. Sources close to the suspect claim that he recently suffered an emotional and financial meltdown after his new book 'The Others' did not sell as he thought it would. His failure to produce a high number of book sales has caused him to face a lot of criticism from the press. For the first time in his career, he was experiencing the pitfalls of fame. Although he has been under a great deal of stress, no one could have expected what happened yesterday afternoon at 4 PM. Dr. Evil was seen walking into the Barclay's Bank armed with a rifle, screaming at the bank teller to open the vault. Scared for her life, the bank teller opened the vault with a flexible object and tossed the money into a garbage bag. After grabbing the bag of money from the woman, Dr. Evil let out a roaring laughter and tried to escape from the scene. However, minutes after he fled the scene he was caught by the police. The paparazzi was there to get snapshots of the entire event. When questioned later on in the day at the police station, Dr. Evil sat upright, slammed his fist on the table and shouted "All my riches are gone and those greedy bastards at the bank are swimming in money".




Exercise 2

Match the definition to the correct picture (1 per picture)

1)		A. A disastrous collapse or breakdown. B. An informal photograph taken quickly, typically with a small handheld camera.
2)		C. Confront and deal with or accept. D. Draw special attention to. E. Having or showing an intense and selfish desire for wealth or power.
3)		F. Convenient to handle or use; useful







Exercise 2

Match the definition to the correct picture (1 per picture)

1)		C = Face	A = Meltdown	D = Highlight	A. A disastrous collapse or breakdown. B. An informal photograph taken quickly, typically with a small handheld camera.
2)		A			C. Confront and deal with or accept. D. Draw special attention to. E. Having or showing an intense and selfish desire for wealth or power.
3)		D	B = Snapshot	E = Greedy	F. Convenient to handle or use; useful

Exercise 3:

Use the pictures to fill in the blanks with the correct word!

 1	 2	 3	 4	 5	 6
---	---	---	---	--	---

<ol style="list-style-type: none"> 1. Dr. Patricia King is a _____ who travels around the world for research purposes. 2. The mother enjoys holding her baby _____. 3. A _____ schedule allows an employee to work hours that differ from the normal company start and stop time. 	<ol style="list-style-type: none"> 4. _____ is another term for LOL. 5. A synonym for _____ life is alien life. 6. Many biblical stories are warnings about the _____ of life (of not walking a straight line).
--	--

Exercise 3:

Use the pictures to fill in the blanks with the correct word!



1. Dr. Patricia King is a scholar who travels around the world for research purposes.
2. The mother enjoys holding her baby upright.
3. A flexible schedule allows an employee to work hours that differ from the normal company start and stop time.

4. Roaring laughter is another term for LOL.
5. A synonym for extra-terrestrial life is alien life.
6. Many biblical stories are warnings about the pitfalls of life (of not walking a straight line).

Test

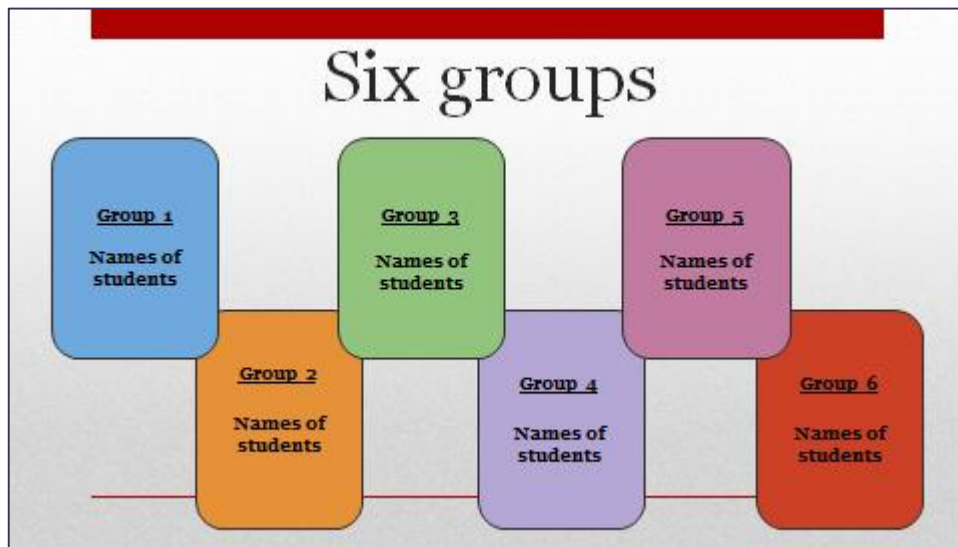


Test



THE END!!!

Appendix K



LEARNING STYLES

PART II

Vocabulary learning through the VAK-model

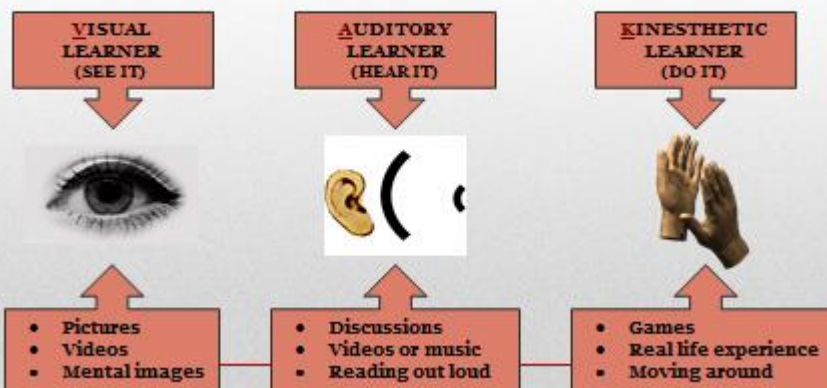
Today's lesson

- Video about Learning Styles (VAK)
- The VAK-model
- Your Learning Style Test Results
- Tasks
- Perform tasks
- Quiz
- Evaluation

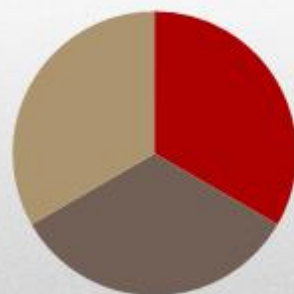


Video: Learning Styles - The VAK-model

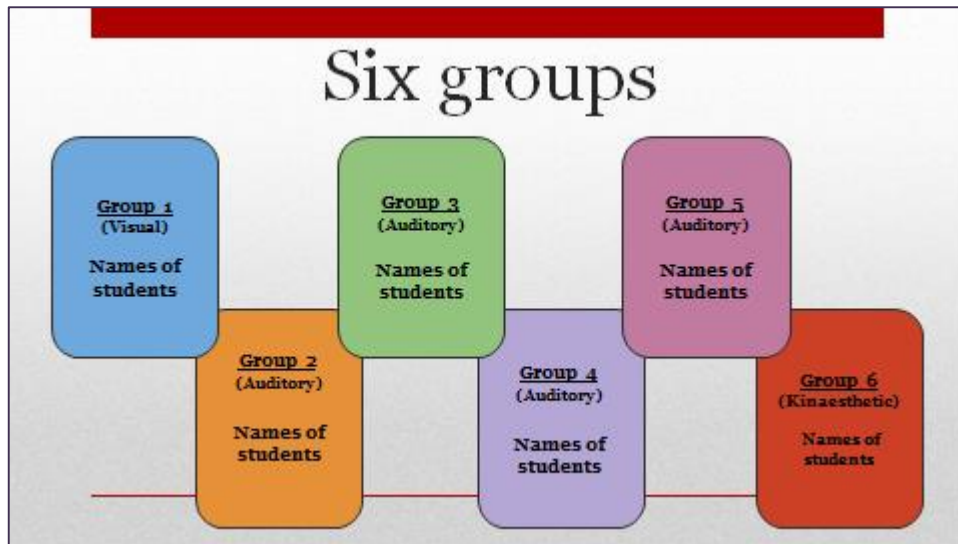
The VAK-model



Your Learning Style Test Results



Visual	- 0
Auditory	- 0
<u>Kinesthetic</u>	<u>- 0</u>
Total:	0



Tasks: The 5 minute challenge!!!

You will receive 5 words from the teacher.

- Group 1: Visual Challenge**
 - Draw 5 images as big and as quick as you can depicting the 5 words (1 image per word). Decide as a group how you will complete the task.
 - Write the word on the other side of the page.
 - The pictures should be clear enough for your classmates to guess the word before you reveal it.
- Groups 2, 3, 4 & 5: Auditory Challenge**
 - Your friend is hospitalized for drinking too much alcohol.
 - Use the five words (a min. of 5 sentences & no less than 5 words per sentence) to write a short text, in which you give advice to your other friends about this issue. Underline or highlight the important words and choose the group member who will read the text to the class.
 - Which group can complete this task within 5 minutes?
- Group 6: Kinesthetic Challenge**
 - Plan within your group how you are going to act out the 5 words for your classmates to guess.
 - Use the prop you get from the teacher with at least three of the five words during the acting.
 - Each group member should act out a word. Discuss the order in which this takes place to avoid delay. You are allowed to have a group member assist you while acting if necessary.

Visual Challenge

- Draw 5 images as big and as quick as you can depicting the 5 words (1 image per word). Decide as a group how you will complete the task.
- Write the word on the other side of the page.
- The pictures should be clear enough for your classmates to guess the word before you reveal it.

Auditory Challenge

- Your friend is hospitalized for drinking too much alcohol.
- Use the five words (a min. of 5 sentences & no less than 5 words per sentence) to write a short text, in which you give advice to your other friends about this issue. Underline or highlight the important words and choose the group member who will read the text to the class.

Kinaesthetic Challenge

- Plan within your group how you are going to act out the 5 words for your classmates to guess.
- Use the prop you get from the teacher with at least three of the five words during the acting.
- Each group member should act out a word. Discuss the order in which this takes place to avoid delay. You are allowed to have a group member assist you while acting if necessary.

Perform the tasks

Group 1: Visual Challenge

Group 6: Kinesthetic Challenge

Groups 2, 3, 4 & 5: Auditory Challenge

Perform the tasks

Group 1: Visual Challenge

1. Billboard
2. Kindergarten
3. Abuse
4. To graduate
5. Surgery

Group 6: Kinesthetic Challenge

1. Goal
2. Martial arts
3. Rope
4. To tie up
5. To skip

Groups 2, 3, 4 & 5: Auditory Challenge

1. Topic
2. Addicted to
3. Limit
4. To hurt
5. Binge drinking



- Have a look at the public service announcement (PSA) video about binge drinking.
- Brief discussion: Have any of you been in this situation? What do you think about binge drinking?

QUIZ

- The teacher will call a name (randomly) to translate a word.
- Put up your fist if your classmate's answer is correct.
- Repeat the correct answer.

Quiz - Translate the following words:

- | | | | | |
|-------------------|---------------------------|--------------|---------------|------------------|
| 1. Onderwerp | 2. Misbruik | 3. Doel | 4. Vastbinden | 5. Reclamebord |
| 6. Verslaafd aan | 7. slagen / diploma halen | 8. Pijn doen | 9. Touw | 10. Vechtkunsten |
| 11. Kleuterschool | 12. Overslaan | 13. Operatie | 14. Grens | 15. Comazuipen |

Quiz - Translate the following words:

- | | | | | |
|------------------|----------------|-------------|--------------|--------------------|
| 1. Topic | 2. Abuse | 3. Goal | 4. To tie up | 5. Billboard |
| 6. Addicted to | 7. To graduate | 8. To hurt | 9. Rope | 10. Martial arts |
| 11. Kindergarten | 12. To skip | 13. Surgery | 14. Limit | 15. Binge drinking |



THE END

Please fill in the evaluation form!!! (5 min.)

Appendix L
CBI Results

Students	Learning Style	Immediate Post-Test	Delayed Post-Test
Student 1	A	9.2	8.3
Student 2	V	8.3	8.3
Student 3	V	10.0	9.2
Student 4	A	8.3	7.5
Student 5	A	7.5	8.3
Student 6	A	5.8	3.3
Student 7	K	6.7	3.3
Student 8	V	6.7	6.7
Student 9	K	6.7	6.7
Student 10	A	7.5	7.5
Student 11	V	10.0	9.2
Student 12	K	8.3	5.0
Student 13	K	4.2	4.2
Student 14	A	6.7	5.0
Student 15	K	8.3	7.5
Student 16	K	5.0	5.8
Student 17	V	8.3	7.5
Student 18	A	9.2	8.3
Student 19	A	9.2	9.2
Student 20	K	7.5	6.7
Student 21	V	6.7	4.2

TBL Results

Students	Learning Style	Immediate Post-Test	Delayed Post-Test
Student 1	V	6.7	3.3
Student 2	K	9.2	8.3
Student 3	V	5.8	3.3
Student 4	A	6.7	4.2
Student 5	A	4.2	5.0
Student 6	V	9.2	8.3
Student 7	V	8.3	6.7
Student 8	K	10.0	10.0
Student 9	A	4.2	7.5

Student 10	A	4.2	4.2
Student 11	A	5.0	4.2
Student 12	A	3.3	3.3
Student 13	A	6.7	5.0
Student 14	A	6.7	6.7
Student 15	A	6,7	4.2
Student 16	A	7.5	4.2
Student 17	A	7.5	5.8
Student 18	K	10.0	9.2
Student 19	A	5.8	4.2
Student 20	A	6.7	4.2

VL Results

Students	Learning style	Immediate Post-Test	Delayed Post-Test
Student 1	V	9.2	8.3
Student 2	K	7.5	6.7
Student 3	V	9.2	7.5
Student 4	K	6.7	4.2
Student 5	V	9.2	7.5
Student 6	V	10.0	6.7
Student 7	V	10.0	9.2
Student 8	V	10.0	8.3
Student 9	A	9.2	7.5
Student 10	A	9.2	6.7
Student 11	A	10.0	8.3
Student 12	V	10.0	10.0
Student 13	A	9.2	6.7
Student 14	A	9.2	6.7
Student 15	A	8.3	5.8
Student 16	A	8.3	6.7
Student 17	K	8.3	6.7
Student 18	K	9.2	6.7
Student 19	V	10.0	8.3
Student 20	K	7.5	3.3