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**Twist in the List:**

**Frame Semantics as Vocabulary Teaching and Learning Tool**

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**Twist in the List:  
Frame Semantics as Vocabulary Teaching and Learning Tool**

by

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## **Dedication**

For my wonderful mother, who loves and supports me unconditionally.

Thank you for always believing in me and being there every step of the way.

And for my father, knowing that he is smiling down on me.

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I would like to thank all the people who guided and supported me in the accomplishment of this dissertation. I would like to thank my dissertation committee members Dr. Zsuzsanna I. Abrams, Dr. Carl Blyth, Dr. Hans C. Boas, Dr. Per Urlaub, Dr. Peter Hess for their feedback and extremely insightful recommendations not only for the present project but future research endeavors. Most of all I would like to thank my supervisor, mentor, professor and role model for my future career Dr. Zsuzsanna I. Abrams for knowing my strength, for keeping me focused and for guiding me through this process. Thank you for your endless hours providing feedback on the drafts and for all your time just listening!

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**Twist in the List:**  
**Frame Semantics as Vocabulary Teaching and Learning Tool**

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The purpose of this study, which is grounded in applied linguistics, was to investigate two ways of presenting vocabulary in a German language class in order to determine whether Frame Semantics is a feasible tool with regards to students' vocabulary acquisition and culturally appropriate usage of vocabulary. In addition, this study examined learners' attitudes toward the new method of vocabulary teaching and learning.

A total of 34 university students enrolled in four second-semester German classes participated in this study. In the Control Group rote memorization techniques were used, while the in the Treatment Group frame semantics was utilized for the teaching and learning of vocabulary.

The data was analyzed through quantitative methods. The quantitative data was derived from an online demographic survey, a vocabulary pre-test, two vocabulary post-tests (an immediate post-test and delayed post-test), a cultural appropriateness pre-test, two cultural appropriateness post-tests (an immediate post-test and delayed post-test), as well as an pre-test and post-test attitude scale provided as an online questionnaire.

Analysis of the data indicates that there was no statistically significant difference between the two groups with regards to their cultural appropriate usage of the vocabulary items, and no statistically significant differences were observed with regards to vocabulary recall and retention. In addition, only the factor of enjoyment yielded significant differences with regards to learners' attitude, while the factors of motivation, interest and confidence did not show statistically significant differences between the groups. Thus, the results indicate that both methods – Frame Semantics and the more traditional methods – are suitable for vocabulary learning and teaching as both methods resulted in an increase of learners' vocabulary knowledge, including long-term retention.

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## **CHAPTER 1 – INTRODUCTION**

„Die Grenzen meiner Sprache bedeuten die Grenzen meiner Welt“

(The limits of my language mean the limits of my world)

Ludwig Wittgenstein, Tractatus Logico-Philosophicus

### **INTRODUCTION TO THE ISSUE**

The quote above from Wittgenstein illustrates precisely how our lives are connected to our language/s. How we understand the world surrounding us depends on the language/s we grew up in and the experiences we made within this language or languages. Our surroundings are shaped by the vary language/s we use to describe it and assign names to it. Therefore, we can say that our language and our surroundings, our culture, are related. Due to this relationship between language and culture, language learners need to learn not only the language itself, but they also need to become aware of the cultural context in which this language is spoken so that they can use the language in a culturally appropriate way.

Yet three major problems stand in their way. First, there is still a lack of vocabulary instruction in the classroom, even though the importance has been pointed out repeatedly over the past three decades and interest in the matter has increased rapidly in research circles (Carter & McCarthy, 1988; Krashen, 1989; Laufer, 1986; Paul Meara, 1980; Nation, 2001; Richards, 1976; Schmitt & McCarthy, 1997). This interest arose in response to a long-held belief that vocabulary would take care of itself (Read, 2004) and that giving language learners lists (alphabetical, semantically related, thematically related) would be enough for them to learn the words. Secondly, language learners

believe that learning vocabulary from lists is a boring and useless activity (Chen, 2001) and more or less a necessary evil (Read, 2004). Finally, the third major problem is that vocabulary teaching is often neglected in the language classroom. This results not only in frustration on the part of the language learners, but also leads to a lack of awareness as to the importance of the connection between vocabulary and culture. As mentioned above, in most cases students are expected to simply learn vocabulary for homework using the list provided in their FL textbooks. However, as Krashen (1989, p. 440) argued:

Excellent reasons exist for devoting attention to vocabulary and spelling. First, there are practical reasons. A large vocabulary is of course, essential for mastery of a language. Second, language acquirers know this; they carry dictionaries with them, not grammar books, and regularly report that the lack of vocabulary is a major problem.

In addition to this lack of explicit attention to L2 lexical development, vocabulary is more than simply a collection of words; it is a complex system comprised of many different facets (Nation, 2001) including culture. It is this issue that the present dissertation aims to address. Specifically, the goal of the present study is to investigate whether Frame Semantics (Fillmore, 1977) - an innovative way of presenting and learning vocabulary in thematic units - might help students understand better cultural information embedded in words.

## **STATEMENT OF THE PROBLEM**

Giving students only lists of lexical items without any further explanation does not only decrease the value of vocabulary (i.e. it sends the wrong message, namely telling students that vocabulary is not important) it also gives the impression that translations



from the native language (L1) to the target language (L2) or vice versa work perfectly fine. However, it would be naïve to assume that all words in one language have an equivalent in another language and it is important to be aware of lexical as well as cultural differences between languages and contexts of language use:

Languages do share lexical common ground (just as they share phonological and syntactic features). Without such common ground, resulting from universality of human experience, the teaching and learning of foreign language would be impossible. [But] different language-speaking communities classify some areas of experience in different ways and words play a significant part in this classification. (Laufer, 1990b, p. 577)

This classification results in so-called culturally-loaded words. It could be argued that all words are in one way or another culturally-loaded since they all belong to their own unique cultural setting; however, certain concepts differ from language to language or culture to culture or might not exist in one language or culture.

For example, concepts across languages differ even though they might seem universal. This also holds true for one of the experiences of human life that seem universal such as personal relationships (Wierzbicka, 1997). Even though relationships exist in every culture, certain concepts regarding relationships between individuals differ across cultures. A learner of a foreign language must be aware of those differences in order to be able to understand the language since culture is an integral part of language. Knowing vocabulary, therefore, requires the learner to be aware of the culture that is embedded within the lexical items. A ‘friend’ in conversations among Americans might not be the same<sup>1</sup> as a *Freund* (‘friend’) in the German speaking culture. In German

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<sup>1</sup> It is important to keep in mind that there are sub-cultures within a culture, and that those sub-cultures may have different understandings of concepts.

speaking cultures different words exist to make a distinction between a *Freund* ('friend') and a *Bekannter* ('acquaintance'). Even though 'acquaintance' is listed as translational equivalent in dictionaries it is not frequently used to label a person. When comparing entries from English and German lexica, the difference can be observed. While both the Merriam-Webster dictionary and the Oxford English dictionary lists 'acquaintance' as a possible definition of 'friend' neither the Wahrig Rechtschreibung nor the Bertelsmann Wörterbuch give *Bekannter* ('acquaintance') as a definition for *Freund* ('friend'). In the German language there is a clear distinction between those two lexical units. Such differences however are difficult to tease out in list-based approaches to vocabulary teaching, and more culturally nuanced practices must be explored and implemented.

## **RELEVANCE OF THE STUDY**

In order to be able to communicate effectively and appropriately in any language, and our special focus is on second or foreign languages, these cultural differences need to be addressed in the language classroom. More specifically, words with cultural differences between the L1 and the L2 need to be taught explicitly to language learners in order for them to become aware of those different classifications and to be able to communicate effectively in the L2. Language learners need to "notice" (Schmidt, 1990) a form to fully understand and retain it; this also applies to the *cultural form*<sup>2</sup>. What happens if the differences are not pointed out is that language learners simply map new second language (L2) words they encounter in or outside the classroom onto their pre-

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<sup>2</sup> Language learners need to be made aware of the cultural differences between their own culture and the L2 culture(s) in order to be able to appropriately use a word in an L2 cultural setting.

existing first language (L1) conceptual system (Jiang, 2004, p. 104). This can lead to miscommunication or, in the worst case, to communication breakdown.

When students go to a country in which the language they are learning is spoken, they are not going to be producing lists of words in isolation or in an alphabetical order. Rather, they will need to be able to communicate with native (and other) speakers in the L2 in a culturally appropriate manner. In other words, they need to know which words they can use in a certain context or situation and they need to know how to use those words in the L2 setting effectively, including their socio-cultural nuance.

As mentioned above, students need to be made aware of the cultural differences between their native language and the language they are learning. The present study not only adds to the sub-field of second language acquisition, namely vocabulary learning and teaching, but also to the discussion of culture in the language classroom. This issue of culture has been raised increasingly in the last decades (Kramsch, 1993) as the importance of culture for language learning has been discussed with growing interest. Nowadays the discussion is still on-going but has been expanded in a way that has shifted focus away from direct teaching applications of different cultural aspects to ways of increasing language learners' cultural awareness as stated in the MLA report (2007). The MLA report specifically reads that students should be taught critical language awareness, and not just cultural components encountered in the target language which are mostly taught as a separate entity in the language classroom and not connected to language itself. The present study adds to this discussion as it shows a method of teaching vocabulary not as individual words but as part of a cultural system (Halverson, 1985, p. 329) that needs

to be understood in order to be able to use the words in the L2 appropriately. Specifically, the current study examines the usefulness of Frame Semantics (Fillmore, 1977) for improving lexical learning in a culturally appropriate way.

## **PURPOSE OF THE STUDY**

The present quantitative research study evaluated the effects of a new approach to vocabulary acquisition: Frame Semantics. The participants were all second-semester university students of German. The study analyzed students' ability to learn the meaning of vocabulary, including long-term retention, as well as the cultural understanding of the words, compared to a more traditional approach to lexical teaching. In other words, the study investigates whether the Frame Semantics approach has benefits over a more traditional vocabulary teaching approach with regards to vocabulary acquisition, retention and recall, and whether it has benefits for L2 learners' usage of words in a culturally appropriate manner.

I argue that using a Frame Semantics approach to the teaching and learning of vocabulary is beneficial because it not only helps to structure the different linguistic entities in a logical manner but it also provides a structure that will help language learners to sort the different linguistic entities within more abstract frames which may help them understand the background knowledge and gain an understanding similar to that of native speakers. As it has been pointed out by researchers in the field of translation theory, Frame Semantics is a useful tool for arriving at the meaning of a foreign language on different levels such as lexis, syntax and text (López, 2002; Qing-guang, 2009).

The Frame Semantics approach (Fillmore, 1982) I propose as a teaching tool is a means to make students culturally aware while engaging them in vocabulary learning. As argued by Swan (1997): “Informed teaching can help students to formulate realistic hypothesis about the nature and limits of cross-linguistic correspondences, and to become more attentive to important categories in the second language which have no mother-tongue counterpart” (p. 179). This approach guides the students in comparing and contrasting their native languages with the target language. With the Frame Semantics approach students also get a visualization of a semantic field and language learners recycle and integrate old and new words and connect them to their emerging background knowledge. Specific aspects of a frame can be visualized using scales or grids. As indicated by Carter (1998) “game-like tasks can be both visually stimulating (with possible benefits to memorization) and meaning related. Using many other grids, there are clear possibilities for representing vocabulary in different ways for groups of learners other than advanced students” (p. 219-220). This will show L2 learners that there are not always translational equivalents available to them and that some cultures might have even more terms to express different concepts, for example feelings, while other cultures have fewer terms than their native language. German, for example has more words such as *lieb haben* (‘like’) - the gloss does not account for its actual meaning - which does not have equivalents in English. Those visualizations will foster learners’ understanding of cultural differences between their native language and their target language since certain aspects might be highlighted and more important in one language than in the other. In addition, those visualizations are beneficial for students because it indicates whether the L2 word

can be mapped onto their existing L1 concept, if their existing L1 concept needs to be altered/expanded or if it was necessary to create a new concept for the L2 word for which the visualization using Frame Semantics as a tool was helpful.

## **SIGNIFICANCE OF THE STUDY**

A Frame Semantics approach may be beneficial because it not only helps to structure the different linguistic entities in a logical manner but it also provides a structure that may help language learners to sort the different linguistic entities within more abstract frames which will help them understand the background knowledge and gain an understanding similar to that of native speakers. Frame Semantics uses the underlying cultural information, such as experiences, practices and beliefs known to native speakers to structure meaning (Fillmore & Atkins, 1992). This means that our background knowledge gives us the tool to arrange it in frames, which help us to paint a mental image of the situation in front of us. Therefore, it can be said that: “In Frame Semantics, word meaning is characterized in terms of experienced-based schematization of the speaker’s world” (Petrucci, 1996, p. 5). In other words, native speakers of a language have not only knowledge of the language itself but the cultural knowledge associated with the native language. Consequently, learning vocabulary in a foreign language must include learning about the cultural knowledge embedded in the individual words.

This study is of pedagogical importance and adds to previous and current research in applied linguistics especially the field of vocabulary acquisition. Information regarding

the implementation of pedagogical tools to teach vocabulary is still scarce even though research in this field has gained some interest in recent years. Furthermore, effective ways of teaching culturally-loaded words successfully to beginning and intermediate learners has been neglected; this is the gap the present research study aims to fill.

## **ORGANIZATION OF THIS DISSERTATION**

After this introduction, Chapter 2 offers an overview of the research relating to important aspects of vocabulary acquisition, such as knowledge aspects of words, incremental nature of vocabulary, cultural aspects of vocabulary knowledge, and the history of vocabulary teaching in the classroom. In addition, a detailed summary of research studies in the field of vocabulary acquisition with a focus on the organization of vocabulary items for teaching and learning purposes is presented, followed by a discussion on Frame Semantics and possible teaching implications.

The proposed research questions are presented in Chapter 3, along with the research and data analytic methodology. This chapter also includes the lexical items that were selected for the study as well as how they were selected. Chapter 4 presents the data collected from the pre-treatment and post-treatment questionnaires, as well as the results from the statistically used in this study. The test results are discussed in detail for each research question and are connected to previous research and their relevance to the field of vocabulary acquisition. Finally, chapter 5 discusses implications for pedagogy and applied linguistics, outlines limitations of the current study and lists recommendations and directions for future research.

## **CHAPTER 2 – REVIEW OF LITERATURE**

### **INTRODUCTION**

The present project is an investigation of the use of Frame Semantics as vocabulary teaching and learning tool. In this chapter I offer an overview of the relevant literature in order to help contextualize the current findings in the ongoing professional discussion on effective approaches to lexical development in second language acquisition. To this end, in the first part of the literature review I discuss several theories concerned with vocabulary acquisition and teaching in a second language research. In the second part of this chapter, I present the main ideas underlying Frame Semantics and its possible applications in the second language (L2) classroom.

### **VOCABULARY ACQUISITION IN SECOND LANGUAGE CONTEXTS**

Almost all aspects of second language (L2) learning have been reviewed multiple times in the last decades, yet the development of L2 vocabulary has been largely ignored and was the “stepchild of foreign language learning” (Chadha, 2007) in SLA until the 1980s (Laufer, 1986; Paul Meara, 1980). Since then it has gained momentum through numerous research studies analyzing different aspects of the broad field of vocabulary acquisition such as depth of vocabulary knowledge (Henriksen, 1999; Nation, 1990), vocabulary and reading comprehension (Nation & Coady, 1988), vocabulary learning strategies and acquisition (Coady, 1997; Ijaz, 1986), approaches for the classroom (Lewis, 1997; Nation, 1990; Nattinger, 1988; Sinclair & Renouf, 1988; Sökmen, 1997; Zimmerman, 1997) and L1 influence on L2 vocabulary (Laufer, 1990a; Swan, 1997). Yet



one area that is widely overlooked is the cultural aspect embedded in words<sup>3</sup> (Liu & Zhong, 1999; Zhao, 2004). Furthermore, there is still a gap between the research currently available and its actual integration into the classroom. Students still have to memorize vocabulary outside of class from long and tedious lists (Read, 2000, 2004). This approach is often not only frustrating for students (Spielmann & Radnofsky, 2001) but ignores the fact that vocabulary is connected to other aspects of language. Furthermore, there have hardly been any changes in the presentation of vocabulary in the textbooks. Vocabulary is mostly still presented in lists at the end of the chapter as in *Alles klar?*, *Deutsch: Na klar!*, *Treffpunkt Deutsch* or *Vorsprung* or even at the end of the book as in *Anders gedacht* and *Kaleidoskop*. These lists presume that lexical learning occurs by simply memorizing a provided translation. However, as the next section illustrates vocabulary knowledge entails more than simply mapping L2 words onto L1 frames.

## **VOCABULARY KNOWLEDGE**

Before we can discuss what the acquisition of vocabulary entails, it is important to understand what it means to actually know a word. Words are not simply words and knowing words encompasses a multitude of aspects. A number of researchers attempted to define ‘what it means to know words’ by creating comprehensive lists of elements of vocabulary knowledge. Wesche and Paribakht (1996, p. 28), for example, present a list separating vocabulary knowledge into five components, namely (1) generalization (being

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<sup>3</sup> With “embedded in words” I refer to cultural knowledge that is associated with or evoked by words or lexical items.

able to provide definition), (2) application (being able to use the word correctly), (3) breadth of meanings (knowing multiple meanings of words), (4) precision of meaning (knowing how to use the word in different contexts), and (5) availability (being able to use the word productively). Prior to Wesche and Paribakhts' vocabulary knowledge categorization Richards (1976, pp. 77-89) suggested seven components of vocabulary knowledge which are knowing: (1) a word's relative frequency and its collocation, (2) the limitation imposed on its use, (3) its syntactic behavior, (4) its basic forms and derivations, (5) its association with other words, (6) its semantic value, and (7) many of the different meanings associated with the word.

Nation (2001, p. 27) adopted the vocabulary knowledge components suggested by Richards, restructured and extended the list. As table 2.1 illustrates Nation categorized his vocabulary knowledge components into form, meaning, and usage which are then further separated into different aspects of knowing a word.

Form	spoken	R	What does the word sound like?
		P	How is the word pronounced?
	written	R	What does the word look like?
		P	How is the word written and spelled?
	word parts	R	What parts are recognizable in this word?
	P	What word parts are needed to express the meaning?	
Meaning	form & meaning	R	What meaning does the word form signal?
		P	What word form can be used to express this meaning?
	concept & referents	R	What is included in the concept?
		P	What items can the concept refer to?
	associations	R	What other words does this word make us think of?
	P	What other words could we use instead of this one?	
Use	grammatical function	R	In what patterns does the word occur?
		P	In what patterns must we use the word?
	collocations	R	What words or types of words occur with this word?
		P	What words or types of words must we use with this word?
	constraints on use (register, frequency, ...)	R	Where, when, and how often would we expect to meet this word?
	P	Where, when, and how often can we use this word?	

Table 2.1: Components of word knowledge

As this table shows, Nation (2001) not only categorized the aspects of word knowledge in terms of form, meaning, and usage but also receptive and productive knowledge (denoted by the *R* and the *P* in the table respectively). The categorization in the table not only illustrated grammatical functions that have to be known for the correct usage of the word but also highlights collocations and constraints on use which are part of cultural knowledge. Besides being part of use cultural knowledge is also needed to be able to know about a specific word meaning. What Nation (2001) categorizes as concepts and referents and associations, listed under the category meaning, also requires cultural knowledge in order to understand and use the words appropriately. Yet language textbooks mostly ignore the cultural aspect of words.

When analyzing language textbooks it becomes obvious that the focus on is on Nations' (2001) form and meaning category (mostly single word translations) and in some instances on grammatical functions as discussed by Brown (2010) while ignoring all other vocabulary knowledge aspects. However, being aware of the many facets of vocabulary knowledge is not enough. It is also important to have an understanding of what a word is. Vocabulary is more than just words. Each word comprises a multitude of language functions: phonology, syntactic pattern, semantics and context ( Schmitt, 2000). In other words: each word has a certain pronunciation or sound, a certain spelling depending on its usage (e.g. adding an ending, changing a vowel) within a sentence, a specific meaning, and an underlying meaning depending on the culture or situation. Figure 2.1 below illustrates various components embedded within individual words.

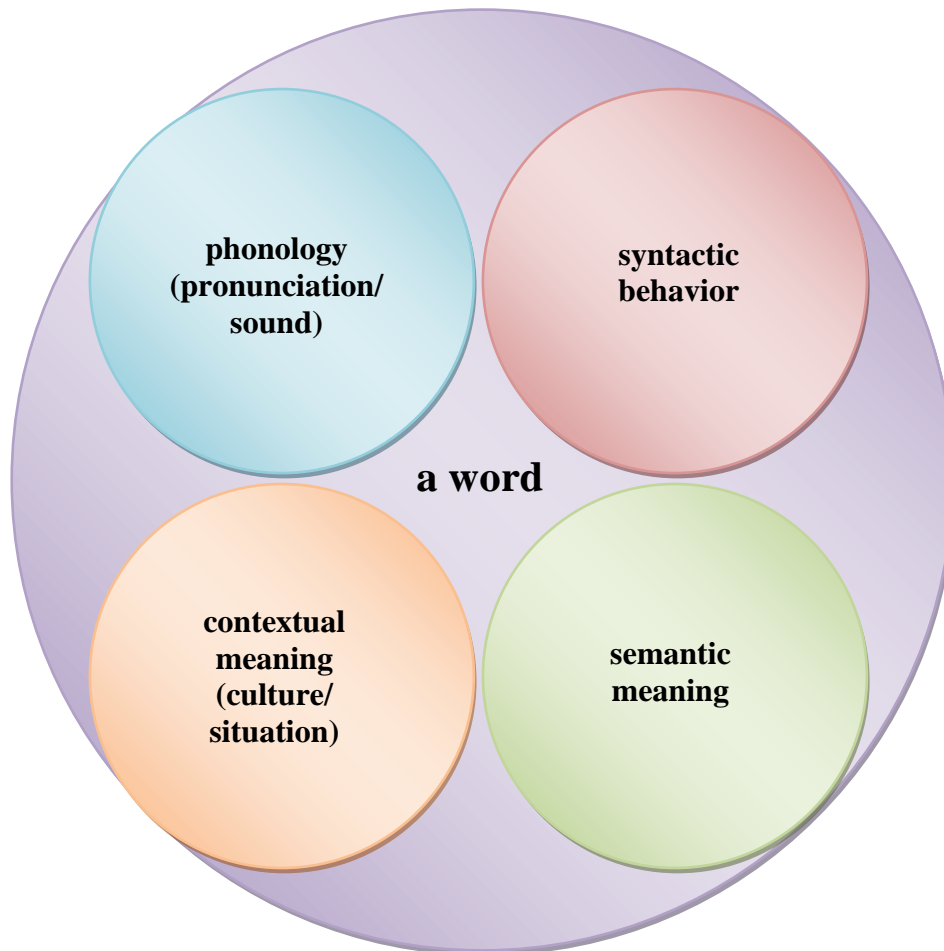


Figure 2.1: What is a word?

All of those language functions are important for language students to develop the four skills of listening, reading, speaking and writing, but also to understand the culture of the target language. Yet it is important to note that language learners simply cannot learn all aspects of vocabulary knowledge at the first encounter with a word, but language learners need to be made aware that there is more to a word than a simple translation and that their knowledge of each word will increase with time as vocabulary knowledge is incremental in nature, as discussed in the following section.

## **INCREMENTAL NATURE OF VOCABULARY LEARNING**

Due to the wealth of knowledge embedded in words that a language learner needs in order to acquire and fully understand them, it is clear that lexical learning is not a one-time event but rather an incremental process. The incremental nature of vocabulary learning has been indicated by research as well (Hulstijn, 1992; Nation, 1990, 2001; Schmitt, 2000). Learners cannot know all there is to know for each word after the first encounter. Rather, they need to be exposed to words multiple times and use them in different contexts in order to fully acquire the knowledge mentioned above. However, not all vocabulary knowledge is acquired the same way and some aspects of vocabulary knowledge will be acquired more quickly than others. Schmitt (2010) states that a word's basic meaning will be acquired more quickly and easily than knowledge of collocations. Yet Schmitt (2010) also points out, that is hard to discuss the development of the different types of word knowledge due to the shortages of studies in this area. The studies that were conducted (Pigada & Schmitt, 2006; Schmitt, 1998; Schmitt & Meara, 1997) seem to agree on the development of some vocabulary knowledge aspects before others, but a conclusion of the overall development has not yet been drawn. However, a word is not simply known or unknown. "All word knowledge ranges on a continuum" (Schmitt, 2010, p. 21), and this continuum can shift back and forth, meaning that vocabulary knowledge can also be forgotten (attrition) through the process of backsliding. Therefore, learners can have a partial knowledge of a word and various times during the acquisition process. However, it is crucial to keep in mind that learners need to know different aspects of a words and that only knowing a multitude of words will not benefit language

learners' communication as discussed in the next section, which focuses on depth versus breadth of knowledge.

## **DEPTH VS. BREADTH OF KNOWLEDGE**

As discussed vocabulary knowledge is incremental in nature. It is not only important for language learners to develop a large vocabulary or breadth (i.e. knowing a lot of different words) but also knowing different knowledge aspects as discussed by Nation (2001) or having depth of knowledge (Chapelle, 1998; Henriksen, 1999).

Traditionally foreign language educators have focused on developing learners' breadth of knowledge – meaning how many words the students know – rather than the learners' depth of knowledge – referring to how much language learners know about each individual word. Vocabulary size tests such as developed by Nation – Vocabulary Levels Test (Read, 2004) – are used to estimate the vocabulary size or breadth of knowledge of language learners and can be used as proficiency and placement tests. However, as discussed above, there is more to knowing a word than simply knowing its L1 translation. Therefore, simply focusing on how many words language learners know is not enough. Depth of knowledge is as important as breadth of knowledge. For example, simply knowing two translations for the word *to miss* ('*vermissen*' and '*verpassen*') does not help language learners to differentiate between the actual meaning. Language learners also need to know the meaning in more *depth* (i.e. they need to know that *vermissen* has a emotional component, e.g. to miss a person, while *verpassen* has a temporal component e.g. to miss a bus). Not knowing different meanings of a word or when and how to use it

appropriately might lead to miscommunication or even communication breakdown. However, those different meanings of words, as well as knowledge of the different aspects of vocabulary knowledge of individual words make some words harder than others. How easy or hard it is to acquire a word and its multiple knowledge aspects also depends on the ease and difficulty of each individual word and its relation to other words, as highlighted in the next section.

## **LEARNING BURDEN**

It is easy to forget that words are different in terms of the knowledge that is required to fully understand and use them. Some L2 words are harder to pronounce than others, some L2 words are more difficult because of their polysemous nature or their syntactic behavior and some L2 words are harder because the knowledge required to understand them does not overlap with the word's L1 meaning, or the concepts needed to understand an L2 word do not exist in the L1 (Laufer, 1990a). In other words, some lexical items or units are harder to learn than others, which is known as the *learning burden*, as Nation (1990, 2001) calls this phenomenon. The learning burden is understood as the amount of effort that is required in order to comprehend all the included knowledge of a lexical item or unit (Nation, 1990). For example, research has found (Lotto & de Groot, 1998) that L2 words that resemble L1 words (e.g. cognates) are more easily learned than words that are dissimilar from L1 lexical items. Other aspects that make it easier to learn L2 words include phonetic similarity (i.e., if the L1 and L2 lexical items are similar in sound). However, this can also cause mistakes, since false friends



look alike in the L2 and the L1 yet have completely different meanings (e.g. *gift* (meaning a present) vs. *Gift* in German (meaning poison)). Therefore, it is important to explain to language learners that knowing a word does not simply imply to be familiar with the translation of this word, especially since many L1 words do not have translational equivalents in the L2 and vice versa. Knowing a word in all its different forms is more beneficial than simply knowing the translation (Aitchison, 2003; Laufer, 1997; Nation, 1990; Schmitt, 2000). Yet there are other factors, besides the different knowledge aspects that make a word harder or easier to learn that affect vocabulary learning. One such factor, as the following section explores, is the motivation of language learners with regards to vocabulary learning.

## **VOCABULARY LEARNING: MOTIVATION AND ATTITUDE**

In addition to knowing the different aspects of a word other aspects that affect the success of vocabulary knowledge includes learners' attitudes toward the foreign language but maybe also toward the specific semantic domain that is being covered. Depending on the interests of the language learners and their long-term goals, certain semantic domains may be more relevant and, therefore, the attitude toward such domains may be more positive. In other words, learning about aspects that are more interesting and relevant for language learners may have positive effect on motivation. As pointed out by Schmitt & Tseng (2008): "To truly understand the vocabulary learning process, we must step outside purely lexical issues and address factors that affect L2 learning in general" (p. 358). Yet even though the factor of motivation has been studied widely in terms of its

impact on learning a second language in general, and has been investigated from both pedagogical and theoretical perspectives (Clément, Gardner, & Smythe, 1977; Clément & Kruidenier, 1985; Csizér & Dörnyei, 2005; Dörnyei & Csizér, 2002; Elley, 1989; Ely, 1986; Gardner, 1985; Gardner & MacIntyre, 1991; Lukmani, 1972; Noels, Clément, & Pelletier, 1999; R. Schmidt & Watanabe, 2001; Tremblay & Gardner, 1995), research has enjoyed limited focus regarding the relationship between vocabulary learning and motivation, as pointed out by Laufer and Hulstijn (2001). Only a few studies have investigated the connection of motivation and attitude of language learners and how they learn the L2 vocabulary (Cortazzi & Jin, 1996; Elley, 1989; Gardner & MacIntyre, 1991; Tseng & Schmitt, 2008). In those studies it becomes clear that vocabulary knowledge and motivation as well as attitude towards the learning process are connected and vocabulary retention may be affected by the learners' attitude. Bartley (1970) brought attention to the importance of attitude for language learning and stated that "attitude toward learning is probably the most important factor in academic success" (p. 383). Different aspects can influence learners motivation and attitude such as the interest in the teaching materials presented by the instructor as discussed by Elley (1989), who found that raising learners' interest with the appropriate selection of teaching materials fostered vocabulary learning.

Gardner and MacIntyre (1991) showed that integrative motivation<sup>4</sup> as well as instrumental motivation<sup>5</sup> can be beneficial for vocabulary learning. Since all learners have different language learning goals their motivation has to be taken into account as

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<sup>4</sup> Integrative motivation refers to motivation that comes from the drive of the language learner to want to become part of a speech community (e.g. using language for social interaction).

<sup>5</sup> Instrumental motivation refers to motivation that comes from the drive of the language learner to obtain a specific goal (e.g. getting a specific job, graduate, read materials in a language).

well. Whether learners are motivated by a desire to become part of a speech community or by a more precise goal such as to graduate or career opportunities, their learning goals can affect their motivation and learning outcomes. Tseng and Schmitt (2008) found that vocabulary learning is promoted when language learners have intrinsic motivation to learn vocabulary. Learners with intrinsic motivation<sup>6</sup> showed more willingness to take control and responsibility for learning vocabulary. This highlights that fact that enjoyment plays an important role for vocabulary learning, especially since there are many words language learners have to learn. Enjoying this task may make it less daunting for language learners. Yet more research investigating the specific link of motivation and vocabulary learning is necessary to draw specific conclusions and to better understand this important connection.

## **EXPLICIT VS. IMPLICIT LEARNING**

Krashen (1981, 1982) defined language acquisition as an unconscious process which happens incidentally while learning takes a conscious effort and in Krashen's definition refers to as conscious knowledge. However, Schmidt (1994) proposes a different distinction than the acquisition-learning distinction introduced by Krashen. He suggested differentiating between explicit and implicit learning. Other researchers (Hulstijn & Graff, 1994; VanPatten, 1994) are of the same opinion and believe that the explicit and implicit learning distinction offers a better conceptualization than the

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<sup>6</sup> Intrinsic motivation, as opposite to extrinsic motivation, refers to motivation connected to enjoyment of a task, while extrinsic motivation refers to motivation due to outside forces (job opportunities, money, grades).

acquisition-learning distinction because the explicit-implicit learning distinction “does not conflate with associated notions (such as intentional-incident learning, attention, explicit-implicit instruction)<sup>7</sup>, as the acquisition-learning distinction does” (Hulstijn & Schmidt, 1994, p. 7). The distinction between *incidental* and *intentional* corresponds to the *implicit-explicit* distinction as *incidental* is defined as “learning of vocabulary as the by-product of any activity not explicitly geared to vocabulary learning” (Hulstijn, 2001, p. 271) and *intentional* is characterized as “any activity geared at committing lexical information to memory” (Hulstijn, 2001, p. 271). Attention refers to the conscious process by the language learner. The following section on explicit and implicit vocabulary teaching does not separate explicit-implicit learning and intentional-incident learning distinction.

In order for language learners to acquire the correct L2 meaning and use it in an appropriate context, they need to be aware of the cultural difference (Hatch & Brown, 1995; Laufer, 1990b; Liu & Zhong, 1999; Zhao, 2004). An explicit vocabulary teaching approach is inevitable, especially in the early stages of students’ vocabulary learning, and when discussing cultural relevant items. After students are trained to learn vocabulary in this manner, they might be more conscious about new words when they learn them implicitly. In addition, the strong push for implicit vocabulary acquisition, e.g. as a nicely

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<sup>7</sup>*Explicit learning* is generally defined as: “more conscious operation where the individual makes and tests hypotheses in a search for structure” (N. C. Ellis, 1994, p. 1), while *implicit learning* is identified as the “acquisition of knowledge about the underlying structure of a complex stimulus environment by a process which takes place naturally, simply and without conscious operation” (N. C. Ellis, 1994, p. 1).

wrapped by-product of language contact inside or outside the classroom has lost his strength. As pointed out by Read (2004):

There is no doubt that incidental learning occurs, particularly through extensive reading in input-rich environments, albeit at a rather slow rate. In the heyday of the communicative approach to language teaching, the concept of incidental learning offered the seductive prospect that, provided the learners had access to sufficient comprehensible input, L2 vocabulary acquisition would largely take care of itself, without the need for any substantial pedagogical intervention.

Or as stated by Sökmen (1997) who summarized the view of vocabulary instruction throughout history the following way: “The pendulum has swung from direct teaching vocabulary (the grammar translation method) to incidental (the communicative approach) and now, laudably back to the middle: implicit and explicit teaching.” This has been supported by other researchers, who concur that both approaches are necessary and that a combination of direct and indirect vocabulary instruction is useful (Barcroft, 2004; Coady, 1993; Haynes, 1993; Paribakht & Wesche, 1993; Read, 2004; Stoller & Grabe, 1993). Schmitt (2000) points out “The consensus is that, for second language learners at least, both intentional learning and incidental learning are necessary, and should be seen as complementary” (121). Gass (1999) illustrated and identified explicit and implicit vocabulary learning not as two separate entities but as equally important depending on the lexical items to be learned, using a continuum, presented by figure 2.2 shown below:



Figure 2.2: Gass (1999) understanding of incidental vs. intentional vocabulary learning

As figure 2.2 illustrates, Gass suggests that there should be an explicit focus on lexical items, and that learning should be intentional if (1) there are no cognates between the L2 and the L1, (2) the items have not been encountered previously, and (3) if there are no words in the L1 that relate to the word in the L2. Not only does research point out that explicit vocabulary learning should not be ignored, it further suggests that potential problems might arise from solely focusing on implicit vocabulary teaching and learning. Those problems also discussed by Sökmen (1997, pp. 236-238) in detail are:

- (1) incidental vocabulary acquisition through guessing from context is a slow processes and language learners are required to learn a multitude of words in a short amount of time (Carter & McCarthy, 1988; Scherfer, 1993; Sternberg, 1987);
- (2) language learners tend to make mistakes and guess the incorrect meaning when inferring word meaning from context. In addition, it is hard to correct the wrongly acquired meaning and students at the lower level of language proficiency are de-motivated with this approach (Kelly, 1990; Pressley, Levin, & McDaniel, 1987);

- (3) relying on guessing from contextual clues might not work, especially at lower levels of proficiency, because the language learners' comprehension skills are still low, including a limited level of vocabulary knowledge (Haynes & Baker, 1993);
- (4) a large vocabulary in language learners does not imply good inferring skills and in most cases language learners relied on other means to acquire a high level of vocabulary knowledge (Hulstijn, 1993);
- (5) long-term retention is not ensured when guessing word meaning from context (Mondria & Wit-de Boer, 1991; Paribakht & Wesche, 1993; Parry, 1993).

As discussed above one of the problems of a solely implicit vocabulary teaching focus and relying too much on guessing from contextual clues in lower levels is the that beginning learners may not be able to comprehend due to their lack of vocabulary. Some researchers (Chern, 1993; Nagy, 1997; Stahl & Fairbanks, 1986) found that using implicit vocabulary learning methods might be more helpful and beneficial to language learners at higher proficiency levels but only in combination with explicit vocabulary instruction. Implicit vocabulary learning and teaching methods also seemed suitable and effective for learning highly complex words (Scherfer, 1993). A similar observation has been made by Schmitt (2000) which was, that "certain important words make excellent targets for explicit attention" (p. 121). Culturally-loaded words certainly fall into the category of important words, since learners need to be aware of their socially appropriate and correct usage in order to fully function in the target culture.

While implicit vocabulary learning describes a learning process in which the learner acquires vocabulary from a text<sup>8</sup> with no specific attention put onto learning individual words, explicit vocabulary learning describes a process of learning in which the learner acquires vocabulary through specific activities and having the learning of specific words as the goal. Both methods have their benefits, as different research studies demonstrate. With regards to vocabulary acquisition and learning, Paribakht and Wesche (1997) found that answering reading comprehension questions helped learners increase their vocabulary knowledge and recognize lexical items. Gu and Johnson (1996) reported that extensive reading benefited language learners' vocabulary knowledge. Yet there are also research findings on the benefits of explicit vocabulary learning. Prince (1996) compared vocabulary acquisition via translation versus guessing vocabulary from context. He found that learning L2 vocabulary via translation benefits vocabulary acquisition in comparison to learning vocabulary from inferring word meaning from context in sentences. An interesting observation was made by Hulstijn (2001) who states that it "is the quality and frequency of the information processing activities (i.e., elaboration on aspects of a word's form and meaning, plus rehearsal) that determine retention of new information" (p. 275). He is in agreement with other researchers mentioned above who find it necessary to not separate incidental and explicit teaching and learning of vocabulary but rather have a balance of both. Yet Hulstijn (2001) further states that traditional vocabulary methods (e.g. regular and multiple rehearsals of words,

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<sup>8</sup> I use the word "text" very broadly. For me a text can be all types of media such as a traditional text in a book, newspaper or other writing, or a visual text such as an advertisement on paper or the TV, or a aural text such as a report on the radio.



rote memorization tasks, etc.) are necessary if the goal is fluent communicative capability and to enable learners to have automatic access to a large L2 lexicon (pp. 275-285). The question that remains is how to best implement a combination of both implicit and explicit vocabulary teaching and learning approach in the language classroom and for the language learner.

### **VOCABULARY TEACHING: A BRIEF HISTORY**

In this section I first give an overview of the development of vocabulary teaching and proceed with an overview of pedagogical implications for vocabulary teaching today. During the history of second language acquisition, changes have taken place in the approaches and methods of teaching and learning that also had an effect on vocabulary teaching and learning strategies (Zimmerman, 1997). The Grammar Translation method, popular well into the mid-twentieth century, focused on analyzing the language in question to using language in a communicative setting as highlighted by the Communicative Language Teaching approach starting in the 1980s (Schmitt, 2000; Zimmerman, 1997). With regards to vocabulary, some methods focused on bilingual word lists (Grammar Translation method) for vocabulary learning, while others neglected vocabulary teaching and thought that vocabulary would somehow take care of itself, such as the Audio-Lingual method or the Communicative Language Teaching approach (Schmitt, 2000, p. 15). Yet a commonality that can be found in all second language teaching approaches is the lack of addressing approaches to teaching vocabulary

specifically. Table 2.2 outlines the role of vocabulary throughout the history of language pedagogy.

<b>Method/Approach</b>	<b>Focus on ...</b>	<b>Role of Vocabulary</b>	<b>Vocabulary Presentation</b>
<b>Grammar Translation Method</b>	ability to analyze language rather than use language	used for translating texts	bilingual word lists
<b>Direct Method</b>	oral language (listening as primary skill)	initial vocabulary kept simple,	pictures, objects, physical demonstration only abstract words presented in lists
<b>Audio-lingual Method</b>	grammar	for drills to teach structural patterns	new vocabulary was only added when necessary for drills
<b>Communicative Language Teaching</b>	fluency rather than grammatical accuracy	vocabulary still secondary status (takes care of itself – through reading)	little guidance on how to learn vocabulary

Table 2.2: Vocabulary in different language teaching methods/approaches

In the late 1980s interest in vocabulary gave rise to new research into vocabulary acquisition (Richards, 1976) which resulted in different pedagogical themes summarized by Sökmen (1997):

- (1) build a large sight vocabulary – which helps language learners to access word meaning automatically;

- (2) integrate new words with old words – which helps language learners to create links and associations between words, become aware of similarities and differences;
- (3) provide a number of encounters with the word – which can be done through the use of different activities and different contexts;
- (4) promote a deep level of processing – which can be done by word manipulation, relating words to previously learned words and personal experience and background knowledge, and by asking language learners for justification of their choices;
- (5) facilitate imaging and concreteness – which can be done by presenting vocabulary in an organized fashion (e.g. presentation in units, introduction of new words in stages);
- (6) use of a variety of techniques – which can be done by implementing a mixed approach to vocabulary learning and teaching strategies in the classroom;
- (7) encourage independent learning strategies – which can be done by introducing and explain different vocabulary learning strategies to language learners.

It has also been pointed out in research that the way in which language learners are asked to memorize words is a complete departure from the way in which native speakers remember words. Instead of remembering separate lexical items native speakers remember words “as part of an integrated semantic system” (Machalias, 1991, p. 19).

However, research on vocabulary teaching and presentation in semantically related sets still needs further research as more current studies indicated that such an approach (using semantically related sets) may actually hinder vocabulary learning as discussed next.

## **VOCABULARY PRESENTATION**

Laufer and Shmueli (1997) conducted a study in which they compared four different ways of presenting English vocabulary to Hebrew speakers in an EFL (English as a Foreign Language) class. The four different ways were (1) words presented in isolation, (2) words in a single sentence, (3) words embedded within a shorter text, and (4) words embedded in an elaborate textual context. For condition (1) students were provided with a 20-word list. The same words were given to students in the single sentence groups, but in sentence form. For group (3) students were given a text that contained all 20 words with glosses, and in group (4) the same text as in group (3) was used but the words were elaborated prior to handing the text to the students. For each method half of the words were translated into English while the other half was *explained* in English. The study showed that L1 (native language) explanations – explanation in the native language, i.e. Hebrew in this case - were always better retained and less context benefited participants' vocabulary retention. Prince (1995) found similar results in a study examining the role of L2 (target language) proficiency of learners with two different ways of presenting vocabulary to the participants. One method entailed presenting vocabulary in lists with L1 translations, while in the other method the lexical items were provided in L2 sentences to participants. The results of this study show that more participants with lower

language proficiencies benefited from using lists than contextualized lexical presentation; they were not only able to recall more vocabulary items but also recalled them with more accuracy.

Research does not indicate that lists are unfavorable for vocabulary learning; rather, they might even be beneficial especially at lower proficiency levels. Yet lists do not provide additional information that is necessary to fully know a word. Furthermore, lists do not help language learners to connect vocabulary to the cultural information embedded in it. As pointed out by Folse (2007) a disadvantage of lists is that language learners “will gain only superficial knowledge of the new words” and that if language learners “only learn the meaning as a translation of simple synonym, then the [language learners] will not be able to actually use the word“ (p. 40). In addition, learning from list may not be the most joyful activity to memorize vocabulary and may also seem overwhelming since most vocabulary lists are relatively long. An important aspect of any teaching method is not to rely only on one method, but to implement different techniques, methods and approaches in order to cater to different learners and to facilitate a learning environment in which vocabulary can be learned through various processes and, from different perspectives, leading to a more thorough understanding not only of the meaning of the word but also of its cultural connotation and use.

Many of the language textbooks currently used in university courses are organizing vocabulary in semantic sets (e.g. animals: mouse, hamster, cat, dog; or furniture: couch, table, lamp, shelf) (Folse, 2007). Yet another way of presenting vocabulary in language textbooks is in thematic sets. Folse (2007, p. 50-52) provides a

visualization in form of a table to illustrate the difference between semantic units and thematic units, and how 32 vocabulary items could be organized in those different ways.

Table 2.3 below shows two of the eight units created by Folse (2007).

Semantic Units	Thematic Units
Unit 1: Colors	Unit 1: eating out with friends
<b>red, blue, green, white</b>	I like to go to this restaurant on <b>Saturday</b> nights when they serve the most <b>delicious fresh</b> shrimp <b>salads</b> you have ever eaten!
Unit 2: days of the week	Unit2: looking at pictures of a trip
<b>Saturday, Sunday, Monday, Tuesday</b>	This is a picture of my <b>sister</b> and me with some friends on Greece. We're both in front of the <b>blue</b> and <b>white</b> Greek flag. She's the <b>tall</b> girl on my left.

Table 2.3: Semantic unit vs. thematic units of representing vocabulary

Even though vocabulary lists in many language textbooks is mostly organized in semantic sets, there has not been a lot of research conducted with regards to vocabulary recall and retention and there have been even fewer studies for the use of thematic units in second language vocabulary research. The most prominent studies have been conducted by Tinkham (1993; 1997) and Waring (1997). Tinkham (1993) investigated the same group of learners in two different settings. First his participants had to learn semantically-related words (e.g. words for colors) and later vocabulary items that were not semantically related. Tinkham found in his study that students had less difficulty to learn the unrelated words than the semantically related words. This may be due to the fact that language learners mix-up semantically similar words. Tinkham's' second study

(1997) compared learning vocabulary in semantics sets versus thematic sets. His results indicated a similar finding to his first study, namely that presenting vocabulary in semantically related sets has a negative effect on vocabulary learning. Logically, his second study suggested that presenting vocabulary in thematic sets facilitates vocabulary learning. Warings' (1997) study was a replication of Tinkhams' (1993) first study on semantically related vocabulary. Warings' study found similar results, in that students had difficulty in learning vocabulary presented in semantically related sets. Due to his results Warings' recommendations for teaching include presenting words in thematic instead of semantic sets, because a set like "*sweater, changing room, try on, cash, register, wool, navy blue, striped* and so on may not show the same interference effects as scarf, tie, coat, pants and skirt" (p. 270). Furthermore, it has been argued by Folse (2007) that presenting vocabulary in thematic sets benefits vocabulary retention. He also suggests that it is useful to "incorporate themes that will naturally require the target words" (p. 56), meaning to use an authentic language context as it has also been suggested by Spinelli and Siskin (1992). Semantic maps, as proposed in the next section, offer one way to present vocabulary in thematic sets.

## **SEMANTIC MAPPING**

Semantic maps are graphic organizers that illustrate a word and its related words in a visual representation. The related words are clustered around the target word on the map whereby the words are organized according to semantic criteria or sub-categories. Semantic mapping is known in literature under various terms such as *lexicosemantic*

*organization* (de Groot & Comijs, 1995), *semantization* (Henriksen, 1999), or *mental organization* (Zhang, 1995). With regards to language learning, semantic mapping is usually known and used as “brainstorming associations which a word has and then diagramming the results” (Sökmen, 1997, p. 250). Figure 2.3 diagramming the results” below illustrates an example of a semantic map<sup>9</sup>.

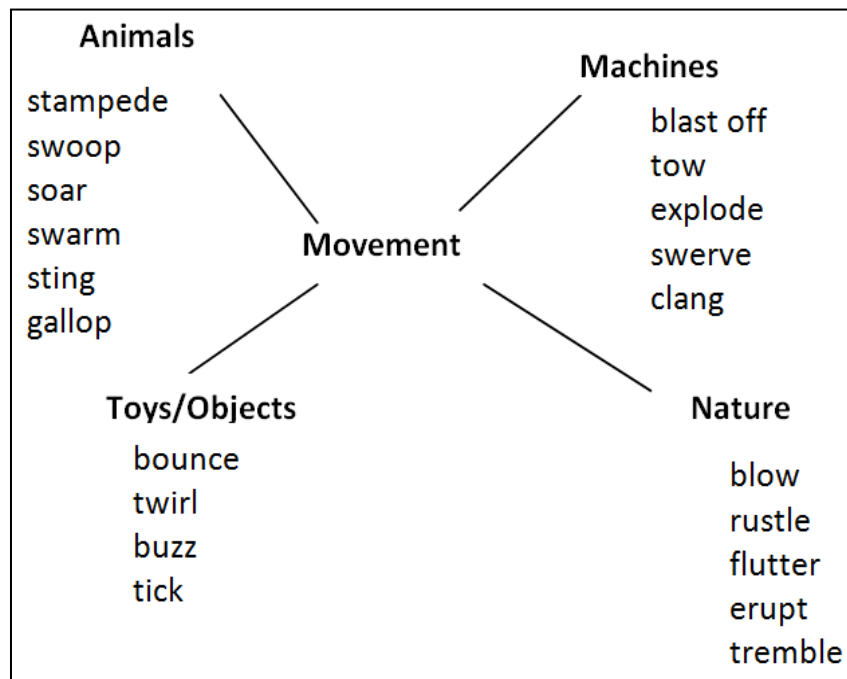


Figure 2.3: Semantic map example

However, in this study I am expanding on this notion by including boundaries in the map that will help students become aware of and understand the boundaries of lexical items. Combining the concept of Frame Semantics (discussed in the next section) with

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<sup>9</sup> The semantic map example is taken from Lehr, Osborn & Hiebert (2004)



semantic mapping gives students a visualized image of lexical items belonging to one frame, therefore helping them to understand how to use a word in a given situation. For example, the word *love* is used very loosely in the US American English, as in *I love you guys*, but cannot be used the same in German because in the German culture the word has specific restrictions of its use. It is only used to express a deep emotional connection to another person. Using semantic mapping as a tool for teaching vocabulary with Frame Semantics may help students to become aware of such boundaries. As discussed by Ijaz (1986) and Jiang (2002), an important task with regards to vocabulary acquisition involves the identification of boundaries existing between lexical items, understanding the meaning within the boundaries and the expansion or modification of the boundaries once additional words that are related to the previously learned words are encountered.

Research is still ambivalent about the best ways to present vocabulary in the L2 classroom, but, as discussed in the previous section, thematic units seem to be favorable compared to semantic units. However it has also been suggested that vocabulary retention is most favorable when new vocabulary is presented in semantic fields, clusters or groupings of words that are related conceptually or summarized under a general term (Keller, 1978). It has been further suggested that the mental lexicon of native speakers as well as advanced language learners is structured in terms of semantic relationships (Hatch, 1983). Semantic maps have been explored widely for native speakers of English and research has shown its benefits as learning and teaching technique for native speakers of English at different grade levels. Semantic maps as the name suggests can be used to illustrate how words are related semantically, however using semantic mapping as a

visualization tool can also be used to arrange words in thematic units. Tinkham (1997) suggests benefits of thematic clusters over semantic clusters for vocabulary learning. He argues that semantic frames, which are understood as the organizing structures of our background knowledge, such as *frog, pond, hop, swim, green, and slippery* (Tinkham, 1997, p. 4) are learned more easily due to their thematic arrangement. A semantic map can be used to connect those words in one map as it would be done in semantic sets.

Students using semantic mapping have shown substantial improvement in reading comprehension, writing and vocabulary expansion (Brown & Perry, 1991; Crow & Quigley, 1985). Semantic mapping has also proved valuable for ESL students reading skills (Carrell, 1985). With regards to semantic mapping and the L2 classroom Morin and Goebel (2001) found that learners in the semantic mapping group reported a higher recall of lexical items than the control group and the semantic mapping group ranked their familiarity with lexical items higher than the control group. In addition, they suggest that semantic mapping can be beneficial to students' motivation. Yet semantic mapping has not been researched extensively enough to make specific claims, and many of the studies have been conducted with regards to L1 vocabulary acquisition, reading and its applications in the ESL classroom.

However, more research needs to be done on semantic mapping and its applications in the L2 classroom. Semantic maps are useful tools for second language vocabulary teaching because they visually show the relatedness of previously learned words and new words. In addition, students connect new words to their own experience and world knowledge (Johnson, Pittelman, & Heimlich, 1986). Laufer (1990a) argues

that “it is possible that conscious organization of words on the basis of meaningful links will reinforce the semantic networks of the learners’ lexicon” (p. 152). Furthermore, semantic maps can be used to illustrate the difference between the L1 and L2 cultural background that is embedded in the vocabulary items. “The procedure of mapping a topic provides students with a means for both activating and enhancing their knowledge base regarding the specific topics and words discussed. [...]. In addition, they see the specific relationships among concepts (Johnson, et al., 1986, p. 780). Several research studies found that verbal as well as visual representation of new information improves not only students’ understanding of the material but also enhances memory and is beneficial to recall of this information (Paivio, 1986; Sadoski, Paivio, & Goetz, 1991). Using semantic mapping as a tool to visually represent words and their connections to other words in the lexicon may help language learners to establish the links between the words similar to native speakers – which includes the knowledge of cultural information that might link words in the lexicon.

Native speakers of any language have a higher linkage of lexical networks than language learners (Wilks & Meara, 2002). Therefore, it would be beneficial to increase the linkage of lexical networks in language learners during vocabulary instruction. Furthermore, asking language learners to justify their choices of sub-categories, and word associations in references to the semantic map they created with the words they learned will increase their awareness of the target language and lead to long term retention (Hague, 1987; Machalias, 1991). However, in order to understand whether language learners acquired a word it has to be assessed. Depending on what knowledge aspect is

being assessed different types of assessment tools must be considered. The next section highlights the most commonly used assessment tools in vocabulary research.

## **VOCABULARY ASSESSMENT**

In this section vocabulary assessment tools are discussed. However, it must be noted that the focus is on vocabulary assessment for research and not the classroom. It is included to give the reader an understanding for the selection of assessment tools chosen for this study. The assessment tool used in this study is further discussed in detail in the methodology section. Research indicates the language learners think vocabulary is an important part of second language learning. Vocabulary instruction, which had been the stepchild in the L2 classroom for too long is slowly gaining footing in the classroom and must therefore also be addressed in tests. We need to assess what we (as language teachers) teach – in this case vocabulary, since this has serious ramifications for how much emphasis students will place on learning vocabulary. Furthermore, testing what we believe is important enough to teach, has potential positive washback effects such as students understanding the importance of vocabulary and a potential increase in students interest in vocabulary learning.

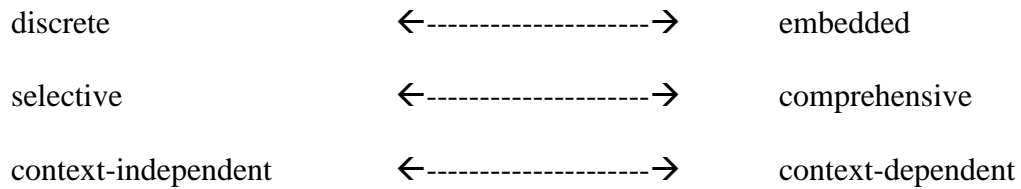
In order to test vocabulary effectively, several questions must be asked:

- 1) Why do we teach vocabulary? What are the pedagogical reasons for teaching and assessment?
- 2) Which words are we going to teach and assess? (And what is a word?)

3) How are we going to teach and assess vocabulary? What kind of tests should be used to measure learners' lexical development?

4) When should we assess it?

In order to address these questions fully, we need to begin with the first one: why do we teach vocabulary? What are our pedagogical objectives with including it in the curriculum? The answer to this question is that there can be different reasons for assessing vocabulary. First, a distinction must be made between research and classroom testing. In a perfect world, pedagogy should be informed by theory, yet classroom testing will mostly be syllabus-based whereas research testing needs to be theory-based. In addition, different things will be tested. For example, a classroom test is usually an achievement test which gives the learner and the teacher an idea of whether the material that was covered has been learned by the language learner (Read, 2004). Those tests are syllabus-based because they cover the materials discussed in class. A diagnostics test and proficiency test – even though they are not only used for research – should be more global in their assessment since they are not dependent on material covered during regular class work. Research generally has other goals for the use of tests than tests written specifically for a language course. Yet whether teaching-oriented or research-oriented, when designing a test it is important to keep in mind what one wants to test. Knowing what to test one can determine what test format is the most useful. Read (2000) also offers some help with his three dimensions of vocabulary assessment.



Discrete tests measures only one construct of vocabulary knowledge without considering other aspects. A sensitive multiple choice test would be on the discrete, selective and context-independent side, whereas a writing assignment (write a letter to review a product) is more on the embedded comprehensive and context-dependent side. The following are different examples of assessments currently available and used.

a) Checklist Test (Yes/No Test): This test, which was first developed by Meara (Meara, 1996; 1989) is a self-evaluative format. The use of a checklist allows for a large amount of vocabulary items to be tested and scored in a timely manner. Test takers indicate whether or not they know a word. Vocabulary items to be tested are selected from a range of frequency levels. The performance of the test taker at the respective level is used as an indication of the individuals receptive vocabulary knowledge (Meara, 1996). A computerized version was later developed by Meara (1990) and is known as the “Eurocentres Vocabulary Size Test” (EVST). This test format focuses on meaning and is a useful tool as a placement tests. In order to get a better understanding and to counteract overestimation of the test-takers Anderson and Freebody (1983) included non-words in the test. Those non-words are used to adjust the test-takers’ results, since test-takers often overestimated their knowledge when simply being ask to indicate whether they do or do

not know a word. Figure 2.4 is an illustration of an example of a checklist test (Read, 2000, p. 129).

1 dring	2 take in	3 majority
4 modest	5 vowel	6 easy
7 swithin	8 obsolation	9 foundation
10 receipt	11 annobile	12 resident

Figure 2.4: Example of a Checklist test format

b) Vocabulary Level's Test: This test created by Nation in the 1980s, is used to get an idea about the test-taker vocabulary size. The tests are structured based on word frequency lists (2000, 3000, 5000, above 5000, and 10000 levels). It also has an additional level for academic English words. The format of the test follows the multiple choice format. The test takers are provided with sets of words and definitions and have to choose the word that best matches the definitions provided. The test assesses knowledge of lexical meaning as well as an understanding of contextual knowledge of the target word. An example of such a test is given in figure 2.5 below<sup>10</sup>.

1. _____ first	a. royal
2. _____ not public	b. slow
3. _____ all added together	c. original
	d. sorry
	e. total
	f. private

Figure 2.5: Example of a Vocabulary Levels Test item

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<sup>10</sup> This excerpt is taken from an example provided by Beglar; available at: [http://jalt.org/test/beg\\_1.htm](http://jalt.org/test/beg_1.htm)

c) Word Associates Test (WAT): This test was developed by Read (1993; 1995) and measures aspects of depth of knowledge such as word associations and collocational knowledge. In the WAT a word is followed by eight other words in two boxes. Two words in each box have either a pragmatic relationship or a syntagmatic relationship with the target word. The test-taker needs to select those four words that form a relationship with the target word. Figure 2.6 illustrates two example of a word association test items based on Read (2000, p. 181).

<u>edit</u>			
arithmetic	film	pole	publishing
revise	risk	surface	text
<u>team</u>			
alternative	chalk	ear	group
orbit	scientists	sport	together

Figure 2.6: Sample items of a Word Association Test

The tests described in b) and c) both use a multiple choice format. This can often lead to guessing by the test-takers, unfortunately, which may negatively impact conclusions we can draw from the results. To reduce the possibility of guessing, Schmitt (2000) points to a format introduced by Vives Boix (1995) which is another version of an Word Association Test that eliminates the problem of guessing. In this format the test taker is provided with three lexical items and has to select the one that is not related. However, as long as test-takers have answer choices provided to them guessing cannot be



fully eliminated. Figure 2.7 presents an example provided by Schmitt (2000) of one sample item for Vives Boix's version of an Association Vocabulary test.<sup>11</sup>

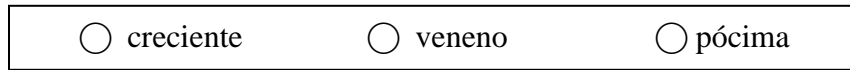


Figure 2.7: Example of Association Vocabulary Test by Vives Boix

d) Vocabulary Knowledge Scale (VKS): The VKS developed by Paribakht and Wesche (1993), gives the test taker a target word followed by a scale which has usually 5 points ranking from 1) I have never seen this word to 5) I know this word and I can use it in a sentence. This test not only requires test-takers to select a word from multiple choices provided or to indicate whether or not they know the word but to give translations, synonyms/opposites and provide sentences. This test measures depth of knowledge and can be used as a developmental measure, since it can assess how vocabulary knowledge develops over time. Schmitt (2000) argues that this test has some problems. He argues that the scale is random and that the spaces on the scale might not be equally distributed. Furthermore, he argues that the test format mixes receptive and productive knowledge and that the lower level knowledge is not verified. Another critique posited that this test does not account for multiple meanings of words. As a response Paribakht and Wesche (1996) included a sixth level in order to account for multiple word meanings which is shown in the example provided in figure 2.8.

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<sup>11</sup> creciente ('growing'), veneno ('poison'), pócima ('nasty drink').

Please report on your knowledge of each of the words written in **bold**.

**ausgehen**

I I don't remember having seen this word before.

II I have seen this word before but I don't know what it means.

III I have seen this word before, and I think it means \_\_\_\_\_. (synonym or translation)

IV I know this word. It means \_\_\_\_\_. (synonym or translation)

V I can use this word in a sentence: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 (Write a sentence.) (If you do this section, please also do Section IV.)

VI I know multiple meanings of this word \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_ (Write all additional meanings of  
 this word you know)

Figure 2.8: Example of a Vocabulary Knowledge Scale test format

e) Other tests that can be used for vocabulary assessment are more on the embedded, comprehensive and context-dependent spectrum of Reads' (2000) three dimensions of vocabulary assessment. Those tests can be used to analyze vocabulary used in written comprehension through statistically analysis, such as looking at lexical density, lexical variation and/or lexical sophistication. Table 2.4 provides a brief overview of the tests described in the section above.

Test Developer	Test Name	Format	Uses	Limitations
Meara (1996; 1989)	Checklist Test (Yes/No Test)	self-evaluative	Pedagogy: Placement test Research: Prior vocabulary knowledge of participants	overestimation of test-taker
Nation(1980s)	Vocabulary Level's Test	multiple-choice	Pedagogy: Placement test Diagnostic test for migrant and international students Research: Estimate vocabulary size of non-native speakers	standards of analysis and validation guessing by test-takers
Read (1993; 1995)	Word Associates Test (WAT)	multiple-choice	Research: Depth of knowledge	guessing by test-takers
Vocabulary Knowledge Scale (VKS)	Paribakht and Wesche (1993)	5-point ranking scale	Research: Depth of knowledge developmental measure	scale is random lower vocabulary knowledge levels not verified
Written Comprehension Tests	-	students writing	Pedagogy: assessing students writing	time consuming

Table 2.4: Test assessing vocabulary knowledge

As mentioned above, when creating or using an assessment tool it is important to keep in mind what the test is used for (research or classroom) and what aspects of knowledge one wants to assess. In this study used Paribakht and Wesches' (1993) Vocabulary Knowledge scale to measure the vocabulary that was known to students prior to the study, as well as immediately after and in a delayed setting. I discuss the test and its applications in this study in more detail in the methodology chapter.

## **VOCABULARY AND CULTURE**

Taylor (1990, p. 1) stresses the importance of vocabulary knowledge: “In order to live in the world, we must name it. Names are essential for the construction of reality for without a name it is difficult to accept the existence of an object, an event, a feeling.” Those objects, events and feelings mentioned by Taylor are not only part of the target language but also of the target culture. One cannot be understood without the other. Vocabulary knowledge is necessary for language learners and native speakers alike in order to be able to express oneself in a language. Yet having knowledge of a language without knowing the culture is not enough. Language and culture are connected and knowledge of both is necessary in order to communicate appropriately. While native speakers’ cultural knowledge is intuitive, language learners have to be made aware of cultural differences between their L1 and the L2 and have to be conscious about it. This leads us to the next question: what is culture? Over the years culture has been defined countless times and yet there are no perfect definitions for the notion of culture. In the following I provide some approaches to the definition of culture and how culture and language are interrelated.

A very vague definition was provided by Edward T. Hall (1959) for whom culture does not refer to “an exotic notion studied by a selective group of anthropologists in the South Seas,” but “a mold in which we are all cast, and it controls our daily lives in many unsuspected ways” (p. 52). While Hall’s definition of culture does not offer much explanation and is rather vague, it clearly reflects the connection between words of a language and the culture in which those words are used: “Communication is Culture, and

Culture is Communication” (Hall, 1959, p. 93). Seelye (1976) offered a similar position, arguing that

“[l]earning a language in isolation of its cultural roots prevents one from becoming socialized into its contextual use. Knowledge of linguistic structure alone does not carry with it any special insight into the political, social, religious, or economic system” (p. 10).

It is, therefore, necessary that language learners are exposed to both linguistic forms, i.e. the words that make up a language, and the culture they are embedded in. It is also important to note that culture is not a fixed and static construct, but rather one that is in constant change and flux as language is. Furthermore, culture and language are not the same for all members of a society; instead, they are nuanced constructs that vary within subcultures, as expressed by Spencer-Oatey (2008):

Culture is a fuzzy set of basic assumptions and values, orientations to life, beliefs, policies, procedures and behavioural conventions that are shared by a group of people, and that influence (but do not determine) each member’s behaviour and his/her interpretations of the ‘meaning’ of other people’s behaviour. (p. 3)

In the above quote from Spencer-Oatey the difficulty of capturing the idea of culture in a definition becomes clear. But, Spencer-Oatey’s definition entails the notion that there is not one culture of one society but that it is part of a group within a society. As mentioned above, native speakers have their native culture(s) internalized. Rivers (1981) includes this internalized aspect of culture and native speakers in her definition:

... children growing up in a social group learn ways of doing things, ways of expressing themselves, ways of looking at things, what things they should value and what things they should despise or avoid, what is expected of them and what they may have expected from others. These attitudes, reactions, and unspoken assumptions become part of their way of life without their being conscious of them. Yet culturally determined features may be recognized in their actions, social relationships, moral convictions, attractions and revulsions; through the

institutions their social group establishes and conserves; and in the art and literature which the members of the group produce and appreciate. (p. 316)

Learners of a second language have different ways of doing things than native speakers of that language; they will express themselves in a different manner, look at things differently, value different things, and despise different things. Language learners need to be made aware in the language classrooms of the culturally defined characteristics and acquire an understanding of the target culture through activities in order to function and communicate appropriately with the target language in the target culture (Rivers, 1981).

The importance of culture in the foreign language education has been pointed out by MLA report (2007). The report reads:

At one end, language is considered to be principally instrumental, a skill to use for communicating thought and information. At the opposite end, language is understood as an essential element of a human being's thought processes, perceptions, and self-expressions; and as such it is considered to be at the core of translanguing and transcultural competence. While we use language to communicate our needs to others, language simultaneously reveals us to others and to ourselves. Language is a complex multifunctional phenomenon that links an individual to other individuals, to communities, and to national cultures. Institutional missions and teaching approaches typically reflect either the instrumentalist or the constitutive view of language. (p. 2)

In addition, in the report the MLA Ad Hoc Committee on Foreign Languages point out that culture goes beyond the Big-C, little-c separation of culture and is comprised of language itself.

Culture is represented not only in events, texts, buildings, artworks, cuisines, and many other artifacts but also in language itself. Expressions such as “the pursuit of happiness,” “liberté, égalité, fraternité,” and “la Raza” connote cultural dimensions that extend well beyond their immediate translation. [...] deep cultural knowledge and linguistic competence are equally necessary if one wishes to understand people and their communities. (p. 2)

The argument stated above, that almost all words inherit a cultural meaning, (2007) has already been stressed by Steele (1990):

Every word, every expression we use has a cultural dimension. Culture is the means by which a community communicates. If people were not referring to a commonly agreed upon set of meaning in their interactions with each other, no communication would take place. Speakers of a language share not only the vocabulary and structure of the language; they share the perception of reality represented by that vocabulary and structure. And because speakers of different language have different perception of reality, no two languages show a one-to-one correspondence between vocabulary items or grammatical structures. It stands to reason then, that learning a second (or additional language), without learning about and understanding the culture(s) in which it is used, will not enable an individual to communicate effectively with speakers of that language. (p. 4)

When looking at the argument that words are embedded in the cultural settings of the language they belong to, the conclusion has to be drawn that how we understand words depends at least in part on our background knowledge, meaning the culture we grew up in. As pointed out by Zhao (2004): “As language and culture are deeply intertwined with each other, and language is the vehicle of cultural manifestation, it is natural that some words represent different notions and cultural values in different languages.” Language and culture are connected and culture (i.e. meanings, values) is embedded in vocabulary it cannot be separated – as Simon (1987, p. 37) describes it “language is culture” and language learners cannot simply memorize random vocabulary lists. Instead, according to Jiying (2004), they need to develop and learn ways of thinking, ordering their expanding world knowledge and finding their way in it in order to function in the L2 culture with the L2 vocabulary knowledge. It is therefore crucial not to separate culture from the other four skills, reading, writing, speaking and listening but rather to integrate culture within those skills (Kramsch, 1989, pp. 1-2). Kramsch continues by stating that “we have to

explore the cultural dimension of the very language we teach if we want learners to be fully communicatively competent in these languages” (pp. 1-2). Learning a new language means developing an understanding of the new language system and organizing the newly acquired lexicon within this system. This also entails referencing the target language (L2) to the existing native language (L1).

Let us take using public transportation as an example. Riding the bus or taking the train requires buying a ticket and *validating* the ticket, which means getting it stamped, punched or marked in a different way. In Germany, however, the alleged translational equivalent is *entwerten*. Table 2.5 provides the dictionary definitions of the both words.<sup>12</sup>

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<sup>12</sup> For the English word the *Merriam-Webster Dictionary* and the *Oxford English Dictionary* were used and for the German word the *Bertelsmann Wörterbuch* and the *Duden* were used.



Validate	entwerten
Merriam-Webster	Duden Universalwörterbuch
<p>1. <i>a</i> : to make legally valid : ratify <i>b</i> : to grant official sanction to by marking &lt;<i>validated</i> her passport&gt; <i>c</i> : to confirm the validity of (an election); <i>also</i> : to declare (a person) elected</p> <p>2. <i>a</i> : to support or corroborate on a sound or authoritative basis &lt;experiments designed to <i>validate</i> the hypothesis&gt; <i>b</i> : to recognize, establish, or illustrate the worthiness or legitimacy of &lt;<i>validate</i> his concerns&gt;</p>	<p>1. für eine nochmalige Verwertung ungültig machen: einen Fahrschein, eine Eintrittskarte e.</p> <p>2. a) den Wert einer Sache, (selten:) einer Person mindern: akte Privilegien wurden im Laufe der Zeit entwertet; Das Schälen der Rinde, insbesondere durch das Hochwild, entwertet das Holz (Mantel, Wald 62); warum die Planung ... die Plätze zu bloßen Verkehrspunkten entwertet habe (Fest, Im Gegenlich 68); das Geld ist entwertet; ... war er ein entwerter und lahmer Mensch, mit dem nichts mehr anzufangen war (Hesse, Sonne 9); b) (e. + sich) (selten) an Wert verlieren: das Geld entwertete sich (Niekisch, Leben 111)</p>
OED	Bertelsmann Wörterbuch
<p>1. a. <i>trans.</i> To render or declare legally valid; to confirm the validity of (an act, contract, deed, etc.); to legalize. b. <i>spec.</i> [Now after French <i>valider</i>.] To declare (an election) valid; to declare (a person) duly and properly elected.</p> <p>2. a. To make valid or of good authority; to confirm or corroborate; to substantiate or support. b. To examine for incorrectness or bias; to confirm or check the correctness of.</p>	<p>ent wer ten [V.2, hat entwertet; mit Akk.] eine Sache e. 1 <i>einer Sache den Wert nehmen, ihren Wert verringern</i>; Geld e.; indem du das sagst, entwertest du meine Arbeit 2 <i>wertlos machen, einer Sache den Geldwert nehmen, sie für weiteren Gebrauch ungültig machen, sie unverkäuflich machen</i>; einen Fahrschein (durch Lochen, Stempeln) e.; eine Eintrittskarte durch Einreißen e.</p>

Table 2.5: Dictionary definitions for the English word *validate* and its commonly accepted German translational equivalent *entwerten*

When looking only on the surface, the translation of *validate* with the German word *entwerten* seems to make sense and to encompass the meaning explained in English above. Yet when looking more closely at the words, what is most noticeable is the prefix *ent-* which usually has a negative meaning in German. And in fact *entwerten* does not

mean validate, but on the contrary expresses the opposite, namely de-validate. Even though this does not change anything about the basic meaning needed for understanding it does show important cultural information. The German word indicates explicitly that the ticket can only be used once, while in English the term has a more positive undertone. This difference between a more positive meaning in English and a more negative meaning in German becomes more obvious when also taking into account the dictionary definitions for the words listed in table 2.5 above. While the entries in the English dictionary focus on positive aspects (e.g. make legal, official, recognize, of good authority, to confirm, etc.) the definition in the German dictionaries highlight more negative aspects in comparison (e.g. to reduce the value, to decrease the value, to lose in value, valueless, etc.). This means that “many foreign words which appear to have an equivalent basic meaning in the learner’s L1 are nevertheless different because of their different connotations” (Laufer, 1990a, p. 582). Therefore, the language learner cannot simply transfer the L1 meaning he associates with this word onto the newly acquired L2 word because there are issues with translational equivalence.

As mentioned above, there are many aspects of word knowledge as discussed by Nation (2001) and not all can be learned at once. However, it is important that language learners are aware of cultural differences and similarities between L1 and L2 even at lower levels which will help them become better learners. Language learners’ L1 knowledge can be utilized to first see how a word is understood in their L1 and then use this knowledge a point of departure to compare the L1 with the L2 which means that learners may have to extend their conceptual understanding or even create a new concept

in order to understand a word in a foreign language. The problem of neglecting the culture embedded in lexical items is also visible in language textbooks. Even though many textbooks started to organize lexical items by semantic fields, their occurrence within the chapters of the textbook does not address the cultural difference between the L2 presented in the textbook and the L1 of the language learner (Hague, 1987). Hague further argues:

... learning a foreign language also entails learning about the culture and customs of the target people; thus, students are frequently faced with many unknown concepts that are easily misunderstood without direct instruction. For example students of Spanish may be assigned to read about the bullfight. However, that student may have existing misconceptions about this sport which may cause a failure in comprehension. Even something as simple as *traje de huces*, the bullfighter's traditional attire can cause a breakdown in comprehension because this concept is not part of the students'/s background knowledge. (p. 221)

Yet this important aspect is ignored in vocabulary presentation in textbooks or even in the language classroom. Spinelli and Siskin (1992) established the following criteria for selecting, presenting and practicing vocabulary: (1) present and practice vocabulary within culturally-authentic semantic fields and networks of relationships; (2) present and practice vocabulary in ways that distinguish the native and target culture; (3) use authentic visuals where native culture/target culture referents differ in form; (4) present and practice a word's denotation and connotation; and (5) present and practice vocabulary in ways that will reinforce appropriate behavior in the target culture. Having "vocabulary presented as part of a total cultural system enables the students to conceive a more conceptually accurate image of the word's meaning in a foreign society" (Halverson, 1985, p. 329). The "vocabulary presentation as part of a total cultural

system” (Halverson, 1985, p. 329) is also in line with the MLA report (2007), which states that the goal of foreign language instruction entails that

students are taught critical language awareness, interpretation and translation, historical and political consciousness, social sensibility, and aesthetic perception. They acquire a basic knowledge of the history, geography, culture, and literature of the society or societies whose language they are learning; the ability to understand and interpret its radio, television, and print media; and the capacity to do research in the language using parameters specific to the target culture. (p. 4)

Even though it can be a daunting task to teach culture, if it is connected to vocabulary it may benefit students’ ability to communicate more appropriately in the cultural setting of the language they are learning. As mentioned above knowing about the cultural differences between the L1 and the L2 may also help language learners to avoid the trap of translational equivalence which is discussed in the next section.

## **TRANSLATIONAL EQUIVALENCE**

Even words that supposedly have a translational equivalent are often not culturally neutral when looking more closely at the actual meaning in the cultural context in which they are embedded in. It is important to look at them within their cultural setting and to analyze them from an outsider perspective assigning misleading and ethnocentric terminology (Goddard, 2006). It is important to be aware of those differences in order to be able to take in new concepts and to understand the new language and culture in terms of that new language and culture instead of through the glasses of the native language.

Concepts across languages differ even though they might seem universal. This also holds true for one of the most important experiences of human life - personal

relationships (Wierzbicka, 1997). Even though the phenomenon of relationships exists in every culture, certain aspects of these interpersonal relationships differ across cultures.

This example illustrates the ‘translational unequivalence’ between many languages which also shows diversity of languages and the inability of one language to represent the reality and culture of another as discussed by Sapir (1924) and Whorf (1942). Language students struggle with this aspect of learning a new language, because many learners bring the conceptual system that they have developed while learning their L1 [native language] into the learning of an L2 [foreign language], assuming that every single unit of conceptualization in their repertoire has an equivalent in the conceptual system associated with the L2 (Sharifian, 2007, p. 33). In other words, when learning a second language students are inclined to assume that there is a translational equivalence between L1 and L2 and they map the new words onto their existing or conceptual system (Jiang, 2002, p. 104). However, this can be problematic since there is not always a translational equivalent as demonstrated above. Students need to be made aware of this problem and they need help understanding and developing a new concept for the L2 words. As argued by Swan (1997):

“Informed teaching can help students to formulate realistic hypotheses about the nature and limits of crosslinguistic correspondences, and to become more attentive to important categories in the second language which have no mother-tongue counterpart” (p. 179).

In addition, even if there seems to be a mother-tongue counterpart (for example the word *Freund* in German meaning ‘friend’ or ‘boyfriend’ in English) does not necessary mean that language learner can map the L2 word onto the existing concept. *Freund* in German

has different meanings than the word *friend* in English as the glosses above indicate. Besides the different translations of *friend* it also has a deeper meaning. As described by Wierzbicka (1997) the word *friend* has different meanings in different cultures. Wierzbicka (1997) points out:

The concept of ‘friend’, and the relationship linked with it, are important to Anglo culture, but it is an illusion to think that they must have their counterparts in all other cultures and that they are somehow part of human nature. [...] Taxonomies of human relations are just as culture-specific, and language specific, [...], and the concept encoded in the present-day English word *friend* has no privileged status in them. (pp. 32-33)

Wierzbicka further observes, that “in the current usage *friends* [in American English] tend to be seen as a multiplicity of people related in an analogous way to a central figure” (p. 45). This example illustrates that concepts can differ even though they seem to be similar.

There are three possibilities when learning a second language: 1) the concepts are the same in both languages and a translational equivalent exists; 2) the concepts are slightly different and the language learner has to alter his or her concepts or 3) no concept exists in the L1 that is equal or similar to the L2 and the language learner must create a new concept in order to make room for the new acquired meaning. Figure 2.9 visualizes the three possibilities of conceptual development when learning a second language.

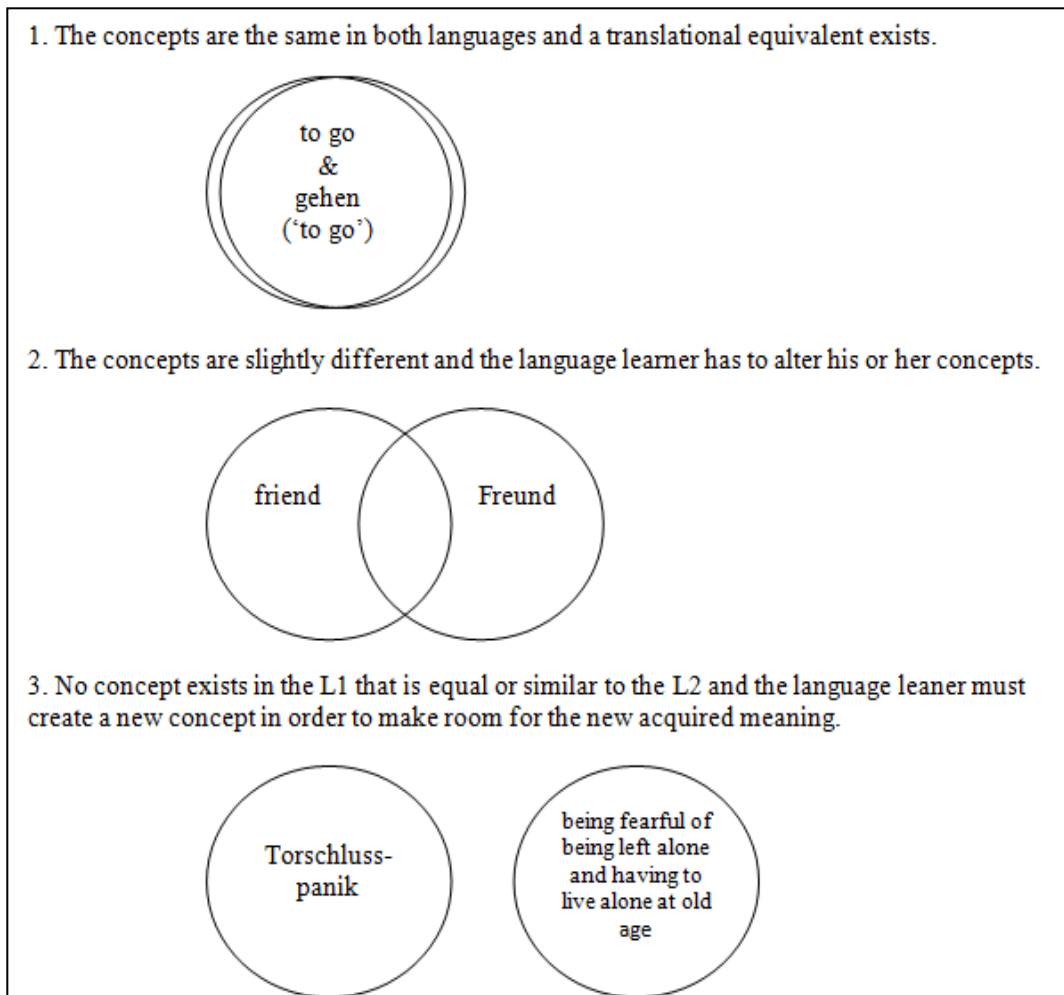


Figure 2.9: Concepts varying in German and English<sup>13</sup>

Frame Semantics may offer a way to deal with the conceptual differences between languages and to help language learners in their vocabulary acquisition, as the next section discusses.

<sup>13</sup> The representation format was taken from Laufer (Laufer, 1990b). Also it should be noted that real translational equivalents are rather rare as stated by Altenberg and Granger (2002).

## FRAME SEMANTICS

The application of Frame Semantics is useful for all possible scenarios described at the end of the last section and illustrated in figure 2.9, but especially for scenario 2 (a concept is similar between L1 and L2; e.g. *friend* (friend, acquaintance) and *Freund* ('friend')) and scenario 3 (the concept does exist in one language but not the other; e.g. *Torschlusspanik* ('being fearful of being left alone and having to live alone at old age')) because words falling into those categories include words that have cultural meaning embedded within them. Another important aspect with regards to both Frame Semantics and translational equivalence is context. What happens if we do not know which frame is used by the speaker? If we are in a situation in which we hear or read the word *hot*, for example, we have to know the context in which the word is used in order to arrive at the correct meaning in German. The following example (2.1) illustrates the different meanings of the word *hot* in English:

- (2.1) a. It was very hot this summer.  
b. The food at the new Indian place is very hot.

(2.1a) carries the meaning relating to temperature, therefore, evoking the temperature scale frame (Fillmore, 2003). (2.1b) could either be carrying the meaning of taste *hot* versus *mild* or it could very well carry the meaning relating to temperature as in *hot* versus *cold*. Sentence (2.1b), therefore, evokes two frames. As discussed by Fillmore (2003) "the word *hot* is capable of evoking a temperature scale frame in some contexts and a particular taste experiences frame in others" (p. 236). For (2.1b) we could argue that because Indian food is known to be spicy, and as a speaker having this kind of



background knowledge, that the meaning of *hot* in this sentence is *spicy* and not the meaning of a very warm temperature. Fillmore mentions that “interpreting a sentence containing this word [*hot*] requires assumptions about which frame is relevant in the given context” (p. 236). Students learning a foreign language may not have the necessary background knowledge to determine what meaning is used. They cannot yet use the L2 the same way they use their L1 and often fall into the trap of simply using the first word that is provided to them by the dictionary translation. However, this often is misleading as in the case of *hot*. Translating *hot* into German gives the following results shown in figure 2.10 below:

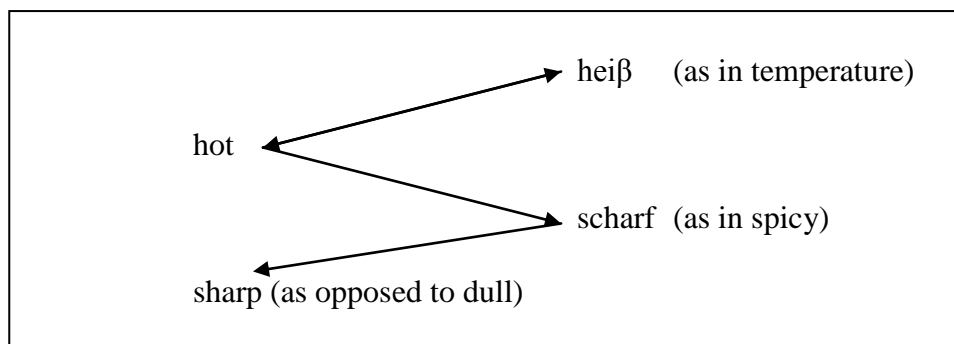


Figure 2.10: Translation from English to German of the word *hot*

Figure 2.10 illustrates the issues that arise when simply using a word without knowing its exact meaning. Not knowing or being aware of the exact meaning is often the case when using dictionaries in which words are not organized by frames, and students are likely to use the first words as mentioned above or one that looks *cool* to them as one of my students told me once after I asked him why he chose a word.

Having a frame-based organization would help language learners to choose the correct term. This means that students need to be made aware of cultural differences between their L1 and the L2 they are learning. In addition, it must be stated again, that there is not one culture for any language but that there are many subcultures, which also have specific terms that are part of their subculture (region, generation, profession, etc.). Frames can also be used to highlight those differences. Hague (1987) points out that semantic networks are culturally determined, yet foreign language textbooks, even though their vocabulary lists are organized in semantic fields, their arrangement in lists suggests that the boundaries of these semantic networks are equivalent between the L1 and L2 culture.

The concept of frame has had many different names over the years but is a result of the schema theory developed by Bartlett (1932) as well as the theory of scripts by Schank and Abelson (1977) which was introduced to cope with the understanding that is involved in event sequences. The classic example is the restaurant script, where different scenes such as entering, ordering, eating, etc. are parts of the entire script. Fillmore understands a frame as a cognitive structuring device and, therefore, representations of knowledge. A frame can be understood as the abstract part of meaning. This might become clearer when looking at Fillmore's earlier work in which he differentiates between scenes and frames. Scenes are abstract knowledge which could be in principle understood non-linguistic knowledge and frames on the other hand are the devices of organizing the linguistic expression needed to express a scene. As explained by Fillmore and Atkins (1992):

A word's meaning can be understood only with reference to a structured background of experience, beliefs or practices, constituting a kind of conceptual prerequisite for understanding the meaning. Speakers can be said to know the meaning of the word only by first understanding the background frames that motivate the concept that the word encodes. Within such an approach, words or word sense are not related to each other directly, word to word, but only by way of their links to common background frames and indications of the manner in which their meanings highlight particular elements of such frames. (p. 76-77)

When we have a conversation or read a text we organize what we hear or read into frames. In other words, those texts, whether written or oral have certain words that evoke the frame. Those different frames are then structured into scenes which in turn give us the broader understanding of the situation being conveyed by the speaker or the text. Frames help us to paint a mental image of the situation in front of us. Therefore, it can be said that: "In Frame Semantics, word meaning is characterized in terms of experienced-based schematization of the speaker's world" (Petrucci, 1996, p. 5). The knowledge a person has about their native language can, therefore, not be separated from the cultural knowledge associated with the person's native language. Consequently, as mentioned earlier, learning a foreign language must include learning about the cultural knowledge embedded in its individual words. To use Fillmore's favorite example: only knowing the meaning of the verb *buy* does not help a learner to understand the whole situation in which this word is used. One needs to be aware of the entire situation, the context, or in other words know the frame as a whole, which in the case of *buy* would be the commercial transaction frame (Fillmore, 1977). The commercial transaction frame includes the following core frame elements: BUYER, SELLER, MONEY and GOODS. Some of the lexical units in this frame are for example: buy and sell. Without

the “buyer”, the “seller” and the “goods” the word *to buy* does not make any sense. In the following sentences (2.2 & 2.3) the frame elements from the commercial transaction frame mentioned above are realized. Frame elements that are optional are in bold. The lexical unit *to buy* is the target lexical unit that evokes the frame:

- (2.2) a. Sandra buys the skirt **from H&M** **for \$39.**  
 b. Mr. Tomson buys the car **from Mr. Smith** **for \$7500.**  
 (BUYER) (TO BUY) (GOODS) (SELLER) (PRICE)
- (2.3) a. Mrs. Wirt sells fresh fruit **Saturday** **at the market.**  
 (SELLER) (TO SELL) (GOODS) (TIME) (PLACE)
- b. Walmart sells almost everything.  
 (SELLER) (TO SELL) (GOODS)

Yet as examples (2.2 & 2.3) show, the frame elements do not have to be realized or with other words they are not obligatory. GOODS are always an obligatory element, but the SELLER and PRICE in example (2.2) and the TIME and the PLACE in example (2.3) are optional. The perspective of a frame depends on the perspective of the verb. Sentence (2.2) is an example of the commercial transaction frame from the BUYERS perspective realized by the verb *to buy* in which the BUYER and the GOODS are fore grounded while sentence (2.3) is an example of the commercial transaction frame from the SELLERS perspective realized by the verb *to sell* foregrounding the SELLER and the GOODS. The other frame elements such as SELLER and PRICE are still understood, even though they are in the background, because the frame is known as a whole by native speakers of English.

Another example (2.4) in which the entire frame is understood even though there is no specific mentioning in the sentence is as follows:

(2.4) Kathy and Tom can't wait to open the presents under the tree and see if the milk and cookies are gone.

English speakers know when hearing this sentences that the sentences talks about Christmas as well as Santa Clause. The presents that are supposedly under the tree are a direct hint to the Christmas frame and it is a tradition to leave milk and cookies for Santa Clause. A person not knowing about Christmas and the “existence” of Santa Clause would not be able to understand the sentence. In addition, they would also wonder about the milk and the cookies that are mentioned. In Germany, Austria and Switzerland for example, Santa Clause does not exist. Instead *St. Nikolaus*<sup>14</sup> comes on December 6<sup>th</sup> and the *Christkind*<sup>15</sup> on Christmas Eve (December 24<sup>th</sup>).

Yet another even more puzzling example (2.5) is connected to American politics. During December 2010 a lot of speeches heard on TV and the radio as well as many headlines in the daily newspapers were concerned with pork.

(2.5) Earmarks turn Capitol Hill into a pork-fest.<sup>16</sup>

A lot of background knowledge is required to be able to make sense of this sentence. First of all readers or hearers need to know that Capitol Hill can be seen as the center of politics for the United States. However, this does not help to understand why

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<sup>14</sup> *St. Nikolaus* was himself a historic 4th-century saint and Greek Bishop of Myra (in Lycia, part of modern-day Turkey). The tradition of Saint Nicholas Day, usually on December 6th, is a festival for children in many countries in Europe related to surviving legends of the saint, and particularly his reputation as a bringer of gifts. (www.freedictionary.com).

<sup>15</sup> The *Christkind* is the traditional Christmas gift bringer in (among other countries) all German speaking countries). (www.freedictionary.com).

<sup>16</sup> From the NY Daily News, December 16<sup>th</sup>, 2010. [http://www.nydailynews.com/opinions/2010/12/16/2010-12-16\\_earmarks\\_turn\\_capitol\\_hill\\_into\\_a\\_pork\\_fest\\_congress\\_insults\\_voters\\_with\\_new\\_org.html](http://www.nydailynews.com/opinions/2010/12/16/2010-12-16_earmarks_turn_capitol_hill_into_a_pork_fest_congress_insults_voters_with_new_org.html).

“*Earmarks*” turn this political center into a “*meat party*”. A reader or hearer would need to know that both Earmarks and pork refer to mostly useless political fillers of a bill.

Another aspect of Frame Semantics is that frames do not stand alone but are connected to other frames and are part of a mesh of different frames or are part of more complex frames, as in the case of the commercial transaction frame discussed above. This frame is has other frames connected to it, such as the *transfer frame* (Fillmore, 2003).

## **FRAMENET**

The FrameNet project, the “computational lexicography project” (Fillmore, 2003) at Berkeley developed by Fillmore, uses Frame Semantics as its basis. It is a lexical resource for contemporary English and is currently running in its 5<sup>th</sup> version. The FrameNet data base currently contains more than 11,600 lexical units of which 6,800 are fully annotated and combined into 960 semantic frames. Those frames and their lexical units are further highlighted by more than 150,000 annotated sentences from which reliable information can be reported on the valence, or combinatorial possibilities, of each of the items analyzed in the database.<sup>17</sup>

The building blocks of FrameNet are lexical units (LUs), which are combined in frames, which contain frame elements (FEs). A lexical unit is a word in one of its meanings, which means that one word might be found in different frames depending on its various meanings. A polysemous word like *to run* for example can evoke different

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<sup>17</sup> The information was taken from the FrameNet website, which can be found under the following link: [http://framenet.icsi.berkeley.edu/index.php?option=com\\_content&task=view&id=40&Itemid=1](http://framenet.icsi.berkeley.edu/index.php?option=com_content&task=view&id=40&Itemid=1).

semantic frames such as the `self_motion` frame, the `Leadership` frame, the `Fluidic_motion` frame, or the `Operating_a_system` frame as examples (2.5) to (2.8) below illustrate respectively. The lexical units are written in capitalized letters and the frame elements are listed in brackets.

- |       |  |                 |                             |
|-------|--|-----------------|-----------------------------|
| (2.5) | Stop                                     | RUNNING         | around the room.<br>(AREA)  |
| (2.6) | These two<br>(LEADER)                    | were<br>RUNNING | the show”.<br>(ACTIVITY)    |
| (2.7) | I could almost feel the river<br>(FLUID) | RUNNING         | behind me.<br>(AREA)        |
| (2.8) | He<br>(OPERATOR)                         | RAN             | a pyramid scam.<br>(SYSTEM) |

The frames that are evoked by lexical units have frame elements (FEs). Frame elements can either be core or non-core elements. Those frame elements are the different participants, props, and other conceptual roles that make up the frame and give it a more visual representation.

The relationships between frames are visually illustrated in FrameNet with the Frame Grapher-tool. The Frame Grapher-tool illustrates the relationship among different frames. Figure 2.11 below is an example of the transfer frame. It illustrates how the `commercial_transaction` frame and the transfer frame are part of a bigger mesh of frames. Both frames are evoked when talking about buying or selling products because

both actions involve the goods and money as well as a transfer of both of those items. It shows how other *transfers* are part of this mesh of frames and might be evoked when using for example the word *to give* (Fillmore, 1982).

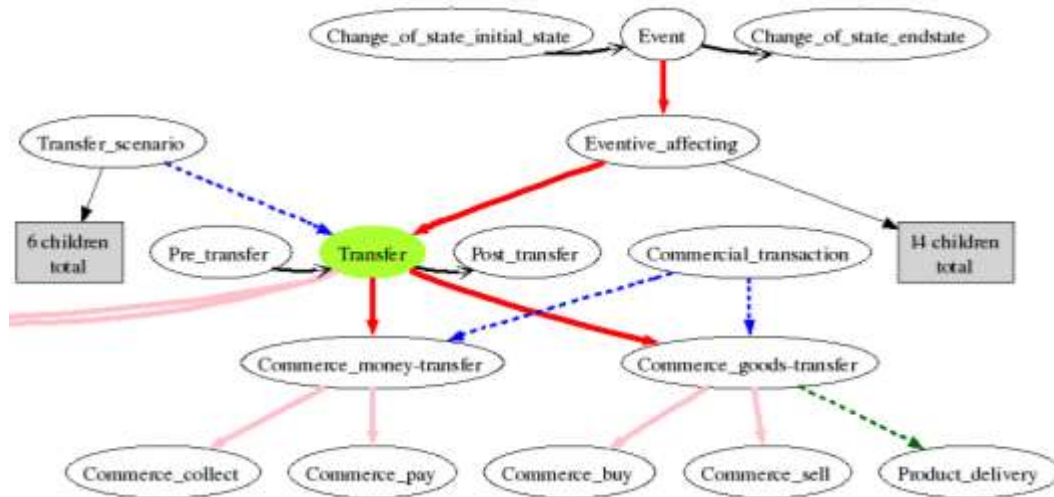


Figure 2.11: Transfer Frame

The assumption is that there is always some background knowledge which is activated by a word (i.e. *give*, *transfer*, etc.). Therefore, frames provide the conceptual structures that in turn provide the context necessary for speakers of a language to interpret those structures. Overall, the frames in FrameNet illustrate the existence of a lexical unit in a language – in this case English. With the lexical units organized in frames, frame elements, annotated sentence and valence patterns they provide the background information and usage of words in a language.



## **FRAME SEMANTICS: TEACHING APPLICATIONS**

While traditional vocabulary presentation approaches such as semantic mapping foster students' word-associations and promote the formation of students' semantic networks which, in turn, benefit students vocabulary retention (Hague, 1987; Machalias, 1991), they also have their pitfalls. One of those pitfalls is that the semantic maps created in class can be overwhelming for students since word associations are unlimited. The Frame Semantics approach utilizes a similar structuring device which creates a visual image of the frame, therefore offering students a useful tool with which to structure their new vocabulary and connect it with previously learned words. Furthermore, the frames in which the lexical items are combined preexist in the real life of the target culture and are not a mere creation through word-associations, as it is the case with semantic mapping. Frame Semantics can be used as a vocabulary teaching and learning tool in line with Byram's (1997) idea of "Cultural awareness as vocabulary learning" (p. 1). Using Frame Semantics to the teaching and learning of vocabulary may be beneficial because it not only helps to structure the different linguistic entities in a logical manner, but also provides a structure that may help language learners to sort the different linguistic entities within more abstract frames which will help them understand the background knowledge and gain an understanding similar to that of native speakers.

Using the entirety offered by the FrameNet database is too overwhelming for beginning language learners; however, using only parts makes it a useful resource. The principles that are used by the FrameNet database can be transferred and used with other

languages and implemented as teaching tools – especially the visual organization of the FrameGrapher tool, organization of lexical units in frames and frame elements.

Even though there have not been any specific studies showing possible applications and benefits of Frame Semantics for the second language classroom its possible value has been mentioned in the literature. Fillmore (1985, pp. 223-224 as stated by Petruck (1996)) sees Frame Semantics as a tool for teaching vocabulary to foreign language learners and Petruck (1996), too, mentions that Frame Semantics may have potential applications for a foreign language learning setting. Boas (2001) highlights the benefits of a frame-semantic bilingual database for second language learning. He especially emphasizes the usefulness of such a database in electronic form since it would not be restricted with regards to size, unlike traditional learning materials (e.g. textbooks, dictionaries). Furthermore, it would benefit students because it would “offer [them] access to more efficient ways of learning vocabulary by being able to relate to a common structuring device, i.e., semantic frames” (Boas, 2001, p. 72), and “with semantically annotated example sentences from corpora, students would be offered the opportunity of learning the vocabulary of a foreign language in context” (Boas, 2001, p. 72). Even though there have not been any studies combining Frame Semantics and second language acquisition, researchers in the field of translation theory have pointed out, that Frame Semantic theory is a useful tool for arriving at the meaning of a foreign language on different levels such as lexis, syntax and text (López, 2002; Qing-guang, 2009). Since learning a foreign language also includes the understanding and transfer of meaning Frame Semantics seems like a valuable tool for the learning and teaching of foreign

languages as well in which lexis, syntax and text play an important role. In addition, Frame Semantics helps to highlight differences between various languages since frame for a given concept vary across languages. English FrameNet frames have been successfully re-used for the analysis of other languages (Boas, 2009). This shows that frames are to a certain degree applicable cross-linguistically.

## **CONCLUSION**

In this chapter I outlined several topics relevant to understanding of vocabulary acquisition, such as what it means to know a word (pronunciation, multiple meanings, cultural knowledge, etc.), the incremental nature of vocabulary learning (e.g. that the learning of vocabulary is a fluid process), the difficulty of learning words or learning burden, breadth and depth of vocabulary knowledge, and an overview of vocabulary in the history of language teaching. In addition, I pointed to different vocabulary assessment tools, which are necessary to understand why the tests used in study were chosen. I also provided an overview of the cultural component embedded in words in which I showed the necessity of knowing not only the translation of a word (e.g. the so-called translational equivalent) but also of the cultural component of words. Lastly, I presented research in the field of vocabulary acquisition, more specifically, semantic mapping, semantic and thematic clustering of vocabulary for teaching and learning purposes, as well as Frame Semantics and its suggested usages in the classroom. The research in semantic and thematic clustering suggests that thematic clustering is beneficial to the vocabulary learning process, while semantic clusters might hinder it. However, the results

are still contradictory and some studies still suggest that semantic clusters can also foster vocabulary learning. In addition, Frame Semantics has been suggested as being a useful language learning tool in literature; however, it has not been implemented in an actual classroom research prior to this study.

In the next chapter, chapter 3, I present the research questions to which this study aimed to seek answers, describe the setting and participants, the instrumentation to collect the data, the lexical units selected for this study, as well as the procedures for and analysis of the collected data.

## **CHAPTER 3 – METHODOLOGY**

### **INTRODUCTION**

In this chapter I first present the research questions posed in this study, followed by a description of the research design, which was used to answer these questions. Next, the instruments that were used to collect the data for this study are outlined. The chapter will conclude with an overview of the data collection procedures as well as how the data was analyzed.

### **RESEARCH QUESTIONS**

The following research questions were investigated in this study:

- 1) What is the demographic make-up of the study participants, and how do demographic characteristics connect to learning vocabulary in the L2?
- 2) Does the Frame Semantics approach have an effect on students' depth of knowledge short- and long-term vocabulary recall and retention compared to more traditional vocabulary learning techniques?
- 3) Do students learning vocabulary with the Frame Semantics approach acquire and retain and recall more lexical items than students learning vocabulary using more traditional vocabulary learning techniques?
- 4) Do students gain a deeper knowledge of vocabulary – especially the cultural component – with the Frame Semantics approach compared to more traditional vocabulary learning techniques?
- 5) Are there differences in learners' attitudes with regards to using Frame Semantics instead of more traditional vocabulary learning techniques?

## RESEARCH DESIGN

### SETTING

The study took place during the fall semester of the 2010 academic year at the University of Texas at Austin. During this time I taught German as an Assistant Instructor in the Department of Germanic Studies. The University of Texas at Austin has a language requirement, which usually takes students two years to fulfill. The accompanying course materials for the first two semesters of German is the non-traditional online textbook *Deutsch im Blick*<sup>18</sup> and the online grammar guide *Grimm Grammar*.<sup>19,20</sup> Students taking German language courses are also required to attend a laboratory class once per chapter in which they complete so-called *Webquests*. Those *Webquests* introduce different aspects of the target culture to students via the Internet through which students have to navigate in the target culture.

*Deutsch im Blick* lists vocabulary for each chapter at the beginning of each chapter. Vocabulary is mostly grouped in thematic units. In addition, students are offered eight vocabulary study tools at the beginning of each chapter as well. Those tools include listening, repeating words out loud, writing words, translation, associations, cognates, words families, and an odd-man-out activity. At the end of each vocabulary list students find a table that they can use to help with their vocabulary learning. They can list the

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<sup>18</sup> The *Deutsch im Blick* website is available to the public by using the following link: [coerll.utexas.edu/dib](http://coerll.utexas.edu/dib)

<sup>19</sup> The *Grimm Grammar* website is available to the public by using the following link: [coerll.utexas.edu/gg](http://coerll.utexas.edu/gg)

<sup>20</sup> Both *Deutsch im Blick* and *Grimm Grammar* were developed and created by Dr. Zsuzsanna Abrams an Associate Professor at The University of Texas at Austin in the Department of Germanic Studies (now Associate Professor at the University of California, Santa Cruz in the Language Program) in collaboration with a team of graduate instructors, native speaker collaborators and staff at LAITS and TLTC (now COERLL)

words by lexical category (e.g. nouns, verbs, adjectives). They also have a space in which they can note a mnemonic. In each chapter, there are semantic maps that should be used and created at the beginning of a new chapter or even topic/theme within a chapter to help students activate knowledge and make connections with previously learned vocabulary. Listening, reading, writing and speaking activities foster the usage of the words found in the vocabulary lists and are geared to help students understand not only the vocabulary but also grammatical aspects of the language and culture.

Even though the *Deutsch im Blick* material includes guidelines to teach vocabulary, this aspect of the book is usually neglected by the instructors. Students are mostly still required to learn vocabulary at home from the list given at the beginning of the chapter. Using *Deutsch im Blick* and incorporating all the tools available to for vocabulary presentation may be more beneficial for students because language learners still need explicit instruction about how to connect vocabulary and culture, something that cannot be done by simply memorizing lists. However, when combining the videos, vocabulary tools and activities in *Deutsch im Blick* with Frame Semantics, language learners might benefit in that they will more easily establish the connection between the L2 vocabulary and the L2 culture and become aware of the differences between the L1 and L2 culture.

## **PARTICIPANTS**

Four second semester German classes were selected for this study. There were a total of 52 participants at the beginning of the study. However, due to attrition (e.g.

students dropping the course, opting out of the study, not completing all parts of the study or missing class on days the treatment or tests were administered) the total number of participants that can be utilized for statistical analyses is 34 participants. The participants were from four different sections of second-semester German. Two of these sections were randomly assigned to the Traditional Group (T Group) and the other two sections were randomly assigned to the Frame Semantics Group (FS Group). There were 17 students in the T Group and 17 students in the FS Group. Students in the T Group were introduced to the new vocabulary via memorization, recognition technique and translation, while the participants in the FS Group were introduced to the new vocabulary via Frame Semantics and techniques to highlight cultural differences between L1 and L2. The participants were from two intact classes. All participants will be enrolled in one of the GER 507 classes - second semester beginning German class - offered during the fall semester 2010. There were 17 participants in each of the two groups. All participants were students from the University of Texas at Austin. Not all participants were native speakers of English. Three of the participants described themselves as either bilingual speaker with English as one of the languages and one participant described himself as non-native speaker of English.<sup>21</sup>

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<sup>21</sup> Two participants described themselves as bilingual speakers (one as English/Spanish and the other one as English/Arabic) and one participant stated that he is a native speaker of Russian.



## PROCEDURES

The study itself took place during the fall semester 2010 at the University of Texas at Austin. A pre-treatment vocabulary test, vocabulary appropriateness test and pre-treatment questionnaire were administered two weeks prior to the treatment. After the treatment, participants received an immediate post-treatment vocabulary and appropriateness test and were asked to complete a post-treatment questionnaire.<sup>22</sup> The specific tests are explained in more detail in the instrumentation section of this chapter.

Prior to the study, native speakers of German were asked to complete an online survey using surveymonkey.com (for the survey, see Appendix A) in order to collect data to which the responses of the student-participants – from the culturally appropriateness test (VAT) - could be compared with. E-mails were sent to *Gymnasiums* and *Fachoberschulen* asking them to participate in this study with their students in the *Abiturklassen*. Students' age in those classes is similar to the age of the students taking German 507 at the University of Texas at Austin. Fifty-five native speakers of German participated in the online questionnaire. The data was used as reference for teaching purposes as well as means for comparison of the participants' results of the vocabulary appropriateness test.

The pre-treatment tests (the vocabulary knowledge scale test and the cultural appropriateness test) for both the T Group and the FS Group were administered on one day during regular scheduled class time. This test was based on Paribakht and Wesches' (1993) *Vocabulary Knowledge Scale* test. The results provided me with the knowledge

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<sup>22</sup> The tests and questionnaires are provided in the Appendix.

base of students' vocabulary, which was useful for my analysis and was used to compare knowledge gain (i.e. students' acquired vocabulary) resulting from the treatment. It showed me the words that were previously known to students in both the Frame Semantics and the Traditional Group. It also showed whether both groups were on even footing. The pre-treatment tests were administered two weeks prior to the treatment. These pre-tests were of the same format as the immediate post-treatment and delayed post-treatment tests used throughout this study and are discussed in detail in a later section.

The FS Group had one additional contact class the day before the additional treatment, during which I explained the concepts underlying Frame Semantics as well as illustrated the importance of culture in order to correctly use vocabulary in the target language.

## **INSTRUMENTATION**

A pre- and post-treatment and delayed-post test design was used in this quantitative comparative study in addition to a pre-treatment demographic questionnaire and a post-treatment (attitude/motivation) questionnaire.

## **BACKGROUND/ DEMOGRAPHIC INFORMATION**

As the first step in the research process, participants received a pre-treatment online questionnaire (see Appendix B) developed with surveymonkey.com. It asked

participants for demographic information such as age, gender, major, GPA, and reasons for taking the course as well as questions about their vocabulary-learning experience, and their vocabulary learning habits. Since most students expect to learn and memorize vocabulary from lists (Read, 2000, p. 1) it was important to include questions about experiences and their habits since those might have an effect on students' vocabulary acquisition. Pimsleur, Mosberg & Morrison (1962) discussed how study habits and second language acquisition are related and Dörnyei (2005) discussed how language learners' past experiences are connected to future language learning encounters and their success rate. In addition, participants were asked about their native language and other languages that they might have studied prior to (or concurrently with) learning with German.

### **ATTITUDE SCALE**

In addition to background and demographic information collected in the online survey, participants were asked to complete an attitude scale, which collected quantitative data. As discussed in the literature review, vocabulary is an important part of language and necessary for communicating effectively. Since students have to learn a great amount of vocabulary in order to communicate effectively, being motivated and having a positive attitude toward vocabulary learning is important to help learners deal with the large amount of vocabulary to be learned. The attitude scale was administered at the same time as the pre-treatment questionnaire, then again with the post-treatment questionnaire. The design of the attitude scale is based on attitude/motivation scale used in a vocabulary

research study by Theodoridou (2009) and adapted to fit with learning German. This particular attitude scale was selected because it not only looks at motivation but includes attitudes toward vocabulary learning (i.e. interest, enjoyment and confidence in using words) that might have an effect on learners' language learning, or in this case vocabulary learning. As pointed out by Dörnyei (2010, p. 6) questionnaires are useful tools to pose questions pertaining to attitude and opinion.

The attitude scale was used to determine whether differences exist between the Traditional Group (T Group) and the Frame Semantics Group (FS Group) with regards to vocabulary learning. Participants had to answer the questions using a 5-point Likert scale from (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, to (5) strongly agree. In the pre-treatment attitude scale 4 questions pertained to participants' attitude toward vocabulary. Those questions were:

- (1) I am interested in learning new vocabulary in German.
- (2) I enjoy learning new vocabulary in German.
- (3) I am motivated to learn new vocabulary in German.
- (4) I feel confident using new vocabulary in German.

The post-treatment attitude scale asked participants to rate nine statements on the same 5-point Likert scale. The statements given to the T Group were as follows:

- (1) The new vocabulary presented in class was interesting.
- (2) I enjoyed using the material presented in class.
- (3) I was interested while learning new vocabulary.
- (4) I was attentive while learning new vocabulary.
- (5) I enjoyed learning new vocabulary.
- (6) I was motivated to continue working with the materials presented in class during vocabulary instruction.
- (7) The vocabulary instruction increases my interest in German vocabulary learning.
- (8) I am confident using the new German vocabulary presented in class.

- (9) I like using lists to learn new vocabulary.

The statements given to the FS Groups were as follows:

- (1) The new vocabulary presented in class was interesting.
- (2) I enjoyed using the material presented in class.
- (3) I was interested while learning new vocabulary.
- (4) I was attentive while learning new vocabulary.
- (5) I enjoyed learning new vocabulary.
- (6) I was motivated to continue working with the materials presented with the Frame Semantics approach.
- (7) The Frame Semantics approach increased my interest in German vocabulary learning.
- (8) I am confident using the new German vocabulary presented in class.
- (9) I prefer the Frame Semantics approach over the vocabulary lists.

The attitude scales administered with the pre-treatment questionnaire and the post-treatment questionnaires are attached in Appendix B-D.

### **VOCABULARY TESTS: (Pre-Tests, Immediate Post-Test and Delayed Post-Test)**

In order to have comparable measures, all vocabulary tests used in this study had the same format, both across the pre- and post-tests and between the Traditional and Frame Semantics groups. Those tests were used to answer the research questions 2-4. The first part of this test was to answer research questions 3 and 4, while the second part of this test is used to answer research question 2. The pre-treatment vocabulary test (see Appendix E) and the pre-treatment vocabulary appropriate test (see Appendix F) were administered two weeks prior to the first treatment (two weeks prior to the start of chapter 8), the immediate post-treatment vocabulary test (Appendix F) and the immediate post-treatment vocabulary appropriate test (Appendix I) were given to the participants

after the treatment; while the delayed post-treatment vocabulary test (Appendix G) and the delayed post-treatment vocabulary appropriateness test (Appendix J) were administered two weeks after the treatment. The pre-treatment tests were given to both groups to determine that they were on even footing in terms of lexical knowledge and to measure pre-existing knowledge of the lexical items focused on in this study. Two tests were administered in each group had - one testing vocabulary knowledge (vocabulary knowledge scale test – VKS) and the other testing the cultural knowledge embedded in the lexical items (vocabulary appropriateness test – VAT).

The first part of the vocabulary test was based on the *Vocabulary Knowledge Scale* (VKS) (Paribakht & Wesche, 1993). Using the VKS as a test model had benefits over using other tests. Not only did this test ask students whether or not they know a word as in the “Checklist Test” or “Yes/No Test” as it is called by Meara (1989), but they also had to make a judgment regarding the depth of knowledge they had about the words by providing an answer depending on their knowledge. Furthermore, this test focused on what students knew rather than on knowledge gaps, since students are asked to provide the knowledge they had of a word prior to the treatment. This test, according to Read (2000) includes a learners’ self-assessment question, graded on a five point scale, and questions soliciting multiple aspects of word knowledge. The questions “check the learners’ awareness of different usage of the word [...] relate[d] to the collocational possibilities of the word” (p. 179) and “elicit other, derived forms of the word family” (p. 179). Figure 3.1 below illustrates the format of the VKS using in this study with one of the lexical item in this case *ausgehen* (‘going out’).

Please report on your knowledge of each of the words written in **bold**.

**ausgehen**

I I don't remember having seen this word before.

II I have seen this word before but I don't know what it means.

III I have seen this word before, and I think it means \_\_\_\_\_. (synonym or translation)

IV I know this word. It means \_\_\_\_\_. (synonym or translation)

V I can use this word in a sentence: \_\_\_\_\_  
 \_\_\_\_\_  
 (Write a sentence.) (If you do this section, please also do Section IV.)

VI I know multiple meanings of this word \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_ (Write all additional meanings of  
 this word you know)

Figure 3.1: Example of VKS format

The pre-treatment test comprised a total of 20 lexical items. The immediate post-tests and the delayed-post test had the same lexical items. The difference in the tests was the order in which the lexical items were presented in order to reduce memory and practice effects. Furthermore, the immediate post-test and the delayed post tests gave students the opportunity to add additional words that they encountered during the treatment and that they felt they had learned.

The original VKS is based on a five point scale. However, since multiple meanings of words are not addressed in the original VKS model introduced by Paribakht & Wesche (1993), I added an additional option for the students to choose, as suggested in a later work by Paribakht & Wesche (1996). This was important since the German word *Freund* can mean either boyfriend or male friend. Therefore, participants had 6 possible answers instead of only 5 (in the original format) that were marked with Roman numerals (I-VI). Participants received the number of points assigned by the Roman numerals if the

answer was correct or 1 point if they selected the first choice “I don’t remember having seen this word before.” The scoring categories were the same as the one suggested by Paribakht & Wesche (1997, p. 181) as shown in Figure 3.2 below.<sup>23</sup> While categories 2, 3 and 4 measure vocabulary recognition, level 5 and 6 are a measure of productive vocabulary. The scoring procedure is as follows: If, for example, participants attempted level 5 and they provided a word in a complete, semantically and grammatically accurate sentence they received 5 points. However, if they made mistakes they received a score of 4, 3, or 2 depending on whether their answers in the subsequent categories were correct or incorrect. If level four is correct they receive four points, if level four is incorrect, level 3 is checked for accuracy, and so on. The scoring was the same for all VKS tests used during this study (pre-treatment, immediate post-treatment and delayed post-treatment vocabulary tests).

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<sup>23</sup> It must be pointed out that future research could also take into account the necessity of grammatical correctness in the scoring procedures of the VKS. Since different languages do vary in their difficulty of grammatical structures (e.g. no accusative in English, whereas students need to be aware of the accusative in German), it might be easier to reach a higher level in one language compared to another language.



Self-report categories	Possible scores	Meaning of scores
I	1	The word is not familiar at all.
II	2	The word is familiar but its meaning is not known.
III	3	A correct synonym or translation is given.
IV	4	The word is used with semantic appropriateness in a sentence.
V	5	The word is used with semantic appropriateness and grammatical accuracy in a sentence.
VI	6	At least one additional meaning is known of this word.

Figure 3.2: Scoring categories of the VKS (Paribakht and Wesche, 1997), with level 6 extension.

Since the breadth of knowledge (i.e. how many words students know) is also important, the VKS test were scored a second time for this purpose. For this analysis only words students did not know in the pre-treatment VKS were used (e.g. only words that participants marked with a ‘knowledge level’ of level one or level two). Scoring in the immediate and delayed post-treatment tests was as follows: Participants received one point for every correct answer at level 3 or above. Those results gave the immediate and delayed post-treatment gain scores.

In addition to the VKS test, a further test was included, which tested students’ cultural knowledge of some of the lexical item assessed by the VKS. This test, the vocabulary appropriateness test (VAT), was modeled after materials developed by Zhao

(2004). It asked students to provide a ranking of appropriateness of the usage of a word and measured students' responses for cultural knowledge of 14 of the 20 lexical items introduced in the study. The lexical items used are listed in table 3.1 below. Only lexical items that referred either to a person with whom one can have a relationship, terms expressing a state of a relationship, and terms expressing emotions were used in the vocabulary appropriateness test (VAT). Since the VKS test was already fairly long and students had to read sentences and determine whether the words were used appropriately, to keep the VAT shorter, not all 20 lexical items were used.

<ul style="list-style-type: none"><li>• der Bekannte</li><li>• der Freund</li><li>• die Freundin</li><li>• der Kumpel</li><li>• verabreden</li><li>• die Verabredung</li><li>• zusammen sein</li><li>• lieben</li><li>• lieb haben</li></ul>
--

Table 3.1: Lexical items used in the vocabulary appropriateness test (VAT)

Similar to Zhao's (2004) test, the target items in each question (either words or phrases) were underlined and students had to respond by selecting the appropriateness on a scale from 1 - 5, where 1 is 'appropriate,' 2 is 'somewhat appropriate, but I would not use it,' 3 is 'not sure,' 4 is 'somewhat inappropriate, I would not use it,' and 5 is 'inappropriate.' An additional possibility was provided in the non-native speaker test, which was 6 'I do not know what this word/sentence means.' Figure 3.3 below provides an example of this test format.

**Please read the following sentences and indicate if the underlined words in each sentence are semantically and/or socially appropriate in the specific contexts by circling one of the numbers:**

1 = Appropriate and you would use the word  
 2 = Somewhat appropriate and you probably would use the word  
 3 = Somewhat inaccurate  
 4 = Somewhat inappropriate and you probably would not use the word  
 5 = Inappropriate and you would not use the word  
 6 = I do not know what the word/sentence means.

1. Thomas habe ich vor zwei Jahren kennengelernt und wir spielen zweimal im Monat Tennis. Er ist ein Bekannter von mir.  
 1      2      3      4      5      6

2. Thomas habe ich vor zwei Jahren kennengelernt und wir spielen zweimal im Monat Tennis. Er ist ein Freund von mir.  
 1      2      3      4      5      6

Figure 3.3: Vocabulary Appropriateness Test

The VAT test was first completed by native speakers of German, who were approximately the same age as the American participants in this study (18-30 years); the German respondents were all students at either *Gymnasiums*<sup>24</sup> or *Fachoberschulen*<sup>25</sup> in Germany. All native speaker participants were in their last year of school (Abiturklasse). For each of the 14 lexical items on the VAT test an average score was calculated using the native speakers' responses. This average score was then used to establish a baseline for the average meaning of the cultural knowledge of native speakers, which, in turn, was used to score the answers provided by the American student participants. The American participants received 2 points for each correct answer (same answer as native speakers of

<sup>24</sup> *Gymnasium*: An academic high school in some central European countries, especially Germany, that prepares students for the university. (www.freedictionary.com)

<sup>25</sup> A *Fachoberschule* is a German type of tertiary educational institution, sometimes specialized in certain topical areas (e.g. technology or business). (www.freedictionary.com)

German), 1 point if they deviated by one point on the scale in either direction, or 0 points for any deviation larger than one point on the scale.<sup>26</sup>

The data collection instruments used in this study are summarized in table 3.2 below, outlining what type of instrument was used to measure the different aspects of this study in order to answer the four research questions posed at the beginning of this chapter.

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<sup>26</sup> The average native speaker rating was used in order to have the same level of comparison. However, it should be noted that participants at times picked the same choice as a native speaker, but since it was not the average it was not used in the analysis. It is also worth mentioning that one always has to be cautious when using scales since participants might select an answer because they misread the instruction on how to use the scale or did not pay attention when selecting their answers.

Measurement Tool	Test Description	Purpose	Research Question
Pre-Tests	Vocabulary Knowledge Scale (VKS) (T. S. Paribakht & M. B. Wesche, 1993) with extended level	Checking pre-existing vocabulary knowledge of participants (both depth and breadth)	2 3 4
	Vocabulary Appropriateness Test (adapted from Zhao, 2004)	Checking students knowledge of cultural connotations	
Immediate-Post Tests	Vocabulary Knowledge Scale (VKS) (T. S. Paribakht & M. B. Wesche, 1993) with extended level	Measure participants ability to recall lexical items (both depth and breadth)	2 3 4
	Vocabulary Appropriateness Test (adapted from Zhao, 2004)	Measure participants awareness of cultural connotations	
Delayed-Post Tests	Vocabulary Knowledge Scale (VKS) (T. S. Paribakht & M. B. Wesche, 1993) with extended level	Measure participants ability to retain lexical items (both depth and breadth)	2 3 4
	Vocabulary Appropriateness Test (adapted from Zhao, 2004)	Measure participants ability to retain cultural connotation information about cultural connotations	
Demographic Survey	Survey asking for language abilities, study habits, understanding of word knowledge	Collecting demographic information of participants	1
Attitude Survey	Survey asking language learners to rate their attitude at the pre-treatment and the post-treatment stage	Measuring participants attitude of learning vocabulary with the two methods used in this study	5

Table 3.2: Summary of Vocabulary Tests utilized in this study

## LEXICAL ITEMS

A total of 20 lexical items was selected for investigation. The content selected for this study is chapter 8 of the *Deutsch im Blick* German textbook, a chapter that the students had not seen before. The focus was on the segment of relationships covered in chapter 8. The lexical items were selected randomly and can be roughly separated into four different categories: 1. descriptors of relationship types, 2. emotions for relationships, 3. personal relationship types and 4. other relationship terms. Table 3.3 below lists the lexical items focused on in this study.

1. Descriptors of Relationships der Freund – male friend, boyfriend die Freundin – female friend, girlfriend der Bekannte – male acquaintance die Bekannte – female acquaintance der Kumpel – buddy, pal	2. Emotions for Relationships sich mögen – to like one another sich verlieben – to fall in love lieben – to love lieb haben – to like someone very much gern haben – to like someone verliebt sein – to be in love
3. Personal Relationship Types die Beziehung - relationship zusammen sein – to date, to be in a relationship miteinander gehen – to date (high school) befreundet sein – being friends	4. Other Relationship Terms ausgehen – to go out/ to go on a date sich verabreden – to agree to meet, to arrange a date sich treffen – to meet die Verabredung - date funken – to spark, to hit it off

**Table 3.3: Personal Relationship Lexical Items<sup>27</sup>**

All lexical items were included in the vocabulary tests (VKS) discussed in the previous section; however, their presentation order was randomly changed for all three tests (pre-

<sup>27</sup> The translation provided in table 3.3 are from the leo.org online dictionary website.

treatment, immediate post-treatment and delayed post-treatment test) to reduce practice effects. The lexical items that were used in the vocabulary appropriates tests (VAT) included lexical items that are understood and used differently by native speakers and non-native speakers and require cultural awareness for appropriate use. Table 3.4 gives an example of differences of the word *to date* and two of its German translations *ausgehen* ('to go out') and *eine Beziehung haben* ('having a relationship'). The table also provides example sentences which illustrate the different meanings.<sup>28</sup>

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<sup>2828</sup> The example sentence for the English word are from the Merriam-Webster Dictionary (MWD) and the Oxford English Dictionary (OED). The example sentences for the two German translations are from the Duden (D), the Langenscheidt Großwörterbuch/Deutsch als Fremdsprache (LG), and/or the Wörterbuch der Gegenwartssprache (WG)

to date	mit jmdm ausgehen ('to go out') <sup>29</sup>	eine Beziehung mit jmdm haben ('having a relationship') <sup>30</sup>
<ul style="list-style-type: none"> <li>• testing the waters</li> <li>• relationship</li> <li>• serious</li> <li>• going out with someone I like</li> <li>• does not have to be serious</li> <li>• dating</li> </ul> <p><u>Example Sentences (MWD):</u></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> She <i>dated</i> a couple guys during college.</li> <li><input type="checkbox"/> He only <i>dates</i> younger women</li> <li><input type="checkbox"/> They've been <i>dating</i> for six months.</li> </ul> <p><u>Example Sentences (OED):</u></p> <ul style="list-style-type: none"> <li>• I'm bad-tempered and broody and going out with brash blondes.</li> <li>• From time to time she had been going out with a doctor.</li> <li>• I don't go out with chicks who have colds all the time.</li> </ul>	<ul style="list-style-type: none"> <li>• mit Freunden oder alleine</li> <li>• Spass haben</li> <li>• Abends weggehen</li> <li>• viele Freunde und ich</li> </ul> <p><u>Example Sentences (D):</u></p> <ul style="list-style-type: none"> <li>• Wir gehen ganz groß aus.</li> <li>• Wir gehen zum Vergnügen weg.</li> </ul> <p><u>Example Sentences (L):</u></p> <ul style="list-style-type: none"> <li>• Abends in ein Lokal gehen.</li> <li>• Zu einer Veranstaltung in ein Lokal gehen.</li> </ul> <p><u>Example Sentences (WG):</u></p> <ul style="list-style-type: none"> <li>• Der junge Mann geht fast jeden Abend aus.</li> </ul>	<ul style="list-style-type: none"> <li>• seriös</li> <li>• ernsthaft</li> <li>• Liebe</li> </ul> <p><u>Example Sentences (D):</u></p> <ul style="list-style-type: none"> <li>• Irgendwann wussten wir beide halt, dass wir zusammensein würden und haben eine Beziehung angefangen.</li> </ul>

Table 3.4: Aspects of the lexical item *dating* in English and 2 of its German translations

The example outlined in table 3.4 shows that neither of the German translations for the English verb *to date* depicts the original meaning. The German translation *ausgehen* ('to go out') refers more to the action of leaving the house and includes the sense of being

<sup>29</sup> www.leo.org

<sup>30</sup> Ibid.



accompanied by a group of people. On the other hand the German translation *eine Beziehung haben* ('to have a relationship') includes the sense of a serious commitment to another person, while a date does not necessary imply a serious commitment between two people.

## **TREATMENT**

### **THE TRADITIONAL GROUP (T Group)**

The Traditional Group used the traditional vocabulary techniques to introduce and learn the new lexical. Participants in the T Group took the same tests as the FS Group (refer to Appendixes B-J). The T Group was introduced to the new vocabulary during their first class day of chapter 8 in the *Deutsch im Blick* textbook sequence. The handout given to participants in the Traditional Group can be found in Appendix K. The following is a detailed description of the activities carried out in the T Group.

Step 1: Participants received a vocabulary list with 20 lexical items. They were asked to watch and listen to videos from the *Deutsch im Blick* German textbook website and underline the words on their list if they hear them on the videos. The videos that were utilized for this activity are listed below in table 3.5:

**Interviews -> Deutsche und Schweizer -> Persönliche Beziehungen:**

1. Berna:  
[http://coerll.utexas.edu/dib/vidt.php?f=08\\_04\\_int\\_bg\\_beziehungen](http://coerll.utexas.edu/dib/vidt.php?f=08_04_int_bg_beziehungen) (00:00:22)



2. Eva:  
[http://coerll.utexas.edu/dib/vidt.php?f=08\\_01\\_int\\_ek\\_beziehungen](http://coerll.utexas.edu/dib/vidt.php?f=08_01_int_ek_beziehungen) (00:00:34)



**Sprache im Kontext:**

1. Christian: Willst du mit mir gehen?:  
[http://coerll.utexas.edu/dib/vid.php?f=08\\_06\\_sik\\_christian-dating](http://coerll.utexas.edu/dib/vid.php?f=08_06_sik_christian-dating) (00:00:31)



2. Guidos Meinung zum Dating:  
[http://coerll.utexas.edu/dib/vid.php?f=08\\_07\\_sik\\_guido-dating](http://coerll.utexas.edu/dib/vid.php?f=08_07_sik_guido-dating) (00:01:03)



Table 3.5: Videos used for listening activity in (C) Group

Participants listened to each video twice and marked the words they heard in the videos. Their answers were reviewed with the entire class. Students said the words they heard in the videos.

Step 2: Next, participants were asked to write down all the words from the vocabulary list on note cards supplied by the instructor. Participants wrote the lexical item in German on one side and in English on the other side of the note cards. After the learners were done they were to familiarize themselves with the lexical items by studying the German-English equivalents (as flashcards). Participants had a total of 30 minutes to write down the lexical items from their list and to use the note cards to familiarize themselves with the lexical items.

Step 3: The next step was a letter-unscrambling activity. Students received 7 lexical items whose letters were out of order. Students had to unscramble the letters and write down the correct words for all scrambled lexical items. Students worked individually in this activity, in order to prevent learners from dominating in terms of knowledge over one another. The results were again reviewed with the entire class.

Step 4: Finally, students had to give the correct translation of randomly selected lexical items from the list (without referring to the list or the flashcards the learners created) in either German or English. This activity was done in a larger group. The teacher started the activity by saying a German lexical item covered in class, then throwing a ball to a student who had to give the English translation of the word. Next, this student had to choose another covered lexical item and say it to the class in German or English (in this case, the second lexical item named by the student was in English).

After the student said the word out loud, he threw the ball randomly to another student, who again had to give the translation (in this case in German) without referring to the list or flashcard. This game continued and the other students had to supply a word in either German or English, throwing the ball randomly to another student who had to provide the correct translation in the opposite language.

The remaining 20 minutes were used to administer the immediate post-treatment vocabulary test and vocabulary appropriateness tests. A complete and detailed lesson plan for the activities completed with the Traditional Group can be found in Appendix M.

### **THE FRAME SEMANTICS GROUP (FS Group)**

Before administering the treatment on the same day as the T Group the FS Group had an orientation session in which they received an introduction to Frame Semantics. In addition, it was the goal in this session to raise students' awareness of cultural aspects which are embedded in many lexical items and which are important to be aware of in order to be able to use them appropriately in the target language. The lesson plan of this session is included in Appendix O.

The Frame Semantics treatment was administered in the Frame Semantics group the same day as the traditional vocabulary learning techniques were used in the Traditional Group. Appendix L contains the handout used during the treatment in the FS group and the lesson plan for the treatment class can be found in Appendix N. The following is a step-by-step description of the Frame Semantics approach in the FS Group.

Step 1: During the first day of chapter 8 – the actual treatment day - students began the class with brainstorming vocabulary covered in previous chapters in order to connect relevant items to words found in chapter 8 (which were the focal point of this study). First, the participants wrote down as many words as possible that are related the concept of *Beziehungen zwischen Personen* ('relationships between people') and the feelings used in those relationships. This task was performed in German in order to recycle previously learned vocabulary. In the second-semester beginning German course, students are already familiar with the semantic field of 'members of the family'.

Step 2: Participants had to sort the words they already knew and collected into sub-frames such as *Verwandtschaft* ('kinship'), *Persönliche Beziehungen* ('personal relationship'), etc. In this study the sub-frames were provided for the participants in the handout due to time constraints. However, this can be done by the students with the guidance of the instructor. Students worked in groups and assigned the vocabulary they found in the previous task to the sub-frames mentioned above and shown in Figure 3.1. For example, vocabulary items such as *Mutter* ('mother'), *Vater* ('father'), *Schwester* ('sister'), *Bruder* ('brother') were categorized as family members (or kinship) while *Freund* ('male friend') and *Freundin* ('female friend'), *Schatz* ('darling') were categorized as personal\_relationships. Words such as *Chef* ('boss'), *Arbeiter* ('worker') and *Sklave* ('slave') were collected under the subordiatnes\_and\_superiors category and *Mitbewohner* ('roommate') was categorized as people\_by\_residence. Students were provided with a handout which included the frame structure, giving them a more concrete overview of the abstract

frame. Figure 3.4<sup>31</sup> below is the frame structure used in this study. It was created using the Berkeley FrameNet project and its FrameGrapher tool as a model. Additional vocabulary that did not fit into the frame of *Beziehungen zwischen Personen* ('relationships between individuals') was categorized under a different frame. Students wrote down words such as *Haustier* ('pet') and *mein Hund* ('my dog'). Those lexical items were collected separately under a different frame, namely *pets\_and\_pet-owners* frame.

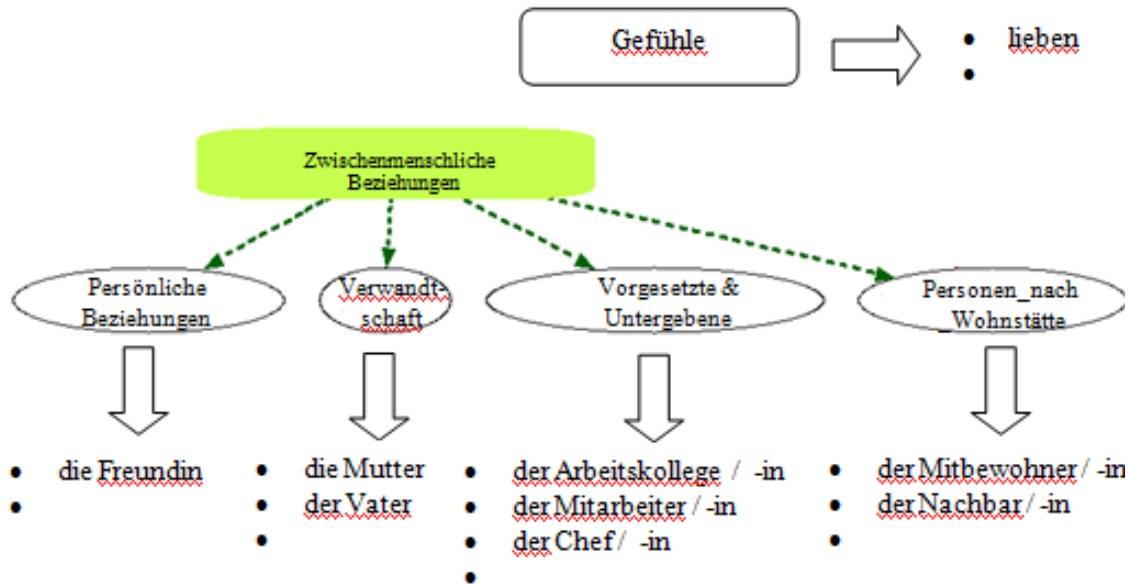


Figure 3.4. Relations\_between\_individuals frame with sub-frames<sup>32</sup>

<sup>31</sup> The Berkeley FrameNet project had already created hundreds for frames and is available at <http://framenet.icsi.berkeley.edu/>. The FrameGrapher tool can be found on the FrameNet website as well.

<sup>32</sup>In order to make this study accessible for different audiences and readers with no knowledge in German the handouts and materials used in this study are provided with an English translation. However, during the study participants had handouts in German only.

The frame structure is also created on the blackboard and discussed with the entire class after students in their groups assigned the vocabulary items to the different sub-frames.

Step 3: The next step was to introduce lexical items relevant to chapter 8 in *Deutsch im Blick* that focus on the sub-frame of personal\_relationships. Not only new lexical items are used in this study since vocabulary knowledge is incremental and many different aspects have to be known in order to have all the vocabulary knowledge embedded in an individual word. The lexical items were introduced by connecting them with the already known lexical items collected by the students in the previous task. *Freund/Freundin* ('male friend/female friend'), for example, was already known by the students in context of a male and female friend and the meaning of 'boyfriend' and 'girlfriend' was added to it. Participants in the FS Group received a vocabulary list as well; however, the words were already sorted by the categories listed in table 3.1 above. Only two of the videos that were utilized in the T Group were used in the FS Group to introduce the words in an aural manner and to point out cultural difference with regards to personal relationships and dating between the German speaking world and the United States of America. Only the two videos were chosen because they explain cultural differences and they were used to make students aware of possible differences and similarities between the L1 and the L2. Table 3.6 highlights the videos from the *Deutsch im Blick* website used during the treatment in the FS Group.

<b>Sprache im Kontext:</b>	
<p>1. Christian: Willst du mit mir gehen?:  <a href="http://coerll.utexas.edu/dib/vid.php?f=08_06_sik_christian-dating">http://coerll.utexas.edu/dib/vid.php?f=08_06_sik_christian-dating</a> (00:00:31)</p> 	<p>2. Guidos Meinung zum Dating:  <a href="http://coerll.utexas.edu/dib/vid.php?f=08_07_sik_guido-dating">http://coerll.utexas.edu/dib/vid.php?f=08_07_sik_guido-dating</a> (00:01:03)</p> 

Table 3.6. Videos from the *Deutsch im Blick* website used in the FS Group

Students marked the words on the vocabulary list when they heard them in the video. The videos were further used to highlight differences and similarities between the native and the target culture. Even though those videos were not specifically created to analyze vocabulary and possible cultural variation between L1 and L2, using the videos helped students to reexamine their reasoning's for assigning different values to the target words and guided them in their endeavor of comparing and contrasting their native culture with the target culture.



Step 4: The *personal\_relationship* frame was discussed and the frame elements belonging to the frame were highlighted. Students were given a definition of the frame as well as the core and non-core<sup>33</sup> frame elements and were asked to give examples for the frame elements with the vocabulary item they collected and those provided on their handout.

Step 5: Next, in groups of two, participants sorted the lexical items in the “descriptors of relationship types” and the “emotions for relationships” categories using scales. The scales used in this study are modeled after the ones first introduced by Redman and Ellis (1989) in their book *A Way With Words* and Gains and Redman (1986) in their book *Working With Words* as an model. Figure 3.5 and 3.6 are two different scales created for this study to help students visualize the differences in intensity or closeness of different relationship participants.

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<sup>33</sup> A frame is a representation (in form of target words and example sentences in which those words occur) of a experience or scenario. In such a representation, a frame consists of different frame elements (i.e. labels), lexical units (i.e. target words). The frame elements can be either core or non-core frame elements. Whereas core frame elements represent an aspect unique to a frame, non-core frame elements can be understood as more general information that is not unique to a given frame.

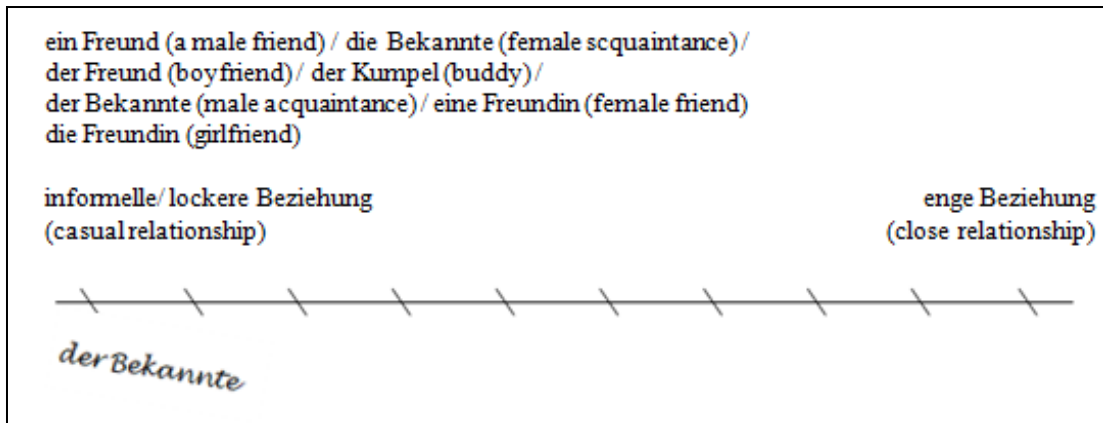


Figure 3.5: Scale asking for difference in closeness of partners in a relationship

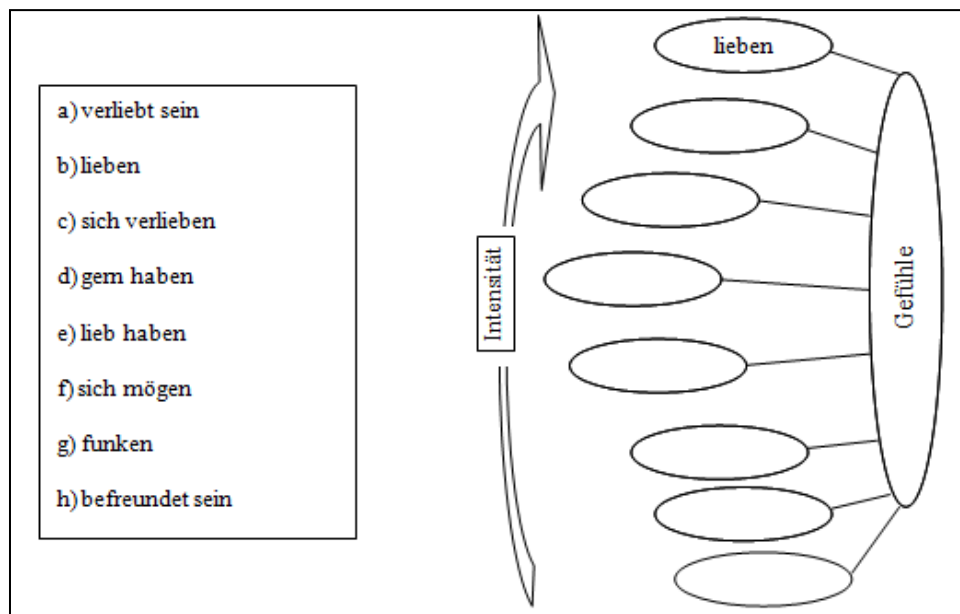


Figure 3.6: Scale asking for intensity of expressions of positive feelings

After participants sorted the lexical items their choices they had to state what lexical items describing emotions they would use for the relationship terms used in this study

(e.g. friend/male friend/female friend, acquaintance and buddy). The following question was posed for this task: What expressions do you use to express your affection to another person and what is the status of that person? The importance here was to make participants aware of differences between the L1 and L2, since some of the lexical items describing emotions do not have translational equivalents in English. Participants worked in groups of two. Afterwards the results from the scale-task and appropriate-usage task were talked over with the entire group. Participants stated their ranking which was collected by the instructor on a handout visible to the entire class via the document-camera. In addition, participants had to give reasons in English or German for their choices (regarding the ranking of emotions, and relationship partners). The group discussions helped students to collect more information about the vocabulary items and its meaning in German since participants could tap into each other's knowledge of the words in question. Even though scales or grids "cannot represent everything a native speaker 'knows' about a particular group of words, [...] they certainly tell the learner more than isolated dictionary entries or textbook definitions" (Channell, 1981, p. 119).

Step 6: The next step was to work further with the lexical items and provide the correct personal relationship term for definitions given to the participants. Participants had sentences on their handout which had information about a relationship between two people. From this context participants had to state the possible relationship those individuals could be in. In addition, to providing an appropriate relationship term for the given context participants had to provide frame elements occurring in the sentences. Figure 3.7 illustrates this activity with two example sentences.

<p>1. Maria kennt Susi seit dem Kindergarten. Sie treffen sich fast jeden Tag und sprechen über alle Sachen. Maria und Susi sind _____</p> <p>2. Tom und ich arbeiten bei der gleichen Firma. Wir gehen manchmal zusammen zum Mittagessen. Ich arbeite gern mit Tom. Er ist mein _____</p>
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Figure 3.7: Example of definitions of personal relationships activity

Afterwards, the immediate post-treatment vocabulary test (VKS) and the immediate post-treatment vocabulary appropriateness test (VAT) were administered. The tests were the same format as the tests administered in the Traditional Group. No time limit was set so that students had as much time as they needed. Participants had 20 minutes of class time plus 15 minutes after the class to complete the test.

### **DATA COLLECTION PROCEDURES**

Two weeks before the treatment, the pre-treatment vocabulary test was administered to both the traditional and Frame Semantics groups. There was one treatment session for both the T and the FS Group, with an additional orientation session for the FS Group the day before the treatment. The treatment took place at the start of chapter 8 in the course syllabus. All four participating sections of second-semester German met in their regular classrooms during the study. I was the assistant instructor in one of the GER 507 classes during the study; my students were participants in the T Groups, while the FS Groups and one T section had three other instructors. None of the four instructors knew which students participated in the study. I collected all informed

consent forms in the other three sections, and a colleague of mine collected the forms in my course to protect students' right of choice.<sup>34</sup>

During the treatment all students of each class were present – not only participants – since the study material constituted regular course material as well (vocabulary covered in chapter 8 of the *Deutsch im Blick* textbook).

In the treatment session (day 1 of chapter 8), lexical items were introduced using the Frame Semantics approach in the FS Group and the traditional vocabulary learning techniques in the T Group. The immediate post-treatment test was administered right after the treatment. The delayed post-treatment test was given to students two weeks after the treatment.

## **DATA ANALYSIS**

For the quantitative data analyses IBM SPSS Statistics, version 18, was used. The items on the online questionnaire (e.g. gender, reasons for taking German) were numerically recoded for the statistically analyses. A number was assigned depending on the participants responses (e.g. female = 2, male = 1). Descriptive statistics was used to summarize the data collected. The descriptive statistics that was used are means, standard deviations, maximums and minimums, frequency distribution, and percentages.

In order to analyze the data collected in the pre-treatment test, the immediate post-treatment test and the delayed post-treatment test, a two-way repeated-measure ANOVA

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<sup>34</sup> All human subjects research at the University of Texas at Austin must first be submitted to the Office of Research Support and Compliance and approved by the Institutional Review Board. The current study was approved under IRB#2009-12-0086.

was used. The two-way ANOVA was used to determine if students' vocabulary knowledge increased as a result of the treatment, and whether or not the treatment have an effect on students' vocabulary retention and recall the lexical items. Furthermore, the ANOVA was used to understand whether or not changes occurring in students' vocabulary knowledge (depth of knowledge and breadth of knowledge) were due to treatment type, time or the combination of treatment and time. The two-way repeated-measure ANOVA was also chosen in order to determine if there is a significant difference between the two groups in their cultural awareness compared to native speakers.

The data collected from the attitude scale was analyzed using a Multiple Analysis of Covariance (MANCOVA) in order to understand whether there was a different over time in the participants' attitude towards vocabulary learning a Multiple Analysis of Variance (MANOVA) was chosen and run via the SPSS statistics packages.

## **CONCLUSION**

In this chapter, the research questions were stated, and the methodology used in this study was introduced. The different steps of the teaching procedures for the Frame Semantics' approach and the traditional vocabulary learning techniques were outlined. In addition, the data collection procedure and the data analysis were described. Table 3.7 below provides a timeline for this study.

Sep. 17 <sup>th</sup> , 2010	Oct. 6 <sup>th</sup> , 2010	Oct. 7 <sup>th</sup> , 2010	Oct. 27 <sup>th</sup> , 2010
2 weeks prior to treatment	1 day before treatment	treatment day	2 weeks after treatment
FS and T Group	FS Group	FS and T Group	FS and T Group
1) Pre-Treatment Tests (VKS / VAT)  2) Pre-Treatment Questionnaire (online via surveymonkey.com)	1) Orientational and explanatory session for Frame Semantics group	1) Introduction of Lexical Items/ Practice  2) Immediate Post-Treatment Vocabulary Tests (VKS / VAT)  3) Post-Treatment Questionnaire (online via surveymonkey.com)	1) Post-Treatment Tests (VKS / VAT)

Table 3.7: Timeline of study

Chapter 4 presents the results from the questionnaires as well as the tests used in this study. The data analysis is summarized and the results are discussed for each research question.

## **CHAPTER 4 – RESULTS & DISCUSSION**

### **INTRODUCTION**

Chapter 4 presents the results of the current quantitative study, which aimed to determine whether Frame Semantics has significant effects on language learners' depth and breadth of knowledge, their culturally appropriate usage of vocabulary and their attitude toward vocabulary learning. This study, which had 34 participants, used traditional vocabulary learning methods (rewriting, flashcards, unscrambling, and oral repetition) as means of comparison. The data collected in this study consisted of a pre-treatment questionnaire, a post-treatment questionnaire, vocabulary knowledge scale test and vocabulary appropriateness test (VAT). The VKS and the VAT were administered three times: as a pre-test, immediate post-test and delayed post-tests. In addition, native speakers of German were asked to complete a questionnaire and VAT in order to have data for comparison with the participants in this study. I start by giving a summary of the descriptive statistics associated with the demographic information collected from the participants. The information is given for both groups – the Traditional group (T Group) and the Frame Semantics group (FS Group). Afterwards, I present the statistically findings pertaining to each of the research questions posed in this study and how these results pertain to previous research.

### **DEMOGRAPHIC INFORMATION: Native Speakers**

A total of 42 speakers in the age range from 18-30 years completed the online survey at [surveymonkey.com](https://www.surveymonkey.com) which asked them to rate German words for their



semantically/culturally appropriate usage. 35 (= 83.3%) native speakers were between 18 and 25 years old and seven (= 16.7%) of the participating native speakers were between 25 and 30 years old. The number of male and female participants was equal with was 21 (= 50.0%) participants each. Most of the participants, 39 (= 92.9%) were students in an Abiturklasse at a German Gymnasium and three (= 7.1%) were students Fachabiturklasse at a German Fachoberschule. All of the participants considered themselves to be native speakers of German<sup>35</sup>. Participants that did not fall within the age range mentioned above, that were not in the Gymnasium or the Fachoberschule, were excluded. Participants who considered themselves to be bilingual speakers or non-native speakers of German were excluded as well.<sup>36</sup> Table 4.1 below shows the languages that participants indicated they speak with their self-rated knowledge of those languages. It is important to acknowledge native-speakers' knowledge of other language since this knowledge (e.g. word meanings in other languages and possible cultural knowledge in those languages) might have had an effect or on their understanding of the words and might have influenced their answers. Although using this knowledge in a detailed analysis would go beyond the scope of this dissertation, it is nonetheless necessary to include this information and be aware of this possible interference of one language with other languages.

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<sup>35</sup> It would go beyond the scope of this dissertation to discuss who or what a native-speaker of a language is. The label "native-speaker" in this study is a result of self-reporting of participants.

<sup>36</sup> Since it was important for this study to have results to which the language learners answers of the VAT could be compared to, and the comparison should be as feasible as possible only native speakers in the same age range as the participants in this study were chosen. Including non-native speakers or bilingual speakers who are probably exposed to other languages and cultures more often may have skewed the data.

Language	Beginner	Intermediate	Advanced
Arabic	1		
Bulgarian			1
Croatian			1
Dutch			1
English		21	20
French	15	6	4
Italian	5	0	2
Japanese			
Latin	8		1
Polish			1
Portuguese			1
Russian		4	1
Spanish	11	2	
Turkish	1	0	1

Table 4.1: Language knowledge of NS participants

17 (= 40.5%) participants spend more than 3 month in another country. Those countries include: Great Britain, USA, Ireland, Kazakhstan, Australia, France, Italy, Russia, Poland, New Zealand, Spain, Netherlands, Brazil, Portugal, Bulgaria and Yemen. The fact that some natives-speaker participants spent more than three month in a foreign country is important since it might have influenced how they understand the world around them. Experiencing other cultures might also influence their answers or ratings of the correctness of the words used in a sentence. The differences between the countries visited and the German culture, not to mention between sub-cultures in each place would again go beyond the scope of this study, but it is important to mention and might be interesting for a future study.

## **RESULTS FOR RESEARCH QUESTIONS**

### **Research Question 1: Participants Demographic Information**

What is the demographic make-up of the study participants, and how do demographic characteristics connect to learning vocabulary in the L2?

The first research question was concerned with participants' demographic make-up of the participants in the study and the connection to L2 vocabulary learning. The reason for collecting this data was twofold. On the one hand, there is a need in second language acquisition to replicated replicate studies. However, this is also difficult because the same research conditions never occur twice. The data presented in the following section benefits later research studies because the data can be connected to the results. Additionally, further in-depth studies can be conducted using this data – which would again lie beyond the scope of this study. Aspects of language knowledge, or language learners' ideas about what it means to know a language, and their reasons for taking a specific language can be connected to the results and used in the analysis.

The data presented here was collected via an online questionnaire at surveymonkey.com that both the Traditional Group (T Group; n = 17) and the Frame Semantics group (FS Group; n = 17) completed. The link to the online questionnaire was available for participants two weeks prior to the treatment. The first part of the online questionnaire focused on participants' background information. 20 (=58.8%) of the participants were female learners and 14 (= 41.2%) were male learners. The majority of the learners 26 (= 76.5%) was between 18 and 20 years of age, six (= 17.7%) learners

were between 21-23 years of age, one (= 2.9%) was between 24 and 26 years of age and one (= 2.9%) was between 27 and 29 years of age.

There was an equal number of participants in the T Group (n = 17) and the FS Group (n = 17). There were 11 (= 32.3 %) female participants and six (= 17.6%) male participants in the T Group. The majority of participants, 14 (= 41.2%) in the T Group were between 18 to 20 years old. Two (= 5.9%) participants were at an age between 24 and 26 years and one (= 2.9%) participant was between 27 and 29 years. In the FS Group there were nine (= 26.5%) female and eight (= 23.5%) male participants. Of the 17 participants in the FS Group the majority, 12 (= 35.5%), were between 18 to 20 years old, four (= 11.8%) were between 21 to 23 years and one (= 2.9%) was between 24 and 26 years. Table 4.2 gives an overview of these data.

<b>Characteristics</b>	<b><u>n</u></b>	<b>%</b>
<u>All Participants</u>	34	100.0%
Female	20	58.8%
Male	14	41.2%
Age Range		
18-20	26	76.5%
21-23	6	17.7%
24-26	1	2.9%
27-29	1	2.9%
<u>Traditional Group (T Group)</u>	17	50.0%
Female	11	32.4%
Male	6	17.6%
Age Range		
18-20	14	41.2%
21-23	2	5.9%
24-26	0	0.0%
27-29	1	2.9%
<u>Frame Semantics group (FS Group)</u>	17	50.0%
Female	9	26.5%
Male	8	23.5%
Age Range		
18-20	12	35.3%
21-23	4	11.8%
24-26	1	2.9%
27-29	0	0.0%

Table 4.2: Characteristics of participating learners

### **Language Abilities in Languages besides German**

In addition to their gender and age, participants were asked to supply information about their language ability of language besides English and German. Since knowing other languages and having been exposed to other languages and cultures might influence

the participants' (Boroditsky, 2003; 2010a; 2010b) results in the study it was important to find out about their language experience. In the T Group 10 (= 29.4%) of the 17 (= 50.0%) learners indicated that they knew one or more languages other than English or German. In the FS Group the same number of learners, 10 (= 29.4%) indicated that they knew one or more languages other than English. Table 4.3 illustrates the number of students reporting knowledge of languages other than English or German.

<u>All Participants</u>	34	100.0%
Some level of knowledge in a language other than English or German	20	58.8%
Number of Languages Reported	12	
<u>Traditional Group</u>	17	50.0%
Some level of knowledge in a language other than English or German	10	29.4%
Number of Languages Reported	4	
<u>Frame Semantics group</u>	17	50.0%
Some level of knowledge in a language other than English or German	10	29.4%
Number of Languages Reported	7	

Table 4.3: Participants knowledge of languages other than English or German

The majority of study participants in the T Group, nine (= 52.9%) reported some level of knowledge of Spanish, two (= 11.8%) participants reported some level of knowledge of French, one (= 5.9%) participant indicated a beginning level of knowledge in Italian and one (= 5.9%) participant reported being a native speaker of Russian. Table 4.4 shows the

level of knowledge the learner in the T Group indicated for the language they know besides English and German.

Languages reported by T Group	Self-Reported Proficiency Level						Total Number of Responses per language
	Beginner	Intermediate	Advanced	Near Native	Native Speaker	Bilingual Speaker (this language and English)	
Spanish	5 (= 29.4%)	2 (= 11.8%)	1 (= 5.9%)	0	0	1 (= 5.9%)	9
French	1 (= 5.9%)	1 (= 5.9%)	0	0	0	0	2
Italian	1 (= 5.9%)	0	0	0	0	0	1
Russian	0	0	0	0	1 (= 5.9%)	0	1

Table 4.4: Self-reported language knowledge besides German (T Group)

In the FS Group the majority of study participants, five (= 29.4%) reported some level of knowledge in Spanish, three (= 17.6%) participants reported some level of knowledge in French, one (= 5.9%) participant each indicated some level of knowledge in Italian, Russian Arabic, Hebrew, and Vietnamese. Table 4.5 shows the level of knowledge the learner in the FS Group indicated for the language they know besides English and German.

Languages reported by T Group	Self-Reported Proficiency Level						Total Number of Responses per language
	Beginner	Intermediate	Advanced	Near Native	Native Speaker	Bilingual Speaker (this language and English)	
Spanish	3 (= 23.5%)	0	1 (= 5.9%)	1 (= 5.9%)	0	0	5
French	2 (= 17.7%)	1 (= 5.9%)	0	0	0	0	3
Italian	1 (= 5.9%)	0	0	0	0	0	1
Russian	1 (= 5.9%)	0	0	0	0	0	1
Arabic	0	0	0	0	0	1 (= 5.9%)	1
Hebrew	0	1 (= 5.9%)	0	0	0	0	1
Vietnamese	0	0	0	0	0	1 (= 5.9%)	0

Table 4.5: Self-reported language knowledge besides German (FS Group)

### Reason for Studying German

The participants were further asked to provide their reasons for taking second-semester German course. They could select from a list of choices and were able to choose multiple reasons as well as provide additional reasons if theirs was not on the list.

Of the 17 participants in the T Group, 14 (= 82.4%) stated that they were taking the course in order to fulfill the foreign language requirement at the university; three (= 17.6%) reported that they were taking the course in order to better communicate with their family; nine (= 52.9%) indicated that they were taking the course in order to learn



about German-speaking culture; seven (= 41.2%) indicated that they took German in order to improve their marketability for a current or future job; one (= 5.9 %) participant indicated that the reason was to improve his GPA; two (= 11.8%) reported that they took German to be able to communicate with friends in German; eight (= 47.1%) stated that they took German in order to be able to watch television and films in German, or listen to German language radio or music; two (= 11.8%) indicated that they want to visit German websites; five (= 29.4%) want to be able to read Spanish language newspapers, magazines or books; equally, one (= 5.9%) learner indicated that they want to be able to read academic journals written in German; 1 (= 5.9%) reported that they want to learn something about their heritage and ancestors; and 2 (= 11.8%) indicated that they were taking the course for other reasons than listed in the available choices. Those were: to improve language skills for travel, and a genuine interest in learning German.

With regards to the Frame Semantics group, FS Group, of the 17 participants, 14 (= 82.4%) stated that they took the course in order to fulfill the general language requirement at the university; two (= 11.8%) participants reported that they took the course to better communicate with their family; six (=35.3%) participants indicated that they took the course to learn about the German cultures; five (= 29,4%) participants indicated that they wanted to improve their language skills for their current or future job; eight (= 47.1%) participants reported that they took the course to listen to and/or watch German television, films, music and radio; three (= 17.6%) participants reported that they took the German course to be able to read German newspapers, books and/or magazines; one (= 5.9%) participant each reported that they took German to improve their GPA, talk

to friends and visit German websites; four (= 23.5%) indicated that they took the course to learn about their heritage and their ancestors; and three (= 17.6%) indicated that they were taking the course for other reasons than listed in the available choices. Those were: to improve their communication skills, to be able to study abroad in Germany and to be able to live in German in the future and to be able to communicate with the population. The results for both groups are presented in table 4.6 below.

Reasons for Taking the Course	Traditional Group (T Group)		Frame Semantics Group (FS Group)	
	<u>n</u>	%	<u>n</u>	%
to fulfill the general language requirement	14	82.4%	14	82.4%
to communicate better with my family	3	17.6%	2	11.8%
to learn about the German cultures	9	52.9%	6	35.3%
to improve my language skills for my current of future job(s)	7	41.2%	5	29.4%
to improve my GPA	1	5.9%	1	5.9%
to talk to my friend	2	11.8%	1	5.9%
to listen to and/or watch German TV, films, music, & radio	8	47.1%	8	47.1%
to visit German websites	2	11.8%	1	5.9%
to read German newspapers, books and/or magazines	5	29.4%	3	17.6%
to read academic journals written in German	1	5.9%	0	0.0%
to learn something about my ancestors	1	5.9%	4	23.5%
other (please specify in the space below)	2	11.8%	3	17.6%

Table 4.6: Reasons for taking second-semester German

### **What does it mean to know a language?**

Part of the pre-treatment questionnaire also sought information about the participants' idea about language knowledge. First, participants were asked to answer the question: "What does it mean to know a language?" Second, they were asked more specifically to indicate which aspects of language they think are components of language (e.g. culture, grammar, non-verbal communication, pragmatics and vocabulary). Participants were allowed to select as many of the choices as they liked. Third, they were asked to rank the aspects just mentioned above in terms of importance on a 5-point Likert-scale from *most important* to *least important*. Finally, participants had to give a reason for their ranking.

Participants' answers to the question "What does it mean to know a language?" were coded using emergent theme analysis (Strauss & Corbin, 1990). Three main themes could be derived from the answer in the T Group (see Table 4.7): (1) being able to communicate, (2) knowing vocabulary and grammar, and (3) being aware of L2 culture. Nine (= 52.9%) participants in the T Group reported that for them being able to communicate means to know a language. Seven (= 41.2%) indicated that knowing vocabulary and grammar of that language means to know that language and three (= 17.6%) also feel that knowing the L2 culture or at least being aware of it is part of language knowledge. As for the FS Group, seven (= 41.2%) participants are of the opinion that knowing a language means being able to communicate in that language. Eight (= 47.1%) participants think that knowing a language includes knowing a the vocabulary and grammatical structures, two (= 11.8%) participants answered that

knowing language means knowing vocabulary and one (= 5.9%) participant each believe that knowing a language also means to be aware of the L2 culture or knowing how to act and interact depending on the social situations. It is interesting to note that many participants indicated in their answers that native speakers know their language. This result is interesting because it shows how language learners assume that someone knows a language simply because he or she can be considered a native speaker, even though a lot of language learners acknowledge that they are far from being experts in their own native language. Students' understanding and idea of what it means to know a language may affect their motivation, interest in a language and confidence in using a language. The results for both groups are illustrated in table 4.7.

What does it mean to know a language?	Traditional Group (T Group)		Frame Semantics group (FS Group)	
	<u>n</u>	%	<u>n</u>	%
being able to communicate	9	52.9%	7	41.1%
knowing vocabulary and grammar	7	41.2%	8	47.1%
knowing vocabulary	0	0.0%	2	11.8%
being aware of the L2 culture	3	17.6%	1	5.9%
pragmatics	0	0.0%	1	5.9%

Table 4.7: What does it mean to know a word – participants' answers

When asked more specifically to select aspects of knowing a language, participants had the following choices: culture, grammar, non-verbal communication, pragmatics, vocabulary and other. In the T Group, 12 (= 70.6%) of participants reported

that culture is part of language knowledge, 16 (= 94.1%) participants indicated that grammar is part of language knowledge, nine (= 52.5%) participants were of the opinion that non-verbal communication is part of language knowledge, 16 (= 94.1%) participants indicated that pragmatics is part of language knowledge and 17 (=100.0%) of the participants reported that vocabulary is part of knowing a language. In the FS Group 15 (= 88.2%) participants reported that culture is part of knowing a language, 17 (= 100.0%) participants believe that grammar is part of language knowledge, 12 (= 70.6%) participants reported that non-verbal communication is part of language knowledge, 14 (= 82.4%) participants indicated that pragmatics is part of knowing a language, 17 (= 100.0%) are of the opinion that vocabulary is part of language knowledge and one (= 5.9%) participant reported other reasons which were: knowing idioms, sayings and idioms. Table 4.8 offers a summary of these responses.

<b>Aspects of Language Knowledge</b>	<b>Traditional Group (T Group)</b>		<b>Frame Semantics Group (FS Group)</b>	
	<b><u>n</u></b>	<b>%</b>	<b><u>n</u></b>	<b>%</b>
Culture	12	70.6	15	88.2
Grammar	16	94.1	17	100.0
Non-verbal communication (e.g. body language, gestures, facial expressions)	9	52.9	12	70.6
Pragmatics (social communication skills) (e.g. greetings, taking turns in conversations)	16	94.1	14	82.4
Vocabulary	17	100.0	17	100.0
Other (please specify)	0	0.0	1	5.9

Table 4.8: Aspects of language knowledge – participants opinions

Figure 4.1 and figure 4.2 show the same results as described above and illustrated in Table 4.8 which are participants options about what is part of knowing a language.

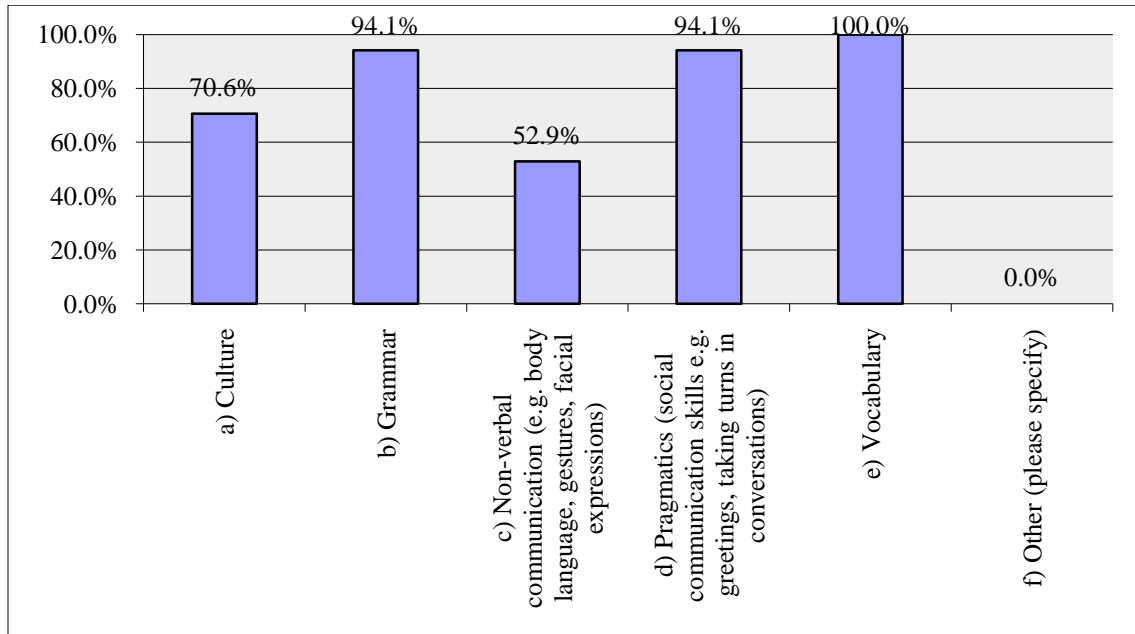


Figure 4.1: Aspects of language knowledge – Traditional Group opinions

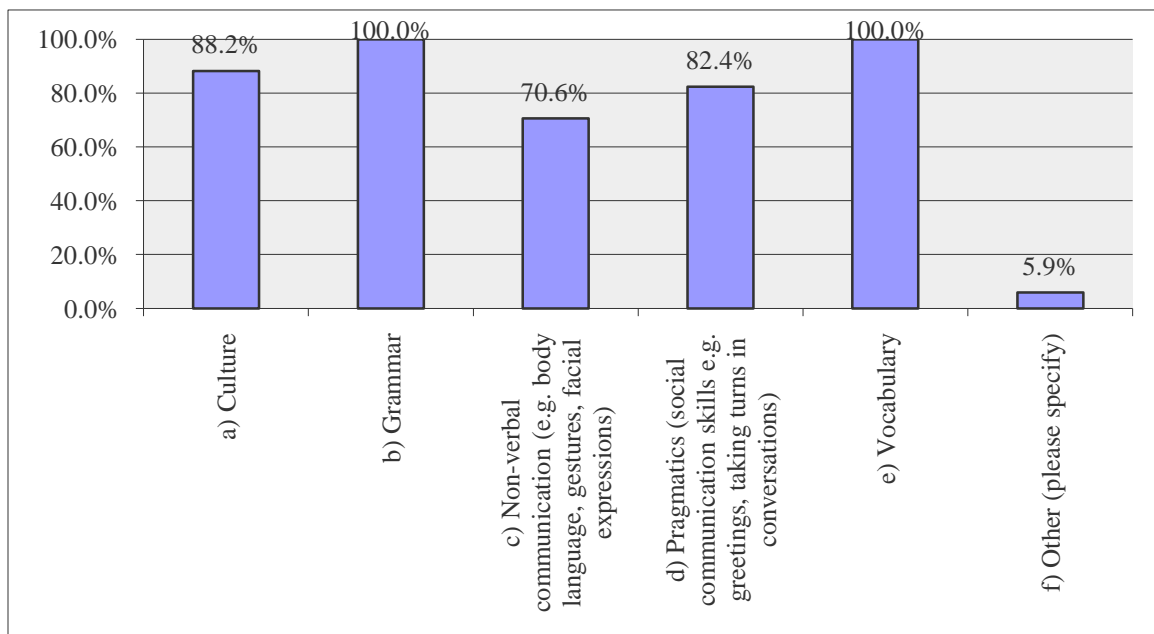


Figure 4.2: Aspects of language knowledge – Frame Semantics Group opinions

Figures 4.1 and 4.2 illustrate the aspects that participants considered to be part of language knowledge. Presenting the data in graphic form in addition to tables more clearly visualizes participants' ideas about parts of language. It is important to keep in mind that language learners' might have a different ideas about what a language is than practitioners and scholars working in the field of second language acquisition. Students might also be more inclined to engage with an aspect of language if they find it useful; however, if they believe that it is not part of language knowledge, they might not spend time on it. Comparing both figures (4.1 & 4.2) shows that both groups have similar ideas except for minor differences suggesting that participants in both groups have a similar understanding of what it means to know a word. This is important because different notions of what word knowledge is may have affected the results of this study.

In addition to indicating what aspects participants believe to be part of language knowledge they were also asked to provide a ranking of those language knowledge aspects on a 5-point Likert scale from *most important* to *least important*. In the T Group 12 (= 70.6%) participants rated knowing vocabulary as most important for knowing a language, eight (= 47.1%) participants thought that grammar is important for knowing a language, an equal number of participants, five (= 29.4%) rated knowing culture and pragmatics as slightly important, eight (= 47.1%) participants ranked knowing non-verbal communication as less important for knowing a language and seven (= 41.2%) participants also rated non-verbal communication as least important. In the FS Group the same number of participants as in the T Group thought that vocabulary is most important and grammar is important for knowing a language which were 12 (= 70.6%) participants

and eight (= 47.1%) participants respectively. Eight (= 47.1%) participants rated knowing culture as slightly important and non-verbal communication as less important, and 12 (= 70.6%) rated knowing non-verbal communication as least important for knowing a language. The entire ratings given by the participants are summarized in table 4.9 for both the T Group and the FS Group. As mentioned above language learners may spend more time engaging with aspects of language knowledge that they consider part of language. They will also engage more dynamically with aspects they believe to be more important, while putting less focus on aspects they consider less important or not a component of language.



Ranking of Language Knowledge Aspects		most important	important	slightly important	less important	least important
a) Culture	Traditional Group (T Group)	1 (= 5.88%)	1 (= 5.88%)	5 (= 29.4%)	5 (= 29.4%)	4 (= 23.5%)
	Frame Semantics Group (FS Group)	2 (= 11.9%)	3 (= 17.6%)	8 (= 47.1%)	3 (= 17.6%)	1 (= 5.88%)
b) Grammar	Traditional Group (T Group)	4 (= 23.5%)	8 (= 47.1%)	4 (= 23.5%)	0 (= 0.0%)	0 (= 0.0%)
	Frame Semantics Group (FS Group)	3 (= 17.6%)	8 (= 47.1%)	3 (= 17.6%)	2 (= 11.9%)	0 (= 0.0%)
c) Non-verbal communication	Traditional Group (T Group)	0 (= 0.0%)	0 (= 0.0%)	2 (= 11.9%)	8 (= 47.1%)	7 (= 41.2%)
	Frame Semantics Group (FS Group)	0 (= 0.0%)	0 (= 0.0%)	2 (= 11.9%)	3 (= 17.6%)	12 (= 70.6%)
d) Pragmatics	Traditional Group (T Group)	0 (= 0.0%)	5 (= 29.4%)	5 (= 29.4%)	3 (= 17.6%)	4 (= 23.5%)
	Frame Semantics Group (FS Group)	0 (= 0.0%)	2 (= 11.9%)	4 (= 23.5%)	8 (= 47.1%)	1 (= 5.88%)
e) Vocabulary	Traditional Group (T Group)	12 (= 70.6%)	3 (= 17.6%)	1 (= 5.88%)	0 (= 0.0%)	1 (= 5.88%)
	Frame Semantics Group (FS Group)	12 (= 70.6%)	4 (= 23.5%)	0 (= 0.0%)	0 (= 0.0%)	0 (= 0.0%)

Table 4.9: Participant rankings of importance of language aspects

A summary of all results for both the T and the FS Group are presented in Figure 4.3. The figure reveals that vocabulary is ranked as the most important in both groups with an average rating of 4.61 on a 5-point Likert scale. The second most important aspect with regards to knowing a language is grammar, with an average rating of 3.9 on a 5-point Likert scale. The participants rated culture as slightly important with an average from both groups of 2.6 on a 5-point Likert scale followed closely by pragmatics as less important for knowing a language with an average rating from both groups of 2.5 on a 5-point Likert scale. Participants in both groups rated non-verbal communication as least important for knowing a language with an average rating from both groups of 1.6 points on a 5-point Likert scale. This rating can affect language learners' willingness to learn certain aspects. If learners' do not see a certain aspect of language knowledge as important, it may affect how they react to a learning approach that includes such aspects.

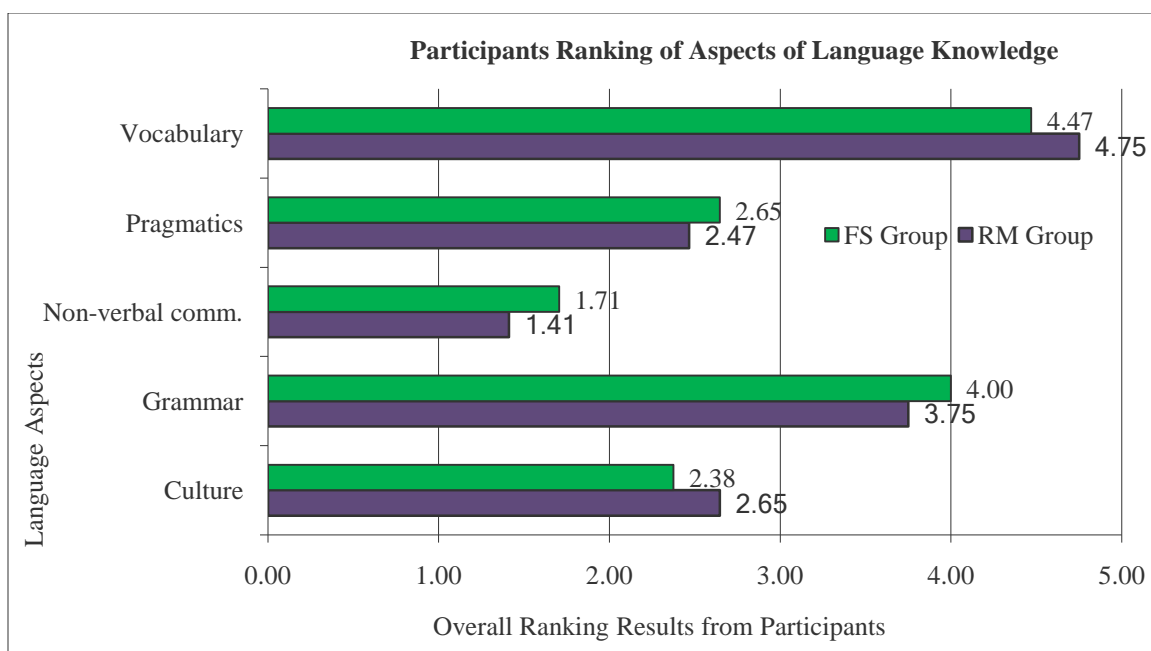


Figure 4.3: Summary of participants rankings of importance of language aspects

Comparing participants' ranking of aspects of language knowledge in the Traditional Group and the Frame Semantics Group (figure 4.3) shows that their idea of what aspect are important and what aspects are less important are similar. Both groups indicated that vocabulary is the most important aspects, followed by grammar. Pragmatics and culture are fairly equally distributed in terms of importance and are ranked third, while non-verbal communication was ranked least important by these participants. Those results should then coincide with participant's language learning habits; we would expect them to spend the most time on vocabulary and grammar.

## Language Study Habits

The pre-treatment questionnaire also asked participants about what aspect of language they focused on most when studying at home, and why they focused on those aspects. In both the T Group and the FS Group the only aspects that were reported to be studied by the participants were grammar and vocabulary. In the T Group 12 (= 70.6%) participants indicated that they study vocabulary the most, while five (= 29.4%) participants reported they focus on grammar the most when studying for the German language course. In the FS Group 14 (= 82.4 %) participants reported they study vocabulary the most and only three (= 17.6%) participants reported they study grammar the most in their language class. Table 4.10 illustrates the aspects of language knowledge that participants in both groups study the most.

Aspects of Language Knowledge Studied the Most	Traditional Group (T Group)		Frame Semantics group (FS Group)	
	<u>n</u>	%	<u>n</u>	%
Vocabulary	12	70.6%	14	82.4%
Grammar	5	29.4%	3	17.6%

Table 4.10: Aspects of language knowledge studied the most by participants

Participants were also asked to provide reasons for spending most time on the different language aspects. Since grammar and vocabulary have been listed as the two most important aspects they are presented in more detail in this section. The reasons for focusing mostly on vocabulary or grammar have emerged as follows: in the T Group

seven (= 41.2%) reported that vocabulary is the most important for communication, therefore, they focus on this aspect. Two (= 11.9%) participants each indicated that they focus on vocabulary because it is difficult for them or because it is very time consuming. One (= 5.8%) participant stated that he focuses on vocabulary because it is what the teacher tells him to learn. In the FS Group four (= 23.5%) reported that they focus on vocabulary because it is crucial for communication. Three (= 17.6%) participants indicated that the vocabulary is the most time consuming and therefore requires the most effort. Two (= 11.9%) participants each stated that they focus on vocabulary for the following reasons: not easy because there are so many words, because this is the aspect that tests and quizzes focus on and because it is the most important. One (= 5.8%) participant stated that homework assignments deal with vocabulary which is the reason for his focus on vocabulary. As for grammar, four (= 23.5%) participants in the T Group stated that they focus on grammar the most when studying for their language class because it is difficult for them to learn or understand and one (= 5.8%) participant reported that grammar has to be learned unlike vocabulary or culture, which is easier especially when one is surrounded by native speakers. In the FS Group participants reported the following reasons for spending the most time studying grammar: it is difficult to learn or understand (one participant, = 5.8%), it is important to understand the structures (one participant, = 5.8%), and because homework assignments focus on grammatical structures (one participant, = 5.8%). A summary of the responses given by the participants is shown in table 4.11.

		Reasons provided by participants	<b>n</b>	<b>%</b>
<b>Traditional Group (T Group)</b>	Vocabulary	important for communication	7	41.2%
		difficult to learn	2	11.9%
		time consuming	2	11.9%
		told to do so by instructor	1	5.8%
	Grammar	difficult to learn/understand	4	23.5%
		has to be learned	1	5.8%
<b>Frame Semantics Group (FS Group)</b>	Vocabulary	not easy because it is vast	2	11.9%
		time consuming	3	17.6%
		focused on in tests and quizzes	2	11.9%
		given in homework assignments	1	5.8%
		important for communication	4	23.5%
		most important	2	11.9%
	Grammar	difficult to learn/understand	1	5.8%
		to understand language structures	1	5.8%
		homework focuses on grammar	1	5.8%

Table 4.11: Reasons for spending the most time on a certain language aspect

Part of the question about participants' language learning habits was concerned with how participants study vocabulary. Participants were asked to provide a description of how they study vocabulary. Their answers were coded and resulted in ten different methods which were (1) using flashcards; (2) repeating the word orally; (3) repeating the word in writing; (4) using lists; (5) listening to the words; (6) memorizing the words; (7) using the words in sentences; (8) looking at the word; (9) talking to friends on Facebook; and (10) drawing a picture of the word. Table 4.12 and 4.13 present the number and percentage of the different methods and tools participants in this study utilize to study vocabulary.

Traditional Group (T Group)	# of Participants	% of Participants
Flashcards	6	35.3
look at the word	2	11.8
repeat orally	2	11.8
repeat writing	5	29.4
Lists	8	47.1
talk to friends on Facebook	1	5.9
draw a pictures of the words	1	5.9

Table 4.12: Vocabulary learning techniques of Traditional Group

Frame Semantics Group (FS Group)	# of Participants	% of Participants
Flashcards	8	47.1
repeat writing	3	17.6
repeat orally	5	29.4
Lists	6	35.3
listen to the word	2	11.8
Memorization	2	11.8
using it in a sentence	2	11.8
looking at the word	1	5.9

Table 4.13: Vocabulary learning techniques of the Frame Semantics Group

Both table 4.12 and 4.13 show how participants in both groups utilize either flashcards or lists to study German vocabulary. Six (= 35.3%) participants use flashcards in the T Group and eight (= 47.1%) participants use flashcards in the FS Group. Lists are used by eight (= 47.1 %) participants in the T Group and six (= 35.3 %) participants in the FS Group. Another technique frequently employed by the participants in both groups is oral or written word repetition. In the T Group, five (= 29.4 %) participants repeat a word by means of writing it down and two (= 11.8 %) participants repeat a word orally in order to learn the word. In the FS Group more participants than in the T Group, five (= 29.4 %)

participants, reported using oral repetition, while three (= 17.6%) participants repeat a word in written form to learn it. Two (= 11.8%) participants in the FS Group and one (= 5.9%) participants in the T Group reported their vocabulary learning technique as looking at the word until they memorized it. Other techniques in the T Group that were reported by the participants included talking to friends on Facebook (= 5.9%) and drawing the word in picture form (= 5.9%). In the FS Group, techniques that were reported besides the ones given above were using the words in a sentence which was reported by two (= 11.8%) participants and two (= 11.8%) participants stated memorization and did not offer an explanation what this might look like.

Comparing the answers of the participants in both groups it appears that they have similar ideas about what language is and what they think they need to do in order to acquire a language. Most participants stated that knowing a language means to be able to communicate, followed by knowing grammar and vocabulary. When asked what aspects are most important the general consensus of the participants in this study was vocabulary, followed closely by grammar and then culture and pragmatics. It also appears that participants in both groups think that vocabulary is most important since this is the aspect they spend most time on studying. All of those beliefs and ideas about what a language is, and how a language should be learned affect the performance and attitude toward a language and practices used for language learning (Horwitz, 1988). Furthermore, gender, age, reasons for taking a course, language learning strategies all play a role with regards to language learners' motivation (Clément & Kruidenier, 1985; Gardner, 1985; Oxford & Shearin, 1994; Schmidt & Watanabe, 2001) which in turn affect their language learning



outcome. The data collected shows that both groups seem to have similar ideas and the information is not only useful for future extended studies that investigate in detail how those aspects may or may not influence the Frame Semantics approach but also benefit studies replicating this present study.

### **Research Question 2: Vocabulary Recall and Retention**

Does the Frame Semantics approach have an effect on students' depth of knowledge short and long-term vocabulary recall and retention compared to more traditional vocabulary learning techniques?

The second research question sought to investigate whether the use of Frame Semantics as a tool for vocabulary instruction in the Frame Semantics Group (FS Group) affected the performance of that group over the performance of the Traditional Group (T Group) in terms of vocabulary recall and retention. To answer this question, two weeks prior to exposing students to the new vocabulary items, the participants of both groups were asked to complete a pre-treatment vocabulary test in order to identify any prior knowledge of the lexical items used in this study.

During the treatment period students in the T Group completed a variety of traditional vocabulary memorization techniques (writing the words, flashcards, unscrambling, L1-L2/L2-L1 oral translation) while the FS Groups used Frame Semantics to introduce and practice the vocabulary items used in this study (the specific methodology was described in Chapter 3). After this session, the participants completed an immediate post-test that evaluated their knowledge of the words presented during the

treatment. Two weeks after the treatment and immediate post-treatment test a delayed post-treatment test was given to the participants of both groups. In order to determine whether the participants in both groups were on equal footing in the pre-treatment state with regards to depth of knowledge an independent t-test was conducted for the means in both groups. The results from the t-test were statistically non-significant ( $p = .441$ ) which suggest that participants in both groups were equal in terms of their depth of knowledge in the pre-treatment stage. Table 4.14 below presents the mean scores and standard deviation for the two groups for depth of knowledge resulting from the VKS test: pre-treatment VKS test, immediate post-treatment VKS test, delayed post-treatment VKS test.

Test-Depth of Knowledge	T Group (Traditional Group)		FS Group (Frame Semantics Group)	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Pre-Treatment VKS	2.26	0.30	2.19	0.16
Immediate Post-Treatment VKS	4.06	0.43	3.80	0.37
Delayed Post-Treatment VKS	3.74	0.44	3.64	0.44

Table 4.14: Mean scores and standard deviation for VSK tests (depth of knowledge)

The results of the descriptive statistics, the mean scores, it appears that there was an increase in depth of knowledge from the pre-treatment (T Group = 2.2588; FS Group = 2.1941) to the immediate post-treatment test (T Group = 4.0588; FS Group = 3.8000) and a decrease from the immediate post-treatment to the delayed post-treatment test (T Group

= 3.7382; FS Group = 3.6441) for both groups. However, the mean scores for the delayed post-treatment test are still higher than those on the pre-treatment test. This suggests that participants have increased their depth of vocabulary knowledge from the pre-treatment to the delayed post-treatment test and that both vocabulary teaching methods (traditional and Frame Semantics) seem to have an impact on students recall and retention for depth of knowledge of vocabulary. In terms of vocabulary retention the T Group retained 82.2%, while the FS Group retained 90.1%.

To investigate whether there was a statistically significant difference in vocabulary recall and retention between the T Group and the FS Group, a two-way repeated-measure Analysis of Variance (ANOVA) was conducted on each of the VKS tests. The Analysis of Variance was chosen in order to account for the differences between the groups of participants over time on their recall and retention of the vocabulary items. The within-subject factor was time, with three levels (pre-treatment, immediate post-treatment and delayed post-treatment). The between-subject factor was the respective group of participants (either Traditional Group or Frame Semantics Group). The level of confidence for this statistically analysis was set at .05.

The Analysis of Variance did not show any statistically significance between-subject effect ( $p = .158$ ) as illustrated in Table 4.15 below. This suggested that there was no statistically significant difference in the performance between the participants in the two groups with respect to their depth of knowledge of the vocabulary items present in the Frame Semantics approach and traditional vocabulary learning techniques over time. The results of this analysis suggest that Frame Semantics used by the FS Group (Frame

Semantics group) did not statistically significantly affect learners' performance compared to the performance of the T Group (Traditional Group) with regards to depth of knowledge. This suggests that using Frame Semantics did not statistically significantly affect participants' performance and depth of knowledge compared to the performance of the Traditional Group. All participants experienced the same learning outcomes with no statistically significant difference.

Test of Between-Subjects Effects						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	
Intercept	1098.93	1	1098.93	4640.91	.000	
Group	0.494	1	0.494	2.087	.158	
Error	7.577	32	0.237			

Table 4.15: Analysis of variance – between-subjects effects

In addition, there is no statistically significant interaction effect between time and group ( $p = .361$ ). This means that there is no statistically significance between the two groups. Yet when looking at the within-subject effects, shown in table 4.16, a statistically significant effect can be observed for time ( $p = .000$ ).

Tests of Within-Subjects Effects						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	
Time	57.82	2	28.912	322.001	0.000	
Time*Group	0.186	2	0.093	1.036	0.361	
Error (Time)	5.746	64	0.090			

Table 4.16: Analysis of variance – within-subject effects

This means that even though the two groups are not statistically significantly different from each other at specific point of time in the study, there are changes in all participants with regards to time. In other words, the data suggests that participants in *both* groups demonstrated substantial vocabulary learning outcomes as a result of either treatment. In order to find out where those differences were (at the intermediate or delayed state) a post-hoc analysis was used.

The post-hoc analysis yielded statistically significant differences for time from the pre-test to the immediate post-test ( $p = .000$ ) and from the immediate post-test to the delayed post-test ( $p = .000$ ) for both the T Group and the FS Group. It also showed a statistically significant difference from the pre-test to the delayed post-test stage ( $p = .000$ ). This supports the previously stated findings that participants in both groups demonstrated substantial vocabulary learning outcomes. Those results are also visualized in figure 4.4 below.

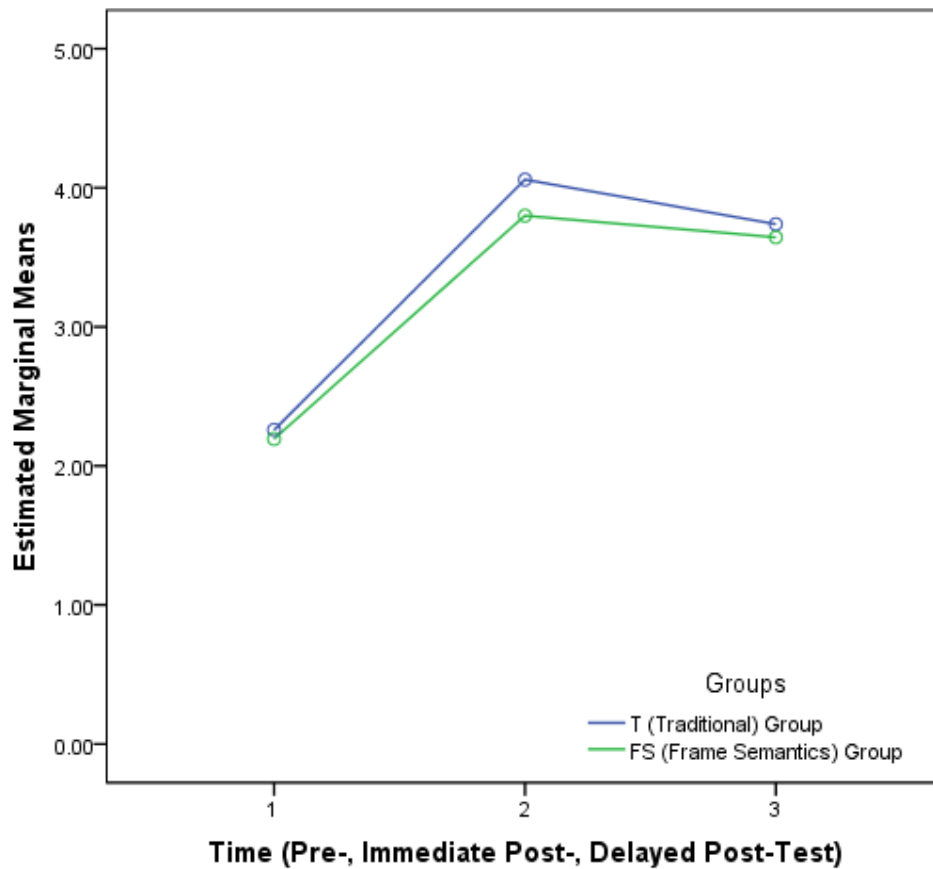


Figure 4.4: VKS (depth of knowledge) test scores over time

The above graph shows that results from both groups are fairly similar from the pre-test to the delayed post-test. It can also be seen that the T Group has a steeper slope from the immediate post-test to the delayed post-test, which can suggest that Frame Semantics may have long-term retention benefits. However, as stated, there are no statistically significant differences that can be reported (which may be due to the small sample size), making it impossible to make a claim about the effectiveness of the FS group compared to the T group. However, a statistically significant difference might be found in future studies using larger sample sizes.

The depth of knowledge dimension is one of the least studied aspects in the field of vocabulary acquisition which is most likely due to the difficulty in measuring vocabulary depth of knowledge compared to vocabulary size (breadth of knowledge). Most studies conducted are concerned with reading comprehension (de Bot, Paribakht, & Wesche, 1997; Qian, 1998, 1999). However, measuring the depth of knowledge is as important since “learners need to have more than just a superficial understanding of the meaning [of a word]; they should develop a rich and specific meaning representation as well as knowledge of the word’s format features, syntactic functioning, collocation possibilities, register characteristics, and so on” (Read, 2004, p. 155). In other words students need to be aware of the knowledge aspects established by Nation (2001). No previous studies investigated Frame Semantics as a vocabulary teaching and learning tool. It was hypothesized in this study that frames can visualize (e.g. represent the meaning) for the language learners and help them to establish a connection between words by means of the thematic clustering of the words. Previous research by Tinkham (1993; 1994; 1997) and Waring (1997) shows that presenting vocabulary in thematic sets (which is done with the Frame Semantics approach) benefits vocabulary retention. Furthermore, research on semantic mapping that was used in this study to create the frames visualizing the vocabulary showed substantial improvement and higher recall in vocabulary knowledge (2001). However, the results of this study are inconclusive, given that there are no statistically significant differences between participants’ performance via the Frame Semantics and the traditional method. This may be attributed to the fact that the instructors were different in the classes and the researcher does not know whether

the instructors covered the words after the treatment or not, despite the researcher's request. Another factor could be the thematic relationship of the vocabulary items. Since both groups were exposed to the same vocabulary items (i.e. the same thematic clusters) this may have contributed to the similarity in learning outcome. As mentioned above both Tinkham (1993; 1994; 1997) and Waring (1997) found positive vocabulary learning outcomes for words presented in thematic clusters.

### **Research Question 3: Breadth of Knowledge**

Do students learning vocabulary with the Frame Semantics approach acquire and retain and recall more lexical items than students learning vocabulary using more traditional vocabulary learning techniques?

The third research question concerns itself with the amount of vocabulary, or breadth of knowledge, acquired by the participants in this study. Participants were asked to supply additional lexical items having to do with personal relationships – the topic covered in the treatment of this study, on the vocabulary knowledge scale test that were not asked for in the test itself. Participants had additional empty knowledge scale fields and were asked to supply the German word and provide their knowledge of the word. The option of providing additional lexical items was given to participants in the immediate post-treatment as well as the delayed post-treatment VKS. Although participants were asked specifically to supply additional words, none of the participants in either group gave additional words.



In order to have useful data to answer this question, the VKS results for the 20 lexical items were utilized. The data collected was re-sorted in the following manner. Only lexical items that none of the participants knew in the pre-test were used. Those words are listed in table 4.17.

<ul style="list-style-type: none"><li>• sich verabreden – to agree to meet, to arrange a date</li><li>• sich mögen – to like one another</li><li>• der Bekannte – male acquaintance</li><li>• die Bekannte – female acquaintance</li><li>• die Verabredung - date</li><li>• die Beziehung - relationship</li><li>• miteinander gehen – to date (high school)</li><li>• der Kumpel – buddy, pal</li><li>• funken – to spark, to hit it off</li><li>• lieb haben – to like someone very much</li></ul>
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Table 4.17: Vocabulary items unknown to participants (results from pre-test)

Since for the breadth of knowledge component only the amount of vocabulary items is of interest, the VKS tests were analyzed. Participants received one point if they provided a correct answer to any of the VKS option beyond the level 2 in the immediate post-treatment and the delayed post-treatment test. Usually the VKS is used as a depth of knowledge measure; however, students did not receive higher points for answers at a higher level. As mentioned above, if students provided an answer beyond level 2 they received 1 one point for their answer. In doing this, students' answers were not rewarded for more detailed knowledge about individual words (i.e. depth) but simply for knowing any knowledge aspect of the word (i.e. breadth). This resulted in the mean scores and

standard deviations for the Traditional and the Frame Semantics Group shown in table 4.18.

Test-Breadth of Knowledge	T Group (Traditional Group)		FS Group (Frame Semantics Group)	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Immediate Post-Treatment VKS Gain	8.12	1.90	6.71	1.31
Delayed Post-Treatment VKS Gain	6.94	1.71	6.41	2.18

Table 4.18: Mean scores and standard deviation for VSK tests (breadth of knowledge)

The mean scores for the breadth of knowledge analysis in the T Group are 8.12 for the immediate gain scores and 6.94 for the delayed gain scores. In the FS Group the mean scores are 6.71 for the immediate gain and 6.41 for the delayed gain. From those descriptive statistic results it appears that there was an increase in learning of vocabulary items from the pre- test to the immediate post-test. It further seems that there was a decrease for the long term recall and retention. Yet it should be pointed out that the decrease appears to be less in the FS Group compared to the T Group. Since only vocabulary items unknown to all participants were chosen to answer the breadth of knowledge question it can be concluded that both groups were on equal footing since none of the participants knew the items in the pre-treatment stage.

To investigate whether there was a difference in vocabulary breadth recall and retention between the T Group and the FS Group, a two-way repeated-measure Analysis of Variance (ANOVA) was conducted with the immediate and delayed test gain scores.

The Analysis of Variance was chosen in order to account for the differences between the groups of participants over time on their recall and retention of the vocabulary items. The within-subject factor was time, with two levels (immediate post-treatment and delayed post-treatment). The between-subject factor was the respective group of participants (either Traditional Group or Frame Semantics Group). The level of confidence for this statistically analysis was set at .05.

Table 4.19 illustrates the between-subject effects. It shows that there was no statistically significant difference ( $p = .066$ ) between the two groups (T Group and FS Group) in this study over time. This means that all students increased their vocabulary knowledge regardless of group form the pre-test to the delayed pos-test stage. Therefore, it cannot be determined from the results of this study whether Frame Semantics is more beneficial compared to traditional methods, yet it can be stated that both Frame Semantics and the more traditional techniques had a positive learning effect for participants.

Test of Between-Subjects Effects						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	
Intercept	3374.132	1	3374.132	763.849	.000	
Group	16.015	1	16.015	3.625	.066	
Error	141.353	32	4.417			

Table 4.19: Analysis of variance – between-subjects effects

Table 4.20 shows the within-subject effect for the breadth of knowledge dimension in this study. As this table illustrates, there are no statistically significant interaction effects between time and group ( $p = .218$ ), but time shows a statistically significant effect ( $p = .044$ ) that suggests that there are statistically significant changes over time. Since there are only two time points (immediate- and post-test stage) a post-hoc analysis is unnecessary, since the difference is between those two time points.

Tests of Within-Subjects Effects						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	
Time	9.191	1	9.191	4.390	0.044	
Time*Group	3.309	1	3.309	1.580	0.218	
Error (Time)	67.000	32	2.094			

Table 4.20: Analysis of variance – within-subject effects

The results for the analysis of participants' breadth of knowledge are visualized in figure 4.5 below. When comparing the two slopes it is obvious that the slope of the T Group is steeper compared to the FS Group. Even though no statistically significant changes were observed in this study, a long-term study should be conducted in order to see whether attrition effects are smaller using Frame Semantics, meaning this approach has benefits for language learners' long-term retention.

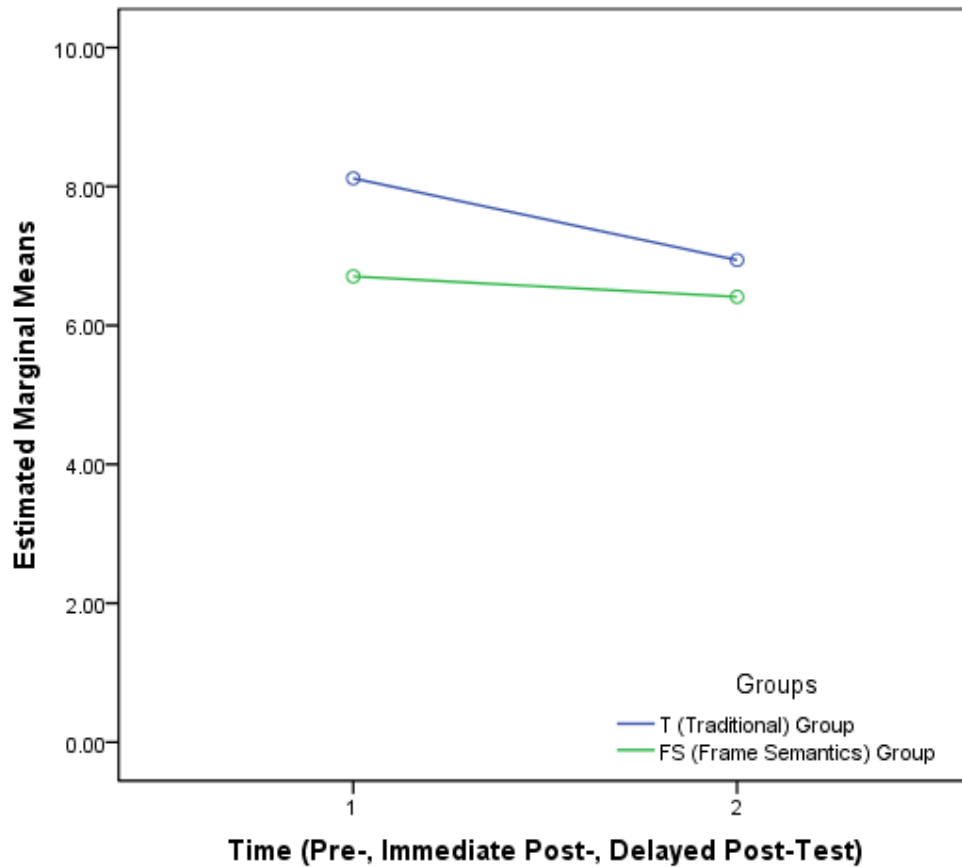


Figure 4.5: VKS (breadth of knowledge) test scores over time

In figure 4.5 it appears that the T Group has a higher attrition effect compared to the FS Group. Therefore, an exploratory post-hoc analysis was conducted. Since the sample size in this study was rather small this could have affected the results of the ANOVA. A higher sample size might have yielded a statistically significant result for the interaction effect of group and time. The pairwise comparison for time and group of the post-hoc analysis showed that there is a statistically significant effect for the T Group ( $p = .024$ ) while no statistically significant effect could be observed for the FS Group ( $p = .558$ ). Those exploratory results indicate that FS might have benefits for long-term

retention compared to more traditional vocabulary learning techniques. However, a larger study is needed in order to statistically determine whether a significant difference exists between the two groups.

Those results (e.g. no statistically significant difference between the Frame Semantics approach and the traditional vocabulary learning methods) contradict a study by Sagarra & Alba (2006) in which the authors found statistically significant differences between their methods (rote memorization, keyword method and semantic mapping). They found that the keyword method yielded better retention than rote memorization and that rote memorization was favorable compared to semantic mapping. Other studies showing benefits of traditional techniques (e.g. rote memorization) over semantic mapping can be found in L1 research (Pressley, et al., 1987) and in L2 research (Scribner, 2000) with beginning learners. Yet there are also studies that indicate the superiority of semantic mapping in research. While Coomber, Ramstad & Sheets (1986) found positive evidence using pseudowords, studies conducted by Brown & Perry (1991) and Scribner (2000) show benefits of semantic mapping in the L2 setting and with higher proficiency learners.

Other vocabulary research focused on teaching vocabulary using lists versus implementing more context. Laufer and Shamueli (1997) found in their study that providing lists with L1 explanations benefited participants' vocabulary retention. Prince (1995) found similar results, namely that lists with L1 translations benefited participants' vocabulary retention. Those results also contradict with the present study as no statistically significant differences have been found between the FS Group and the T

Group. These and other studies are different in their methodology, language and proficiency, as well as their comparing treatments, making it hard to achieve conclusive results.

A reason for the statistically non-significant results in this study may be due to the fact that the sample size was fairly small and the fact that it was an actual classroom study and not a purely research-oriented setting. However, there also have been studies in which no statistically significant differences have been found using semantic mapping and other vocabulary teaching and learning approaches (Moore & Bailey, 1992).

#### **Research Question 4: Culturally Appropriate use of Vocabulary**

Do students gain a deeper knowledge of vocabulary – especially the cultural component – with the Frame Semantics approach compared to traditional techniques?

The fourth research question sought to investigate whether the use of Frame Semantics as a tool for vocabulary instruction in the Frame Semantics group (FS Group) affected the performance of that group over the performance of the Traditional Group (T Group) in terms of the ability to use vocabulary in a culturally appropriate manner. To answer this question, two weeks prior to exposing students to the new vocabulary items, the participants of both groups were asked to complete a pre-treatment vocabulary tests in order to identify any prior knowledge of the lexical items used in this study.

During the treatment period students in the T Group completed a variety traditional vocabulary learning activities, while the FS Groups used Frame Semantics to

introduce and practice the vocabulary items used in this study. Directly after the treatment the participants completed an immediate post-treatment vocabulary appropriateness test (VAT) asking them about their knowledge of using words in a culturally appropriate fashion. Two weeks after the treatment and immediate post-test and a delayed post-treatment test was given to the participants of both groups. The following table 4.21 presents the mean scores and standard deviation for the two groups for the vocabulary appropriateness tests: pre-treatment VAT, immediate post-treatment VAT, delayed post-treatment VAT.

Test	T Group (Traditional Group)		FS Group (Frame Semantics Group)	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Pre-Treatment VAT	0.40	0.17	0.43	0.17
Immediate Post-Treatment VAT	0.73	0.14	0.94	0.22
Delayed Post-Treatment VAT	0.69 (87.9%)	0.20	0.88 (88.2%)	0.21

Table 4.21: Mean scores and standard deviation for VAT tests

In order to determine whether the participants in both groups were on equal footing with regards to the culturally appropriate usage of vocabulary an independent t-test was conducted for the means in both groups. The results from the t-test are not statistically significant ( $p = .675$ ); they indicate that participants in both groups can be seen as equal in terms of their culturally appropriate usage of vocabulary of knowledge in the pre-treatment stage.



To investigate whether there was a difference in the culturally appropriate usage of vocabulary items between the T Group and the FS Group, a two-way repeated-measure of Analysis of Variance (ANOVA) was conducted on the VAT (vocabulary appropriateness tests) scores of the two groups. The Analysis of Variance was chosen in order to account for the differences between the groups of participants over time on their culturally appropriate usage of the vocabulary items. The within-subject factor was time, with three levels (pre-treatment, immediate post-treatment and delayed post-treatment). The between-subject factor was the respective group of participants (either Traditional Group or Frame Semantics Group). The level of confidence for this statistically analysis was set at .05.

According to the data, there was a gain in culturally appropriate usage of vocabulary in both groups in the immediate post-treatment test. The immediate post-treatment mean score for the T Group was 0.73 and the immediate post-treatment mean score for the FS Group was 0.94. In addition, both groups retained knowledge about the culturally appropriate usage of vocabulary items. The mean score of the delayed post-treatment VAT for the T Group was 0.69 and for the FS Group 0.88. Those results give a knowledge retention level of 87.9% and 88.2% respectively.

The between-subject effects are given in table 4.22. A statistically significant effect ( $p = .002$ ) could be observed with regards to group. This means that there was a statistically significant difference for both the T Group and the FS Group over time. In other words, both groups experienced significant statistically differences from the pre-treatment stage to the delayed post-treatment stage.

Test of Between-Subjects Effects						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	
Intercept	46.975	1	46.975	1035.222	.000	
Group	.514	1	.514	11.325	.002	
Error	1.452	32	.045			

Table 4.22: Analysis of variance – between-subjects effects

A statistically significance ( $p = .000$ ) was also observed with respect to the time factor present in table 4.23. This means that there was a statistically significant change in the performance of all participants in this study. The interaction between time and group is not statistically significant ( $p = .064$ ). In other words there is no statistically significant difference between the two groups. However, since the p-value is only slightly above the significant level an exploratory post-hoc analysis was conducted to see possible results in case of a larger sample size.

Tests of Within-Subjects Effects						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	
Time	3.553	2	1.776	57.316	0	
Time*Group	0.177	2	0.089	2.8062	0.064	
Error (Time)	1.984	64	0.031			

Table 4.23: Analysis of variance – within-subject effects

As shown in table 4.24 there is a statistically significant difference ( $p = .000$ ) from the pre-test to the delayed-post test for all participants in both groups. A significant effect ( $p = .000$ ) can also be observed from the pre-test to the immediate post-test, however, there is no statistically significant difference ( $p = .610$  in the T Group;  $p = .391$  in the FS Group) between the immediate post-test and the delayed-post test for participants in both

groups. This suggests that there is long term retention for the culturally appropriate usage of vocabulary items.

Groups	Time		Std. Error	Sig.
T (Traditional) Group	1	2	.056	.000
	1	3	0.62	.000
	2	3	0.32	.610
FS (Frame Semantics) Group	1	2	.056	.000
	1	3	.062	.000
	2	3	.063	.391

Table 4.24: Exploratory statistically significant effects for different times in study

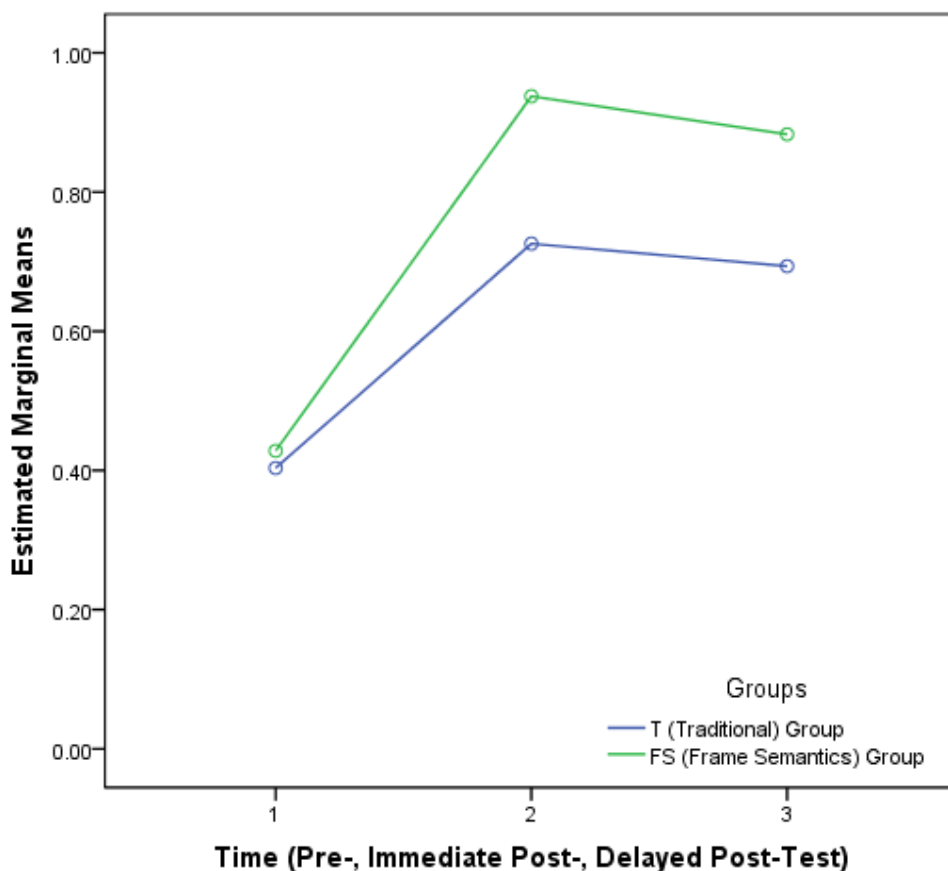


Figure 4.6: VAT scores over time

The results from the VAT test discussed above are illustrated in figure 4.6. It shows that there is an increase in the appropriate usage of vocabulary in both groups from the pre-test to the immediate post-test as well as to the delayed post-test. It can also be seen that the changes from immediate post-test to the delayed post-test are minimal which has been confirmed not to be statistically significant. Even though there are no statistically significant differences between the groups, these results suggest that there are long term retention effects for the culturally appropriate usage of vocabulary items in both groups. However, the mean scores for the FS Group are higher at the immediate and

the delayed post-test and there is a statistically significant difference between the FS Group and the T Group at those time points (immediate and delayed post-test stage) suggesting that frame semantic has benefits compare to a more traditional vocabulary learning method with regards to the culturally appropriate usage of vocabulary items.

A similar result to the one in the present study has been found by Zhao (2004). In her study she determined that raising participants' awareness of cultural differences their competence in judging appropriate word usage increased statistically significantly compared to the control group. Another interesting results was provided by the study on the acquisition of culturally loaded words conducted by Liu & Zhong (1999). The outcome of their study suggests that language learners' proficiency level does not automatically improve their knowledge of culturally loaded words. The present study seems to confirm those results and indicates that using Frame Semantics benefited participants' understanding of the cultural component embedded in words. It has also been pointed out by the MLA ad-hoc committee (2007) that "deep cultural knowledge and linguistic competence are equally necessary if one wishes to understand people and their communities" (p. 2). This means that raising language learners' cultural awareness is not only beneficial to their overall understanding of words and appropriate behavior in an L2 setting but will also provide learners' with a better understanding of the culture they encounter in their learning endeavor.

Even though Frame Semantics did not show statistically significant benefits over the more traditional method both groups increased their ability to culturally appropriately use the words. As it has been pointed out by Nation (2001) knowing words entails more

than just knowing a one-word translation. Nation's vocabulary knowledge aspects, labeled meaning and use, are all part of the cultural system which the words belong to. Therefore, being aware of cultural differences and similarities is necessary to appropriately use vocabulary in a foreign language (Hatch & Brown, 1995; Laufer, 1990a; Liu & Zhong, 1999; Zhao, 2004). The results indicated that explicit vocabulary teaching is necessary especially for words that differ in their concepts from one language or culture to another. (Schefer, 1993; Schmitt, 2000). Comparing the results with similar studies it is clear that explicit vocabulary teaching benefits students' culturally appropriate usage. Even though Frame Semantics and the traditional group did not differ significantly with regard to the statistical results (which have been due to interference of the other instructors during the teaching of chapter 8) Frame Semantics itself shows a statistically significant increase in the ability to use a word culturally appropriately. Leaving students to their own devices and not providing the necessary knowledge may interfere with their communication abilities. However, further studies are needed comparing different vocabulary instruction methods, including incidental vocabulary acquisition over a longer treatment period and for different levels of learners' language proficiency.

### **Research Question 5: Learners' Attitudes towards German Vocabulary Learning**

What are learners' attitudes reactions towards German vocabulary learning with regards to the two different approaches: Frame Semantics and a more traditional method?

The fifth research question was posed in order to investigate differences in learners' attitudes toward German vocabulary learning after being exposed to either the Frame Semantics approach or the more traditional techniques. Participants in both groups received an attitude scale that was administered with the online questionnaire prior to the treatment and after the treatment. Participants had to rate four statements on the pre-treatment attitude scale and nine questions on the post-treatment attitude scale. All scales were based on a 5-point Likert scale from 1 = strongly disagree to 5 = strongly agree. The four statements in the pre-treatment attitude scale focused on interest, enjoyment, motivation and confidence with regards to learning and using German vocabulary. The nine statements in the post-treatment attitude scale focused on the same categories, but were formulated differently than the statements presented to participants in the pre-treatment attitude scale. They differed in their wording to fit with the respective group (e.g. FS Group and T Group). 3 statements focused on interest while learning vocabulary, 2 statements focused on enjoyment while learning vocabulary, 3 statements focused on motivation while learning vocabulary and one statement focused on confidence when using German vocabulary.

In order to analyze possible group differences with regards to participants' attitudes (T Group and FS Group) a Multiple Analysis of Covariance (MANCOVA) was performed. The homogeneity of the regression slopes was investigated using scatterplots

and as both groups were similar in their slopes, it was possible to use the MANCOVA. The four categories of the pre-treatment attitude scale were used as covariates. The sum was taken for each category in order to arrive at new average scores which indicated the vocabulary learning attitudes of participants prior to the treatment of this study. The results of the nine statements of the post-treatment attitude scale were used as dependent variables in the MANCOVA. The level of confidence for the statistically analysis was set at .05.

The analysis indicated that there was no statistically significant differences between the T Group and the FS Group (Wilks' Lambda = .783, F = .788, p = .769) as illustrated in table 4.25 below.

	Effect	Value	F	Hypothesis df	Error df	Sig.	Observed Power <sup>b</sup>
Group	Pillai's Ftrace	.217	.617 <sup>a</sup>	9.000	20.00	.769	.218
	Wilks' Lambda	.783	.617 <sup>a</sup>	9.000	20.00	.769	.218
	Hotelling's Trace	.277	.617 <sup>a</sup>	9.000	20.00	.769	.218
	Ro's Larget Root	.277	.617 <sup>a</sup>	9.000	20.00	.769	.218

Table 4.25: Multiple analysis of covariance

Those results suggest that there were no statistically significant differences between the two groups with regards to their attitude of learning German vocabulary using the two approaches to learning vocabulary.

In addition to the MANCOVA a Multiple Analysis of Variance (MANOVA) was conducted to investigate whether the attitudes of the participants in the two groups (T Group and FS Group) changed with time – prior the treatment and after the treatment in



this study. The four attitude sets examined<sup>37</sup> by the attitude scale - interest, enjoyment, motivation and confidence - were used to investigate whether statistically significant changes could be observed. The nine statements used in the post-treatment attitude scale were grouped into the same four categories as explained above in order to have comparable variables. The level of confidence for this statistically analysis was set at .05.

The analysis shows only a statistically significant between-subject effect for the factor of enjoyment, with a significance of  $p = .049$ . That is, learners in the FS Group reported a significantly higher level of *enjoyment* when using Frame Semantics to learn vocabulary than did learners in the T Group, which used more traditional vocabulary learning methods. The other factors do not show any statistically significant between-subject effect (interest  $p = .064$ ; motivation  $p = .081$ ; and confidence  $p = .553$ ) as illustrated in table 4.26 below. In other words, there was no statistically difference between the experiences of the two groups for interest, motivation or confidence.

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<sup>37</sup> (a) Traditional group pre-survey, (b) Traditional group post-survey, (c) Frame Semantics group pre-survey, and (d) Frame Semantics group post-survey comprised the four data sets for this particular analysis.

Test of Between-Subject Effects						
Source	Measure	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	Interest	1245.309	1	1245.309	2585.679	.000
	Enjoyment	1080.015	1	1080.015	1372.729	.000
	Motivation	948.765	1	948.765	1070.805	.000
	Confidence	868.368	1	868.368	848.101	.000
Group	Interest	1.779	1	1.779	3.695	.064
	Enjoyment	3.309	1	3.309	4.206	.049
	Motivation	2.882	1	2.882	3.253	.081
	Confidence	.368	1	.368	.359	.553
Error	Interest	15.412	32	.482		
	Enjoyment	25.176	32	.787		
	Motivation	28.353	32	.886		
	Confidence	32.765	32	1.024		

Table 4.26: Multiple analysis of variance – between-subject effects

The mean scores for the factor of enjoyment analyzed in the attitude scale for both the T Group and the FS Group are listed in table 4.27 below.

Groups		<u>M</u>	<u>SD</u>
T Group (Traditional Group)	PreEnjoyment	4.18	.728
	PostEnjoyment	4.24	.562
	Pre-PostAttitude Increase	0.05	
FS Group (Frame Semantics Group)	PreEnjoyment	3.59	.795
	PostEnjoyment	3.94	.966
	Pre-PostAttitude Increase	0.35	

Table 4.27: Mean scores and standard deviation for attitude scale (factor: enjoyment)

Looking at the descriptive statistics of the pre-treatment attitude scale with the post-treatment attitude scale for the factor of enjoyment an increase of 0.35 can be observed in the FS Group (i.e. the mean score in the post-treatment attitude scale for the factor enjoyment is higher than in the pre-treatment attitude scale). In the T Group only an increase of .05 can be observed when comparing the mean scores of the pre-treatment attitude scale with the post-treatment attitude scale for the factor of enjoyment.

Research also found that motivation plays an important role with regards to language acquisition (Clément, et al., 1977; Clément & Kruidenier, 1985; Csizér & Dörnyei, 2005; Dörnyei & Csizér, 2002; Elley, 1989; Ely, 1986; Gardner, 1985; Gardner & MacIntyre, 1991; Lukmani, 1972; Noels, et al., 1999; Schmidt & Watanabe, 2001; Tremblay & Gardner, 1995). Yet specific studies in the field of vocabulary acquisition and motivation are rather scarce (Cortazzi & Jin, 1996; Elley, 1989; Gardner & MacIntyre, 1991; Tseng & Schmitt, 2008). This study showed that learning vocabulary with Frame Semantics is more enjoyable than using more traditional methods. As Bartley (1970) pointed out “attitude toward learning is probably the most important factor in academic success” (p. 383). Therefore, using teaching approaches and creating teaching materials that influence language learners attitude in a positive manner benefit learning outcomes, which has been suggested by Elley (1989), who found that encouraging learners’ interest with the appropriate selection of teaching materials fostered vocabulary learning. Frame Semantics uses materials that engages the students and makes them compare their L1 with the L2. In addition, the materials used helped students to visualize the cultural differences and similarities which might be more joyful than simply creating

and memorizing flashcards. However, having interviews with the participants or additional questionnaires might be helpful in future studies (which is discussed in a later section) to be able to pin-point what participants liked or disliked about their specific vocabulary teaching and learning methods.

## **CONCLUSION**

This chapter presented the results from the pre- and post-treatment questionnaire. It further provided the statistically analysis the data collected during the pre-test, immediate post-test and delayed post-test, followed by a discussion for the results for each research question.

The study was conducted in four sections of a second semester university German course at the University of Texas at Austin. It analyzed students' ability to learn the meaning of vocabulary as well as the cultural understanding of the words and vocabulary retention, compared to a traditional approach to lexical acquisition, which in this case include lists, memorization, unscrambling, oral repetition. In addition, the study attempted to examine learners' reaction and attitudes towards the new approach.

The data collected from the demographic questionnaire illustrated that language learners in both groups have similar ideas about what it means to know a language, what aspects of language knowledge are part of languages, what the most important language knowledge aspects are, and what needs to be focused on while studying. There is a general tendency among the participants to see vocabulary as most important followed by grammar, which is also visible in their study habits – most of the participants focus on

vocabulary followed by grammar. This data can be not only used for future research when looking who those aspects, but also how those ideas affect the Frame Semantics approach, and also as a means for comparison when replicating this study.

The data from the statistically analysis showed that both Frame Semantics and the more traditional method fostered vocabulary acquisition and retention between the pre- and post-tests, without significant differences *between* the groups in terms of the breadth and depth of vocabulary knowledge. It also showed that Frame Semantics is beneficial in the understanding of the cultural component of words as it fostered students' culturally appropriate usage of those words; however, there was no significant difference between the FS Group and the T Group. Finally, the results showed that Frame Semantics benefits language learners' enjoyment with regards to vocabulary learning, while other attitudes such as motivation, interest and confidence in using the words did not show a significant effect between Frame Semantics and the more traditional method. The following chapter presents the limitations of this study, contributions to applied linguistics as well as language pedagogy outlines recommendations for future research and ends with concluding remarks.

## **CHAPTER 5: CONCLUSION**

### **INTRODUCTION**

The goal of the present study was to determine whether Frame Semantics benefits students' vocabulary acquisition, retention and fosters the culturally appropriate usage of vocabulary. This quantitative research study evaluated the effects of a new approach to vocabulary teaching and learning for second-semester university students of German. It analyzed students' ability to learn the meaning of vocabulary as well as the cultural understanding of the words and vocabulary retention, compared to a more traditional approach to lexical acquisition.

A total of 34 university students enrolled in four second-semester German courses participated in the study. Each of the two groups – the Traditional Group and the Frame Semantics Group – had a total of 17 participants. While the Traditional Group used traditional methods for vocabulary learning, the Frame Semantics Group was introduced to the Frame Semantics approach. The data were collected using a demographic information questionnaire and vocabulary and cultural-appropriateness tests as well as an attitude scale. The demographic information questionnaire was completed by participants prior to the treatment, while the vocabulary and cultural-appropriateness tests as well as an attitude scale were completed both before and after completing the treatment session.

In the following section the implications for pedagogy and contributions to applied linguistics are presented, followed by the limitations of the present study. In

addition, future research possibilities are outlined and concluding remarks are given at the end.

## **CONTRIBUTIONS TO APPLIED LINGUISTICS**

Even though there is no overall theory of vocabulary acquisition (Schmitt, 2010; Schmitt & McCarthy, 1997; Takač, 2008) the field of applied linguistics expanded its research into different aspects of vocabulary acquisition and began increasing their understanding of certain aspects important to vocabulary acquisition. A major problem is that vocabulary acquisition is a highly complex system and studies are usually focused on one aspect of this vast field. As suggested by Schmitt (2010) “it will probably take a large number of studies using a combination of methodologies before the key developmental patterns become obvious” (p. 36).

The current study adds to the ongoing discussion in the sub-field of vocabulary acquisition, especially studies concerned with teaching and learning methods such as semantic mapping. Only a few studies (Brown & Perry, 1991; Scribner, 2000) have examined semantic mapping in an L2 setting. Furthermore, it uses a tool, Frame Semantics, suggested for vocabulary teaching and learning for quite some time, which has never been researched in the second language acquisition context prior to this study. Research has been conducted on semantic and thematic clusters and seems to come to a consensus of benefits of thematic over semantic clustering. Since frames can be understood as thematic clusters this study adds to this research strand.

Furthermore, culture is gaining increasing recognition not as a fifth skill but as a construct that permeates all aspects of a foreign language. The importance of culture for language has been pointed out by many scholars (Kramsch, 1989; MLA, 2007) and not just culture but the connection between culture and words (Jiying, 2004; Laufer, 1990a; Simone, 1987; Steele, 1990; Zhao, 2004). Research studies on ways in which to teach the cultural component embedded in words to language learners are rare, but the importance of raising learners' cultural awareness has been pointed out multiple times in recent years (MLA, 2007; Liu & Zhong, 1999; Zhao, 2004). This study belongs to those research studies (Liu & Zhong, 1999; Zhao, 2004) and the results can help inform classroom teaching. This study also uses an actual classroom setting, which makes the research applicable to real life. Therefore, pedagogical implications are presented in the following section.

## **IMPLICATIONS FOR PEDAGOGY**

The results of this study add to the body of literature related to semantic mapping in the foreign language classroom. Since research results in literature in this area of vocabulary acquisition are varied (Sagarra & Alba, 2006) as to the effectiveness of semantic mapping for vocabulary acquisition and as to the usefulness of semantic mapping as a vocabulary teaching tool, the results of this study add to the ongoing discussion, and helps to determine whether or not this method is a useful tool in the foreign language classroom.



Furthermore, Frame Semantics has been mentioned in the linguistics literature as a possible useful tool for vocabulary teaching (in the L2), however, it has not actually been implemented in L2 teaching contexts, and its benefits for vocabulary teaching and learning have not been studied prior to this study. More studies in a similar vein – with more participants, more presentations of semantic frames, etc. – are necessary before we can draw general conclusions. However, this study suggests that Frame Semantics is at least as beneficial as more traditional learning methods. In addition, it showed that Frame Semantics may increase learners’ cultural awareness (e.g. differences and similarities between the L1 and the L2) and therefore helps them to use a word more culturally appropriately. As mentioned by Zhao (2004) “language and culture can’t be treated separately because they are closely intertwined and language is deeply embedded in culture” (p. 49). Therefore, a suggestion for L2 teaching, resulting from this and previous studies (Zhao, 2004; Liu & Zhong, 1999) is to include or even combine the teaching of culture and vocabulary, especially with regards to culturally loaded words, and words not having a translational equivalent. Teaching certain words explicitly is necessary and important for vocabulary acquisition, not only for breadth of knowledge (e.g. the amount of words) but even more for depth of knowledge (e.g. detailed knowledge of words (i.e. grammatical function, collocations, usage, etc.) and its knowledge aspects are known) (Coady, 1997). Using the results from this study and the knowledge from previous research as a starting point, teachers should give language learners the opportunity to learn words in a cultural context. One possible way of doing this is using Frame Semantics, which follows the criteria for selecting, presenting and practicing vocabulary

outlined by Spinelli and Siskin (1992). They state that vocabulary should be presented in culturally-authentic fields and networks of relationships, which also fits in with research findings by Tinkham (1993, 1994, 1997) and Waring (1997) who found benefits of thematic clusters (but not semantic clusters). Spinelli and Siskins' second point is to present and practice vocabulary that highlight cultural differences between the L1 and L2; they suggest using authentic visuals in which the L1 and L2 culture can be compared, to practice a word's denotation and connotations and to present and practice vocabulary in ways that will reinforce appropriate behavior in the L2 culture. Giving students these opportunities will not only lead to better language knowledge and improvement of the four skills (reading, listening, writing, speaking) but will also foster appropriate behavior and communication in an L2 language setting.

## **LIMITATIONS**

The results of the present study should be interpreted cautiously and the methodological limitations must be addressed. First, the potential population pool from which the participants could be selected was limited. In the fall semester of 2010 four second semester beginning German classes were offered. In this classroom-based research, participants were from intact groups, either the Frame Semantics Group (FS Group) or the Traditional Group (T Group). Whether the intact groups were a Frame Semantics group or a Frame Semantics Group was assigned randomly. In addition, all four second semester beginning German courses were taught by a different instructor, which made it difficult to control the content to which participants were exposed,

especially the vocabulary topics used in this study, even though the instructors were specifically instructed not to discuss the vocabulary items used in this study outside of the treatment. Due to those conditions, the results of this current study may only be applicable to conditions similar to those in this study and the ability to generalize may be limited. On the one hand, given those conditions, the study was designed in the best possible way in order to take full advantage of the available recourses, while not unduly impacting the curriculum, thus negatively affecting the learners, the course, or the participants' classroom performance. On the other hand, these natural conditions made the data much more realistic and applicable to actual classroom practices. Ellis (1997) citing Nunan (1991) points out that "much of SLA research takes place in settings other than the classroom" (p. 71). Ellis (1997) further states citing Wright (1992) that "even research that has taken place in classrooms is often not really research on classrooms" (p. 71). Therefore, there is a need for realistic empirical studies.

Another limitation that might have affected the outcome of this study was the small same size of participants ( $N=34$ ). The number of participants was limited because participants dropped the course, decided not to participate in the study, did not complete the online questionnaire or missed class on the treatment day and/or test days. A larger sample size might have changed the results of this study, especially with regards to statistically significance.

The third limitation was the time spent with both the Traditional Group and the Frame Semantics Group. Longer exposure to either Frame Semantics or the traditional vocabulary learning techniques could have changed the results of this study. A longer

exposure and intensive work with either method could have changed the attitude toward vocabulary learning in German and a statistically significance could possibly be observed for all factors of the attitude scale. Therefore, future research studies should examine the long-term exposure effects of Frame Semantics as a potential teaching tool, perhaps comparing it to a broader range of vocabulary teaching practices, as discussed by Sagarra & Alba (2006).

A fourth limitation was the memory effect that might have affected participants and might have come from the vocabulary tests and culturally appropriateness tests. Even though lexical items were rearranged for each test (both VKS and VAT) and each time (pre-, immediate post-, and delayed post-treatment) in a random order to partially control for this, memory effects might have influenced participants' responses.

Lastly, the length of the online questionnaires as well as the VKS (vocabulary knowledge scale test) may have affected the results of this study. Even though it only took approximately 15-20 minutes for the pre-treatment online questionnaire, and 10-15 minutes for the post-treatment online questionnaire, it is possible that participants gave random answers in order to finish more quickly. However, the majority of participants took the time to answer open-ended questions, which points towards the fact that participants gave honest answers when responding to questions in the online questionnaire. As for the vocabulary tests, having to provide not just a one-word translation but multiple answers in the form of synonyms, opposites, sentences or even multiple meanings might be tiring for participants and they might have chosen to rate their knowledge lower in order to not have to provide additional information or just a

simple one word translation. Participants did not give additional lexical items that were not asked for in the test which points to this fact. Yet it should be pointed out, that many participants tried to give answers that require at least the translation, a complete sentences or even multiple meanings of the word in questions, which means that the assumption can be made that a lot of them wanted to provide the knowledge of the vocabulary they thought they had.

## **RECOMMENDATIONS FOR FUTURE RESEARCH**

This study was designed to determine whether Frame Semantics is a useful tool for the foreign language classroom and beneficial to students' vocabulary acquisition as well as their knowledge of cultural understanding of vocabulary items. This study did not provide any statistically significant effects between the FS Group and the T Group with regards to breadth and depth of knowledge as well as culturally appropriate usage of words. Yet it indicated that both groups experienced a statistically significant effect over time for breadth and depth of knowledge as well as the culturally appropriate usage of words. The results also indicate that using Frame Semantics is more enjoyable for the learning process compared to the more traditional techniques. However, this study has provided several areas where future research is recommended.

As it has been pointed out by Schmitt (2010), a lack of replications of studies in vocabulary research is a common difficulty. Therefore, this study can be considered as a useful starting point for similar research or replication to see whether the findings apply in other settings as well. In addition, replicating this study with a larger population is

valuable. Furthermore, a longer time period for this study should be selected, in which the study participant work with the Frame Semantics approach on a regular basis and in different thematic units. Using such an approach would allow the researcher to analyze different lexical fields and frames and draw more conclusive conclusions about the benefits of Frames Semantics not only as a teaching tool, but for vocabulary acquisition. In addition, the incremental nature of vocabulary (Hulstijn, 1992; Nation, 1990, 2001; Schmitt, 2000) can be analyzed using a long-term study.

Future research with language learners beyond the beginning level (intermediate and advanced learners) is necessary in order to have a comparison of the benefits of Frame Semantics for vocabulary acquisition at different proficiency levels. It would be interesting to examine if more proficient students with an extended vocabulary base would be able to benefit more from Frame Semantics than beginning students.

Researching and comparing Frame Semantics with different methods of vocabulary teaching and learning methods such as studies conducted by Sagarra & Alba (2006) who compared rote memorization, keyword method and semantic mapping and using longer treatment time may yield interesting results and will expand the field of research into vocabulary acquisition, which is still needed.

Focusing on the breadth of knowledge that students might be able to develop using the Frame Semantics approach, especially at the beginning level, would be another recommendation for future research. Giving students the option to write down additional words not covered in the test that they learned during the treatment did not provide any results. Participants in this study did not supply any additional words. However, asking

participants to provide words is not the most effective method to identify additional words participants know. Instead, adding words that came up during the treatment but were not the specific focus of the study might be a better way to acquire an understanding of participants' knowledge of those lexical items.

In addition, studying the effects of vocabulary learning methods in a realistic classroom setting will contribute to the field of SLA. Both Nunan (1991) and Wright (1992) discuss the importance and the need for realistic empirical studies (i.e., studies that collect actual data but are grounded in the real classroom environment). Those classroom studies investigating – in this case - Frame Semantics can also investigate the effectiveness of this approach for different levels of proficiency. Using Frame Semantics in higher proficiency levels (e.g. 3<sup>rd</sup> year or 4<sup>th</sup> year) may have more benefits, since vocabulary is incremental in nature. Students at higher levels already know certain vocabulary knowledge aspects and using semantic frames could benefit their expansion of their depth of knowledge.

Furthermore, different frames need to be analyzed not only on a semantically level but also on a syntactic level, meaning that their syntactic realizations from one language to other languages must be investigated in order to determine whether the complexity of frames affects language learners' ability of learning some frames more easily than others. (e.g. are frames with the same or similar valence patterns in the native and the target language easier to learn; are less abstract frames such as the *forward motion* frame easier to learn compared to frames with different valence patterns and more complex and abstract frames, or are frames evoked by only one lexical unit as in the

case of *Kulanz* ('the willingness of a company after a commercial transaction to provide accommodations or be generous towards the customer') harder to acquire). Using this analysis, language textbooks must be examined to see if they can be arranged by means of frames – starting with easier frames and having more abstract, frames in later chapters. Using this approach will help to determine what frames should be introduced at what time helping in the development of materials and the ultimate goal of an online frame based vocabulary learning tool.

## **CONCLUDING REMARKS**

This study was the first to implement Frame Semantics as a language teaching tool in the second language classroom. Even though studies have been conducted looking at the benefits of semantic mapping in the foreign language classroom (Brown & Perry, 1991; Moore & Bailey, 1992; Scribner, 2000), they have not been combined with the concepts underlying Frame Semantics.

The present study used a pre-treatment – immediate post-treatment – delayed post-treatment test design to investigate potential benefits of Frame Semantics versus more traditional vocabulary learning techniques for vocabulary acquisition. In addition, this study analyzed whether Frame Semantics would profit language learners' usage of vocabulary in a culturally appropriate manner and improve their attitude towards vocabulary learning in a positive way.

It was argued that the Frame Semantics approach would exhibit increased vocabulary learning outcomes with regards to vocabulary recall and retention compared



to the Traditional Group (T Group). Furthermore, it was hypothesized that using Frame Semantics would be beneficial to students depth of vocabulary knowledge, especially with respect to using vocabulary items culturally appropriate. In addition, it was hypothesized that using Frame Semantics would significantly influence the positive attitude of the FS Group compared to the T Group. However, the results of this study do not allow us to make specific claims of the benefits of Frame Semantics over more traditional vocabulary learning techniques, although they do suggest a trend toward the effectiveness of Frame Semantics that help beginning learners of German to understand the cultural component embedded in lexical items and use vocabulary culturally more appropriately in the target language. The participants that were exposed to Frame Semantics did not appear to have an advantage in terms of vocabulary knowledge, as compared to participants who did use the more traditional vocabulary learning techniques.

As pointed out by Fillmore and Atkins (1992) Frame Semantics uses the underlying cultural information, such as experiences, practices and beliefs known to native speakers, to structure meaning. This meaning needs to be acquired by language learners who want to be able to communicate appropriately in the target culture. The results of this study show that using both traditional methods (creating flashcards, unscrambling words, oral repetition) and Frame Semantics for vocabulary teaching is beneficial to second semester beginning learners of German with regards to vocabulary acquisition and retention. Furthermore, this study showed that using Frame Semantics had positive learning outcomes for participants with respect to the culturally appropriate

usage of vocabulary. This suggests, that Frame Semantics is a useful tool to visualize cultural differences and similarities embedded that in turn will help language learners to use vocabulary items appropriately in an L2 cultural setting, possibly reducing miscommunication or even communication breakdown, but also raising awareness of another culture helping them to gain a better understanding for actions, behaviors and traditions of the foreign and their own culture by means of comparison.

## **APPENDICES**

## Appendix A: Native Speaker Questionnaire and Vocabulary Appropriateness Test (VAT)

### Dissertation: AppropriatenessTest (Native Speakers of German)

#### Verständnis von Wortbedeutungen - Persönliche Fragen

Vielen Dank für Ihre Hilfe bei meiner Studie für meine Doktorarbeit. Sie brauchen ca. 10-15 Minuten, um die Fragen zu beantworten.

In dem folgenden Fragebogen bitte ich Sie Sätze auf einer Skala von 1-6 nach semantischer und/oder kultureller "Richtigkeit" (angemessener Verwendung) zu beurteilen.

Da für das Verständnis von Wortbedeutungen auch Altersunterschiede, Geschlecht, usw. eine Rolle spielen können bitte ich Sie auch einige persönliche Fragen zu beantworten. Es werden aber keine Fragen gestellt die Ihren Namen, Adresse, usw. preisgeben. Die Studie ist anonym.

#### 1. Geschlecht?

- männlich  
 weiblich

#### 2. Wie alt sind Sie?

- unter 18  
 zwischen 18 und 25  
 zwischen 25 und 30  
 über 30

#### 3. Welche Schule besuchen Sie momentan? oder Welchen Schulabschluss haben Sie?

- Hauptschule  
 Realschule  
 Gymnasium  
 Gesamtschule  
 Fachoberschule  
 Andere Schule (bitte hier angeben)

**4. Sprechen Sie andere Sprachen (außer Deutsch)?**

Wenn ja, geben Sie bitte an welche und wie gut Ihre Kenntnisse sind.

Bitte geben Sie auch an, wenn Sie eine Sprache nicht sprechen.

Bitte geben Sie auch weitere Sprachen die Sie sprechen an.

	Spreche ich nicht	Grundkenntnisse	Fortgeschritten	Fließend	Muttersprache
Arabisch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinesisch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Englisch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Französisch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Italienisch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spanisch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Türkisch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

andere Sprachen:

**5. Wenn Sie andere Sprachen sprechen:**

Wie oft sprechen Sie diese Sprachen?

- immer
- fast jeden Tag
- einmal in der Woche
- einmal im Monat
- nur im Urlaub
- ganz selten

Wenn Sie mehrere Sprachen sprechen, geben Sie bitte an wie oft Sie diese Sprachen verwenden:

**6. Waren Sie schon einmal laenger im Ausland? (laenger als 3 Monate)**

Wenn ja, wo?

Land 1	<input type="text"/>
Land 2	<input type="text"/>
Land 3	<input type="text"/>
Land 4	<input type="text"/>
Land 5	<input type="text"/>
Land 6	<input type="text"/>

7. Bitte geben Sie bei den folgenden Sätzen an, ob die Wörter die zwischen den \*Sternchen\* geschrieben sind semantisch und/oder kulturell angemessen verwendet wurden.

Die Skala geht von 1-5.

1 = absolut nicht richtig/angemessen verwendet (Ich würde das Wort nie so verwenden.)

...

5 = absolut richtig/ angemessen verwendet (Ich würde das Wort auf jeden Fall so verwenden.)

	1 - absolut nicht richtig/angemessen verwendet	2 - nicht richtig verwendet	3 - etwas fehlerhaft verwendet	4 - richtig verwendet	5 - absolut richtig verwendet
1. Thomas habe ich vor zwei Jahren kennengelernt und wir spielen zweimal im Monat Tennis. Er ist ein *Bekannter* von mir.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Thomas habe ich vor zwei Jahren kennengelernt und wir spielen zweimal im Monat Tennis. Er ist ein *Freund* von mir.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Anna und Silvia gehen in die gleiche Klasse und kennen sich seit 7 Jahren. Sie machen fast jeden Tag etwas gemeinsam nach der Schule. Sie sind *Freundinnen*.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Anna und Silvia gehen in die gleiche Klasse und kennen sich seit 7 Jahren. Sie machen fast jeden Tag etwas gemeinsam nach der Schule. Sie sind *Schulfreundinnen*.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Wenn Sie Kommentare haben bitte hier angeben:

8. Bitte geben Sie bei den folgenden Sätzen an, ob die Wörter die zwischen den \*Sternchen\* geschrieben sind semantisch und/oder kulturell angemessen verwendet wurden.

Die Skala geht von 1-5.

1 = absolut nicht richtig/angemessen verwendet (Ich würde das Wort nie so verwenden.)

...

10 = absolut richtig/ angemessen verwendet (Ich würde das Wort auf jeden Fall so verwenden.)

	1 - absolut nicht richtig/angemessen verwendet	2 - nicht richtig verwendet	3 - etwas fehlerhaft verwendet	4 - richtig verwendet	5 - absolut richtig verwendet
5. Tim ist Annas Freund. Die zwei *verabreden* sich seit einem Jahr.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Tim ist Annas Freund. Die zwei *sind* seit einem Jahr *zusammen*.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Herr Eller und Herr Probs arbeiten in der gleichen Abteilung bei Simens. Herr Eller ist ein *Kollege* von Herrn Probs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Herr Eller und Herr Probs arbeiten in der gleichen Abteilung bei Simens. Herr Eller ist ein *Kumpel* von Herrn Probs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Wenn Sie Kommentare haben bitte hier angeben:

**9. Bitte geben Sie bei den folgenden Sätzen an, ob die Wörter die zwischen den \*Sternchen\* geschrieben sind semantisch und/oder kulturell angemessen verwendet wurden.**

**Die Skala geht von 1-5.**

**1 = absolut nicht richtig/angemessen verwendet (Ich würde das Wort nie so verwenden.)**

...

**10 = absolut richtig/ angemessen verwendet (Ich würde das Wort auf jeden Fall so verwenden.)**

	1 - absolut nicht richtig/angemessen verwendet	2 - nicht richtig verwendet	3 - etwas fehlerhaft verwendet	4 - richtig verwendet	5 - absolut richtig verwendet
9. Tim und Susi wollen heute gemeinsam Fussball spielen. Tim sagt: „Ich ruf ein paar *Kollegen* an, dann haben wir mehr Spieler.“ Nach einer halben Stunde kommen auch schon fünf seiner Freunde.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Deine Freunde überraschen dich mit einem Konzertticket für deine Lieblingsband. Du sagst: „Ich liebe euch Jungs*.“	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Ein Bekannter von dir hilft dir mit einer Aufgabe. Du bedankst dich bei ihm indem du sagst: „Du bist toll. *Ich liebe dich*.“	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Ich habe Sven letzte Woche bei einer Party kennengelernt. Wir haben morgen eine *Verabredung* und wir wollen zum Essen gehen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Wenn Sie Kommentare haben bitte hier angeben:

**10. Bitte geben Sie bei den folgenden Sätzen an, ob die Wörter die zwischen den \*Sternchen\* geschrieben sind semantisch und/oder kulturell angemessen verwendet wurden.**

**Die Skala geht von 1-5.**

**1 = absolut nicht richtig/angemessen verwendet (Ich würde das Wort nie so verwenden.)**

...

**10 = absolut richtig/ angemessen verwendet (Ich würde das Wort auf jeden Fall so verwenden.)**

	1 - absolut nicht richtig/angemessen verwendet	2 - nicht richtig verwendet	3 - etwas fehlerhaft verwendet	4 - richtig verwendet	5 - absolut richtig verwendet
13. Ich bin mit Tina seit zwei Jahren zusammen. Ich *liebe* sie.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Ich *liebe* meine Mutter.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Ich *liebe* meine Eltern.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Ich habe meine Eltern *lieb*.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Wenn Sie Kommentare haben bitte hier angeben:

## **Appendix B: Participants Online Questionnaire – Pre-Treatment (both groups)**

### **Dissertation: Pre-Treatment Questionnaire**

The purpose of this questionnaire is to collect demographic information, information about your language learning experience and your language learning habits.

It takes about 10-15 minutes to complete this questionnaire.

Your answers will remain completely confidential. Thank you very much for taking the time to complete this questionnaire.

**\* 1. At the beginning of the study you received a number.**

**Please enter this number in the text box below. Please use the same number for any test and questionnaire in this study.**

**This study is anonymous. Using this number will help me connect your answers/responses from this part to the next as well as to the tests. Thank you for your help and time with this study.**

**\* 2. What is the name of your professor?**

**Please provide the last name in the space provided below:**

**\* 3. What is your gender?**

female

male

**\* 4. How old are you?**

younger than 18

18-20

21-23

24-26

27-29

30-32

above 33



**\* 5. What are your primary reasons for taking this course?**

**Please check all that apply:**

- a) to fulfill the general language requirement
- b) to communicate better with my family
- c) to learn about the German cultures
- d) to improve my language skills for my current or future job(s)
- e) to improve my GPA
- f) to talk to my friend
- g) to listen to and/or watch German TV, films, music, and radio
- h) to visit German websites
- g) to read German newspapers, books and/or magazines
- i) to read academic journals written in German
- j) to learn something about my ancestors
- k) other (please specify in the space below)

Other (please specify)

**\* 6. If you speak other languages besides English please indicate the level of proficiency in those languages:**

	Beginner	Intermediate	Advanced	Near Native	Native Speaker	Bilingual Speaker (this language and English)
Spanish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
French	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
German	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Italian	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Russian	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Arabic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Greek	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify the language(s) and proficiency(s))

**\* 7. How long you have been studying or have been able to speak these languages for?**

Spanish	<input type="text"/>
German	<input type="text"/>
Italian	<input type="text"/>
French	<input type="text"/>
Russian	<input type="text"/>
Arabic	<input type="text"/>
Greek	<input type="text"/>
Other (please indicate what language)	<input type="text"/>
Other (please indicate what language)	<input type="text"/>
Other (please indicate what language)	<input type="text"/>
Other (please indicate what language)	<input type="text"/>
Other (please indicate what language)	<input type="text"/>

**\* 8. For what purpose do you use the other language you selected above?**

	To talk to my family	For business purposes	To talk to friends	To communicate on the Internet (Facebook, Twitter, Blogs, etc.)	Schoolwork
Spanish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
German	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Italian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
French	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Russian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arabic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Greek	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify the language(s) and the purpose(s) you use it)

The following questions and statements are about your language learning habits, general attitudes, impressions, and feelings when it comes to learning new vocabulary in German. Please answer truthfully by selecting an appropriate answer, give more information where needed or by indicating on the scale which statement generally applies to you.

There is no right or wrong answer. Above all, the answers you give and the statements you choose will not be a reflection of your performance in your German class, nor will it affect your grade or how you are perceived in your class.

**\* 9. What do you think it means to know a language? (e.g. What elements make-up a language?)**

**\* 10. Which of the following is part of a language? Please select all choices that you think are part of a language.**

- a) Culture
- b) Grammar
- c) Non-verbal communication (e.g. body language, gestures, facial expressions)
- d) Pragmatics (social communication skills e.g. greetings, taking turns in conversations)
- e) Vocabulary
- f) Other (please specify)

**\* 11. Please rank the following aspects of a language from most important to least important with regards to knowing a language.**

	most important	important	neutral	less important	least important
a) Culture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Grammar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Non-verbal communication (e.g. body language, gestures, facial expressions)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Pragmatics (social communication skills e.g. greetings, taking turns in conversations)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) Vocabulary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (if there is another area please specify here and indicate its importance for knowing a language)

**\* 12. Please comment on your ranking choices above. Why did you rank the aspects of a language the way you did? or Provide comments about the ranking. Do you think one aspect is more important and why?**

**\* 13. On what area of language do you spend the most time when studying?**

- a) Culture
- b) Grammar
- c) Non-verbal communication (e.g. body language, gestures, facial expressions)
- d) Pragmatics (social communication skills e.g. greetings, taking turns in conversations)
- e) Vocabulary
- f) Other (please specify)

**\* 14. Follow-up for Question 13:**

**Why do you spend most of your time on the area of language you selected in question 13?**

- \* 15. Are there words that are easier for you to learn and to remember than others? Please explain your answer in the space provided below (give an example if applicable).

- \* 16. How is new vocabulary presented/introduced in class? Please use the comment field below for your response.

- \* 17. Would you change something with regards to vocabulary teaching/instruction in the foreign language classroom?  
If so, please specify (if not, simply write "no" in the space provided below).

- \* 18. Respond to the following statements and indicate the strength of your agreement or disagreement with the statement.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am interested in learning new vocabulary in German.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy learning new vocabulary in German.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am motivated to learn new vocabulary in German.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident using new vocabulary in German.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe vocabulary is an important aspect of a language.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe grammar is more important than vocabulary.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vocabulary is covered enough in the classroom.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wish vocabulary would be covered more frequently in class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vocabulary is not covered in class - I am expected to learn it at home.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My instructor gave me good tools to learn vocabulary on my own.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't know how to study vocabulary.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vocabulary is presented effectively in class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vocabulary is not presented effectively in class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vocabulary is not presented in class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**\* 19. How much of your study time for German do you spend on studying/reviewing vocabulary?**

- a) 90-100%
- b) 80-90%
- c) 70-80%
- d) 60-70%
- e) 50-60%
- f) 40-50%
- g) 30-40%
- h) 20-0%
- i) I don't study vocabulary

**\* 20. How do you study vocabulary? Please list/describe your methods in the space provided below.**

**\* 21. How would you change your vocabulary learning methods? Please describe/list your method(s) in the field provided below.**

**\* 22. If you come across a word that you are unfamiliar with what do you do?**

**\* 23. With regards to question 22:**

**You just came across an unfamiliar word and you figured out what the meaning is - what do you do to retain this meaning of this word for the future?**

**Appendix C:  
Participants Online Questionnaire – Post-Treatment (Traditional group)**

**Dissertation: Post-Treatment Questionnaire (Control Groups)**

The purpose of this questionnaire is to collect information about your language learning experience and your language learning habits.

It takes about 10-15 minutes to complete this questionnaire.

Your answers will remain completely confidential. Thank you very much for taking the time to complete this questionnaire.

**\* 1. Please enter your unique "participant" name in the text box below. Please use the same name you used for the first questionnaire.**

**This study is anonymous. Using this unique "participant" name will help me connect your answers/responses from this part to the next. Thank you for your help and time with this study.**

**\* 2. What is the name of your professor?**

**Please provide the last name in the space provided below:**

**\* 3. What are your primary reasons for taking this course?**

**Please check all that apply:**

- a) to fulfill the general language requirement
- b) to communicate better with my family
- c) to learn about the German cultures
- d) to improve my language skills for my current or future job(s)
- e) to improve my GPA
- f) to talk to my friend
- g) to listen to and/or watch German TV, films, music, and radio
- h) to visit German websites
- g) to read German newspapers, books and/or magazines
- i) to read academic journals written in German
- j) to learn something about my ancestors
- k) other (please specify in the space below)

Other (please specify)

The following questions and statements are about your language learning habits, general attitudes, impressions, and feelings when it comes to learning new vocabulary in German. Please answer truthfully by selecting an appropriate answer, give more information where needed or by indicating on the scale which statement generally applies to you.

There is no right or wrong answer. Above all, the answers you give and the statements you choose will not be a reflection of your performance in your German class, nor will it affect your grade or how you are perceived in your class.

**\* 4. What do you think it means to know a language? (e.g. What elements make-up a language?)**



**\* 5. Which of the following is part of a language? Please select all choices that you think are part of a language.**

- a) Culture
- b) Grammar
- c) Non-verbal communication (e.g. body language, gestures, facial expressions)
- d) Pragmatics (social communication skills e.g. greetings, taking turns in conversations)
- e) Vocabulary
- f) Other (please specify)

**\* 6. Please rank the following aspects of a language from most important to least important with regards to knowing a language.**

	most important	important	neutral	less important	least important
a) Culture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Grammar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Non-verbal communication (e.g. body language, gestures, facial expressions)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Pragmatics (social communication skills e.g. greetings, taking turns in conversations)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) Vocabulary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (if there is another area please specify here and indicate its importance for knowing a language)

**\* 7. Please comment on your ranking choices above. Why did you rank the aspects of a language the way you did? or Provide comments about the ranking. Do you think one aspect is more important and why?**

**\* 8. On what area of language do you spend the most time when studying?**

- a) Culture
- b) Grammar
- c) Non-verbal communication (e.g. body language, gestures, facial expressions)
- d) Pragmatics (social communication skills e.g. greetings, taking turns in conversations)
- e) Vocabulary
- f) Other (please specify)

**\* 9. Follow-up for Question 8:**

**Why do you spend most of your time on the area of language you selected in question 8?**

**\* 10. How much of your study time for German do you spend on studying/reviewing vocabulary?**

- a) 90-100%
- b) 80-90%
- c) 70-80%
- d) 60-70%
- e) 50-60%
- f) 40-50%
- g) 30-40%
- h) 20-0%
- i) I don't study vocabulary

**\* 11. How do you study vocabulary? Please list/describe your methods in the space provided below.**

**\* 12. Would you change your vocabulary learning methods?**

**Please describe/list your method(s) in the field provided below.**

**\* 13. Respond to the following statements and indicate the strength of your agreement or disagreement with the statement.**

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The new vocabulary presented in class was interesting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoyed using the material presented in class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was interested in learning new vocabulary.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was attentive while learning new vocabulary.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoyed learning new vocabulary.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was motivated to continue working with the materials presented in class during vocabulary instruction.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The vocabulary instruction increases my interest in German vocabulary learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident using the new German vocabulary presented in class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like using lists to learn new vocabulary.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Appendix D:  
Participants Online Questionnaire – Post-Treatment (Frame Semantics group)**

**Dissertation: Post-Treatment Questionnaire (Treatment Group)**

The purpose of this questionnaire is to collect information about your language learning experience and your language learning habits.

It takes about 10-15 minutes to complete this questionnaire.

Your answers will remain completely confidential. Thank you very much for taking the time to complete this questionnaire.

- \* 1. Please enter your unique "participant" name in the text box below. Please use the same name you used for the first questionnaire.**

**This study is anonymous. Using this unique "participant" name will help me connect your answers/responses from this part to the next. Thank you for your help and time with this study.**

- \* 2. What is the name of your professor?  
Please provide the last name in the space provided below:**

**\* 3. What are your primary reasons for taking this course?**

**Please check all that apply:**

- a) to fulfill the general language requirement
- b) to communicate better with my family
- c) to learn about the German cultures
- d) to improve my language skills for my current or future job(s)
- e) to improve my GPA
- f) to talk to my friend
- g) to listen to and/or watch German TV, films, music, and radio
- h) to visit German websites
- g) to read German newspapers, books and/or magazines
- i) to read academic journals written in German
- j) to learn something about my ancestors
- k) other (please specify in the space below)

Other (please specify)

The following questions and statements are about your language learning habits, general attitudes, impressions, and feelings when it comes to learning new vocabulary in German. Please answer truthfully by selecting an appropriate answer, give more information where needed or by indicating on the scale which statement generally applies to you.

There is no right or wrong answer. Above all, the answers you give and the statements you choose will not be a reflection of your performance in your German class, nor will it affect your grade or how you are perceived in your class.

**\* 4. What do you think it means to know a language? (e.g. What elements make-up a language?)**

**\* 5. Which of the following is part of a language? Please select all choices that you think are part of a language.**

- a) Culture
- b) Grammar
- c) Non-verbal communication (e.g. body language, gestures, facial expressions)
- d) Pragmatics (social communication skills e.g. greetings, taking turns in conversations)
- e) Vocabulary
- f) Other (please specify)

**\* 6. Please rank the following aspects of a language from most important to least important with regards to knowing a language.**

	most important	important	neutral	less important	least important
a) Culture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Grammar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Non-verbal communication (e.g. body language, gestures, facial expressions)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Pragmatics (social communication skills e.g. greetings, taking turns in conversations)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) Vocabulary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (if there is another area please specify here and indicate its importance for knowing a language)

**\* 7. Please comment on your ranking choices above. Why did you rank the aspects of a language the way you did? or Provide comments about the ranking. Do you think one aspect is more important and why?**

**\* 8. On what area of language do you spend the most time when studying?**

- a) Culture
- b) Grammar
- c) Non-verbal communication (e.g. body language, gestures, facial expressions)
- d) Pragmatics (social communication skills e.g. greetings, taking turns in conversations)
- e) Vocabulary
- f) Other (please specify)

**\* 9. Follow-up for Question 8:**

**Why do you spend most of your time on the area of language you selected in question 8?**

**\* 10. How much of your study time for German do you spend on studying/reviewing vocabulary?**

- a) 90-100%
- b) 80-90%
- c) 70-80%
- d) 60-70%
- e) 50-60%
- f) 40-50%
- g) 30-40%
- h) 20-0%
- i) I don't study vocabulary

**\* 11. How do you study vocabulary? Please list/describe your methods in the space provided below.**

**\* 12. Would you change your vocabulary learning methods? Please describe/list your method(s) in the field provided below.**

**\* 13. Respond to the following statements with regards to the different approach to vocabulary introduced in class and indicate the strength of your agreement or disagreement with the statement.**

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The new vocabulary presented in class was interesting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoyed using the material presented in class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was interested in learning new vocabulary.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was attentive while learning new vocabulary.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoyed learning new vocabulary.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was motivated to continue working with the materials presented with the Frame Semantics approach.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident using the new German vocabulary presented in class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Frame Semantics approach increased my interest in German vocabulary learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I prefer the Frame Semantics approach over the vocabulary lists.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



**Appendix E:**  
**Pre-Treatment Vocabulary Knowledge Scale Test (VKS)**

Unique Participation Name/Number: \_\_\_\_\_

**In the following boxes you are provided with different words. You probably do not know all of them or cannot recognize any of the words, but it is also possible that you already know some of them. Please mark (circle) the Roman numeral (I-VI) on the scale provided for each word indicating your knowledge of that word. If you select the Roman numeral III, IV, V, or VI please provide the additional information asked for in the parentheses. If you do part V, please also do part IV and if you do part VI, please also do part V.**

Please report on your knowledge of each of the words written in **bold**.

**1. der Freund**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**2. ausgehen**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**3. sich verabreden**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**4. sich mögen**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**5. die Freundin**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**6. sich treffen**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**7. der Bekannte**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**8. die Verabredung**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**9. die Beziehung**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**10. zusammen sein**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**11. miteinander gehen**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

12. **sich verlieben**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

13. **gern haben**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

14. **die Bekannte**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**15. verliebt sein**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**16. befreundet sein**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**17. lieb haben**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**18. funken**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**19. lieben**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**20. der Kumpel**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**Appendix F:  
Immediate Post-Treatment Vocabulary Knowledge Scale Test (VKS)**

Unique Participation Name/Number: \_\_\_\_\_

**In the following boxes you are provided with different words. You probably do not know all of them or cannot recognize any of the words, but it is also possible that you already know some of them. Please mark (circle) the Roman numeral (I-VI) on the scale provided for each word indicating your knowledge of that word. If you select the Roman numeral III, IV, V, or VI please provide the additional information asked for in the parentheses. If you do part V, please also do part IV and if you do part VI, please also do part V.**

Please report on your knowledge of each of the words written in **bold**.

**1. sich mögen**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**2. der Kumpel**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)



### 3. die Beziehung

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

### 4. die Verabredung

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

### 5. der Freund

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**6. befreundet sein**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_

**7. die Freundin**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**8. die Bekannte**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

9. **sich verabreden**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

10. **funken**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

11. **sich verlieben**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**12. lieben**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**13. zusammen sein**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**14. gern haben**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

15. **verliebt sein**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

16. **lieb haben**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

17. **sich treffen**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

18. **miteinander gehen**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

19. **der Bekannte**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

20. **ausgehen**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**If there are additional words that you learned that have to do with “Relationships between people” please add them to the below and provide your knowledge of the word as before.**

21. \_\_\_\_\_
- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

22. \_\_\_\_\_
- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

23. \_\_\_\_\_
- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

24. \_\_\_\_\_
- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

25. \_\_\_\_\_
- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

26. \_\_\_\_\_
- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)



- 27.** \_\_\_\_\_
- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

- 28.** \_\_\_\_\_
- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

- 29.** \_\_\_\_\_
- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

## Appendix G:

### Delayed Post-Treatment Vocabulary Knowledge Scale Test (VKS)

Unique Participation Name/Number: \_\_\_\_\_

**In the following boxes you are provided with different words. You probably do not know all of them or cannot recognize any of the words, but it is also possible that you already know some of them. Please mark (circle) the Roman numeral (I-VI) on the scale provided for each word indicating your knowledge of that word. If you select the Roman numeral III, IV, V, or VI please provide the additional information asked for in the parentheses. If you do part V, please also do part IV and if you do part VI, please also do part V.**

Please report on your knowledge of each of the words written in **bold**.

#### 1. **der Kumpel**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

#### 2. **lieb haben**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**3. der Freund**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**4. befreundet sein**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**5. die Bekannte**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**6. funken**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**7. sich verlieben**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

**8. lieben**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

9. **sich verabreden**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

10. **die Beziehung**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

11. **verliebt sein**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

12. **ausgehen**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

13. **miteinander gehen**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

14. **sich treffen**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

15. **die Verabredung**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

16. **die Freundin**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

17. **sich mögen**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_.  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_.  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

18. **der Bekannte**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
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(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

19. **zusammen sein**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

20. **gern haben**

- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)



**If there are additional words that you learned that have to do with “Relationships between people” please add them to the below and provide your knowledge of the word as before.**

21. \_\_\_\_\_
- I I don't remember having seen this word before.
  - II I have seen this word before but I don't know what it means.
  - III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
  - IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
  - V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
  - VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

22. \_\_\_\_\_
- I I don't remember having seen this word before.
  - II I have seen this word before but I don't know what it means.
  - III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
  - IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
  - V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
  - VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

23. \_\_\_\_\_
- I I don't remember having seen this word before.
  - II I have seen this word before but I don't know what it means.
  - III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
  - IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
  - V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
  - VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

- 24.** \_\_\_\_\_
- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

- 25.** \_\_\_\_\_
- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

- 26.** \_\_\_\_\_
- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

- 27.** \_\_\_\_\_
- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

- 28.** \_\_\_\_\_
- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

- 29.** \_\_\_\_\_
- I I don't remember having seen this word before.
- II I have seen this word before but I don't know what it means.
- III I have seen this word before, and I think it means \_\_\_\_\_.  
(synonym or translation)
- IV I know this word. It means \_\_\_\_\_.  
(synonym or translation)
- V I can use this word in a sentence \_\_\_\_\_  
\_\_\_\_\_  
(Write a sentence. *If you do part V, please also do part IV.*)
- VI I know multiple meanings of this word \_\_\_\_\_  
\_\_\_\_\_  
(Write all the meanings you know of this word. *If you do part VI, please also do part V*)

## Appendix H: Pre-Treatment Vocabulary Appropriate Test (VAT)

Unique Participation Name/Number: \_\_\_\_\_

A. Please read the following sentences and indicate if the underlined words in each sentence are semantically and/or socially appropriate in the specific contexts by circling one of the numbers:

- 1 = Appropriate and you would use the word  
2 = Somewhat appropriate and you probably would use the word  
3 = Somewhat inaccurate  
4 = Somewhat inappropriate and you probably would not use the word  
5 = Inappropriate and you would not use the word  
6 = I do not know what the word/sentence means.

1. Thomas habe ich vor zwei Jahren kennengelernt und wir spielen zweimal im Monat Tennis. Er ist ein Bekannter von mir.

1      2      3      4      5      6

2. Thomas habe ich vor zwei Jahren kennengelernt und wir spielen zweimal im Monat Tennis. Er ist ein Freund von mir.

1      2      3      4      5      6

3. Anna und Silvia gehen in die gleiche Klasse und kennen sich seit 7 Jahren. Sie machen fast jeden Tag etwas gemeinsam nach der Schule. Sie sind Freundinnen.

1      2      3      4      5      6

4. Tim ist Annas Freund. Die zwei verabreden sich seit einem Jahr.

1      2      3      4      5      6

5. Anna und Silvia gehen in die gleiche Klasse und kennen sich seit 7 Jahren. Sie machen fast jeden Tag etwas gemeinsam nach der Schule. Sie sind Schulfreundinnen.

1      2      3      4      5      6

6. Tim ist Annas Freund. Die zwei sind seit einem Jahr zusammen.

1      2      3      4      5      6

7. Herr Eller und Herr Probs arbeiten in der gleichen Abteilung bei Siemens. Herr Eller ist ein Kumpel von Herrn Probs.

1      2      3      4      5      6

8. Deine Freunde überraschen dich mit einem Konzertticket für deine Lieblingsband. Du sagst: „Ich liebe euch Jungs.“

1      2      3      4      5      6  
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9. Ein Bekannter von dir hilft dir mit einer Aufgabe. Du bedankst dich bei ihm indem du sagst: „Du bist toll. Ich liebe dich.“

1      2      3      4      5      6

10. Ich habe Sven letzte Woche bei einer Party kennengelernt. Wir haben morgen eine Verabredung und wir wollen zum Essen gehen.

1      2      3      4      5      6

11. Ich bin mit Tina seit zwei Jahren zusammen. Ich liebe sie.

1      2      3      4      5      6

12. Ich liebe meine Mutter.

1      2      3      4      5      6

13. Ich liebe meine Eltern.

1      2      3      4      5      6

14. Ich habe meine Eltern lieb.

1      2      3      4      5      6

## Appendix I: Immediate Post-Treatment Vocabulary Appropriate Test (VAT)

Unique Participation Name/Number: \_\_\_\_\_

A. Please read the following sentences and indicate if the underlined words in each sentence are semantically and/or socially appropriate in the specific contexts by circling one of the numbers:

- 1 = Appropriate and you would use the word**  
**2 = Somewhat appropriate and you probably would use the word**  
**3 = Somewhat inaccurate**  
**4 = Somewhat inappropriate and you probably would not use the word**  
**5 = Inappropriate and you would not use the word**  
**6 = I do not know what the word/sentence means.**

1. Anna und Silvia gehen in die gleiche Klasse und kennen sich seit 7 Jahren. Sie machen fast jeden Tag etwas gemeinsam nach der Schule. Sie sind Freundinnen.

1      2      3      4      5      6

2. Ich habe meine Eltern lieb.

1      2      3      4      5      6

3. Deine Freunde überraschen dich mit einem Konzertticket für deine Lieblingsband. Du sagst: „Ich liebe euch Jungs.“

1      2      3      4      5      6

4. Ich liebe meine Eltern.

1      2      3      4      5      6

5. Herr Eller und Herr Probs arbeiten in der gleichen Abteilung bei Simens. Herr Eller ist ein Kumpel von Herrn Probs.

1      2      3      4      5      6

6. Tim ist Annas Freund. Die zwei sind seit einem Jahr zusammen.

1      2      3      4      5      6

7. Anna und Silvia gehen in die gleiche Klasse und kennen sich seit 7 Jahren. Sie machen fast jeden Tag etwas gemeinsam nach der Schule. Sie sind Schulfreundinnen.

1      2      3      4      5      6

8. Thomas habe ich vor zwei Jahren kennengelernt und wir spielen zweimal im Monat Tennis. Er ist ein Freund von mir.

1      2      3      4      5      6

9. Thomas habe ich vor zwei Jahren kennengelernt und wir spielen zweimal im Monat Tennis. Er ist ein Bekannter von mir.

1      2      3      4      5      6

10. Ich liebe meine Mutter.

1      2      3      4      5      6

11. Ein Bekannter von dir hilft dir mit einer Aufgabe. Du bedankst dich bei ihm indem du sagst: „Du bist toll. Ich liebe dich.“

1      2      3      4      5      6

12. Ich habe Sven letzte Woche bei einer Party kennengelernt. Wir haben morgen eine Verabredung und wir wollen zum Essen gehen.

1      2      3      4      5      6

13. Tim ist Annas Freund. Die zwei verabreden sich seit einem Jahr.

1      2      3      4      5      6

14. Ich bin mit Tina seit zwei Jahren zusammen. Ich liebe sie.

1      2      3      4      5      6

**Appendix J:  
Delayed Post-Treatment Vocabulary Appropriate Test (VAT)**

Unique Participation Name/Number: \_\_\_\_\_

A. Please read the following sentences and indicate if the underlined words in each sentence are semantically and/or socially appropriate in the specific contexts by circling one of the numbers:

- 1 = Appropriate and you would use the word**  
**2 = Somewhat appropriate and you probably would use the word**  
**3 = Somewhat inaccurate**  
**4 = Somewhat inappropriate and you probably would not use the word**  
**5 = Inappropriate and you would not use the word**  
**6 = I do not know what the word/sentence means.**

1. Ich bin mit Tina seit zwei Jahren zusammen. Ich liebe sie.

1      2      3      4      5      6

2. Thomas habe ich vor zwei Jahren kennengelernt und wir spielen zweimal im Monat Tennis. Er ist ein Bekannter von mir.

1      2      3      4      5      6

3. Tim ist Annas Freund. Die zwei sind seit einem Jahr zusammen.

1      2      3      4      5      6

4. Ich habe meine Eltern lieb.

1      2      3      4      5      6

5. Tim ist Annas Freund. Die zwei verabreden sich seit einem Jahr.

1      2      3      4      5      6

6. Herr Eller und Herr Probs arbeiten in der gleichen Abteilung bei Siemens. Herr Eller ist ein Kumpel von Herrn Probs.

1      2      3      4      5      6

7. Ich liebe meine Eltern.

1      2      3      4      5      6

8. Anna und Silvia gehen in die gleiche Klasse und kennen sich seit 7 Jahren. Sie machen fast jeden Tag etwas gemeinsam nach der Schule. Sie sind Schulfreundinnen.

1      2      3      4      5      6



9. Thomas habe ich vor zwei Jahren kennengelernt und wir spielen zweimal im Monat Tennis. Er ist ein Freund von mir.

1      2      3      4      5      6

10. Ich habe Sven letzte Woche bei einer Party kennengelernt. Wir haben morgen eine Verabredung und wir wollen zum Essen gehen.

1      2      3      4      5      6

11. Anna und Silvia gehen in die gleiche Klasse und kennen sich seit 7 Jahren. Sie machen fast jeden Tag etwas gemeinsam nach der Schule. Sie sind Freundinnen.

1      2      3      4      5      6

12. Ein Bekannter von dir hilft dir mit einer Aufgabe. Du bedankst dich bei ihm indem du sagst: „Du bist toll. Ich liebe dich.“

1      2      3      4      5      6

13. Deine Freunde überraschen dich mit einem Konzertticket für deine Lieblingsband. Du sagst: „Ich liebe euch Jungs.“

1      2      3      4      5      6

14. Ich liebe meine Mutter.

1      2      3      4      5      6

**Appendix K:  
Traditional Group Handout**

**Arbeitsblatt für Zwischenmenschliche Beziehungen:**

**1. Markieren Sie die Wörter die Sie in den Videos hören.**

ausgehen – to go out/ to go on a date  
befreundet sein – being friends  
der Bekannte – male acquaintance  
die Bekannte – female acquaintance  
die Beziehung - relationship  
der Freund – male friend, boyfriend  
die Freundin – female friend, girlfriend  
funken – to spark, to hit it off  
gern haben – to like someone  
der Kumpel – buddy, pal  
lieben – to love  
lieb haben – to like someone very much  
miteinander gehen – to date (high school)  
sich mögen – to like one another  
sich treffen – to meet  
sich verabreden – to agree to meet, to arrange a date  
die Verabredung - date  
sich verlieben – to fall in love  
verliebt sein – being in love  
zusammen sein – to date, to be in a relationship

**2. Schreiben Sie die Wörter auf Notizkarten (Englisch vorne/ Deutsch hinten). Sie haben ein paar Minuten, um die Wörter zu lernen.**

**3. Buchstabenchaos: Welches Wort ist das?**

dneruf            nögem            hegnesa            ntneakbe  
                  benielrev        nkenuf            tedneurfeb

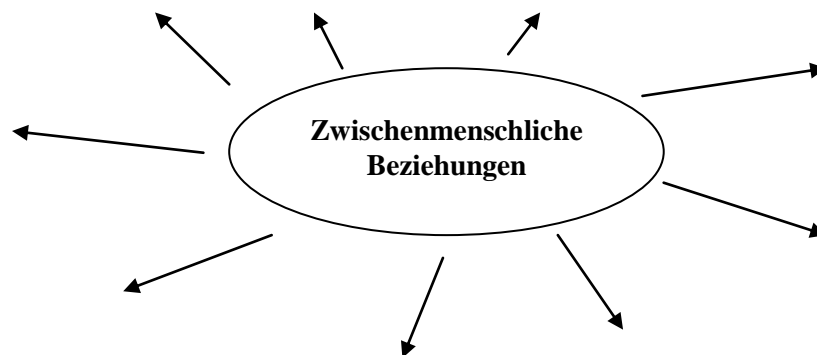
**4. Klassenspiel: Eine Person sagt ein Wort auf Englisch – oder auf Deutsch – und ein anderer Student muss die Übersetzung sagen**

**Appendix L:**

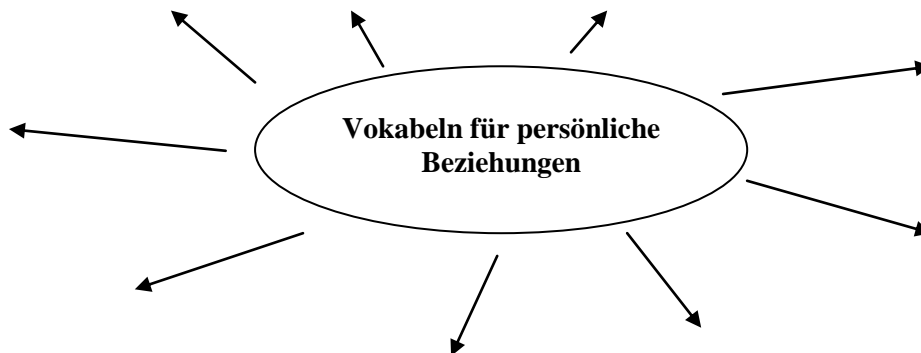
**Frame Semantics Group Handout:**

**Arbeitsblatt für Zwischenmenschliche Beziehungen:**

**1. Welche Wörter fallen Ihnen zum Wort “Verwandtschaft“ ein? Verwandtschaften sind Beziehungen zwischen Personen (zwischenmenschliche Beziehungen). Welche anderen zwischenmenschliche Beziehungen kennen Sie schon?**



**3. Welche Wörter in den Videos haben mit persönlichen Beziehungen zu tun? Schreiben Sie alle Wörter auf, die Sie hören.**



## A. Persönliche Beziehungen

Frame Definition:

The words in this frame have to do with people and the personal *Relationships* they are or can be a part of. Some of the words denote people engaged in a particular kind of *Relationship*, others denote the *Relationship*, yet others the events bringing about or ending the *Relationships*. Many of the words presuppose an understanding of states and events that must have occurred before another event takes place or before a person can be classified in a certain way.

Core Frame Elements:

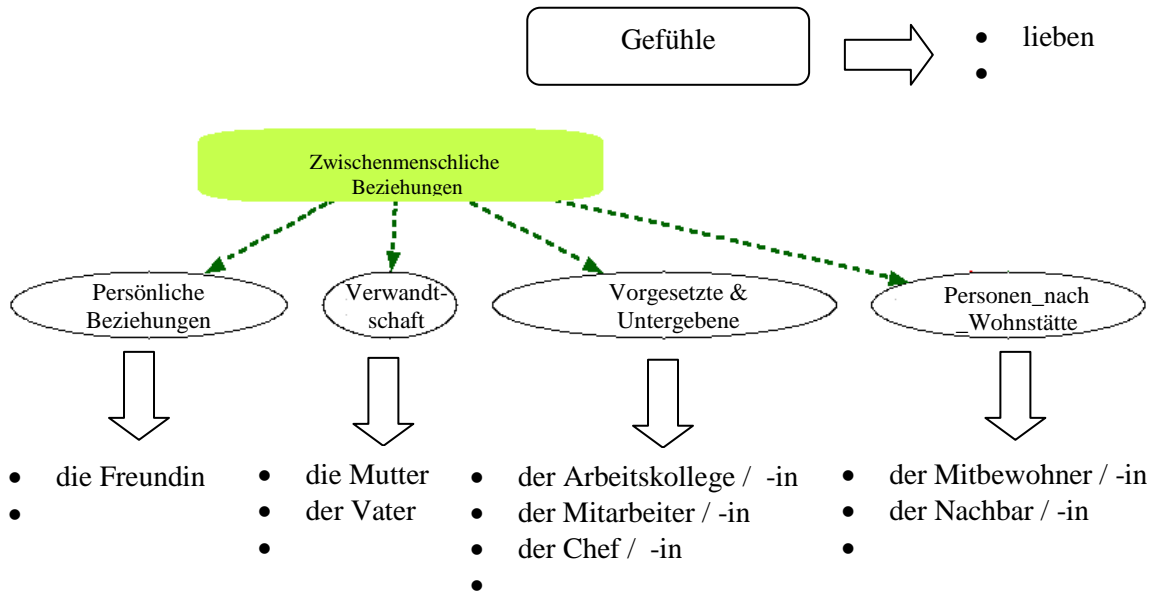
- Partner\_1, Partner\_2, Partners
- Ich liebe meinen Freund.  
(Partner\_1) (Partner\_2)  
Wir sind verliebt.  
(Partners)

Non-Core Frame Elements:

- Degree (to which an event occurs)
- Depictive (phrase describing the partner(s))
- Duration (length of relationship)
- Manner (of performing an action)
- Means (state of affairs - a act whereby a focal participant achieves an action indicated by the target)
- Relationship (between partners)
- Source (of relationship)

**4. Sortieren Sie die Vokabeln von Übung 2 und 3 in die Kategorien in der Mindmap.**

**5. Benutzen Sie die Mindmap und die Liste, um andere Vokabeln für „Zwischenmenschliche Beziehungen“ zu sortieren. Kennen Sie noch weitere Vokabeln für „Zwischenmenschliche Beziehungen“?**



1. Persönliche Beziehungen der Freund – male friend, boyfriend die Freundin – female friend, girlfriend der Bekannte – male acquaintance die Bekannte – female acquaintance der Kumpel – buddy, pal	2. Gefühle für Beziehungen sich mögen – to like one another sich verlieben – to fall in love lieben – to love lieb haben – to like someone very much gern haben – to like someone verliebt sein – being in love
3. Beziehungsarten die Beziehung - relationship zusammen sein – to date, to be in a relationship miteinander gehen – to date (high school) befreundet sein – being friends	4. weitere Ausdrücke für Beziehungen ausgehen – to go out/ to go on a date sich verabreden – to agree to meet, to arrange a date sich treffen – to meet die Verabredung - date funken – to spark, to hit it off

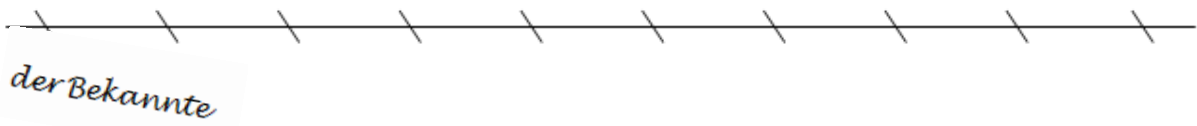
## 6. Beziehungen und Gefühle

a) Sortiere die Beziehungen, die man mit diesen Personen hat von lockerster zu engster (casual relationship to close relationship).

ein Freund (a male friend) / die Bekannte (female acquaintance) /  
 der Freund (boyfriend) / der Kumpel (buddy) /  
 der Bekannte (male acquaintance) / eine Freundin (female friend)  
 die Freundin (girlfriend)

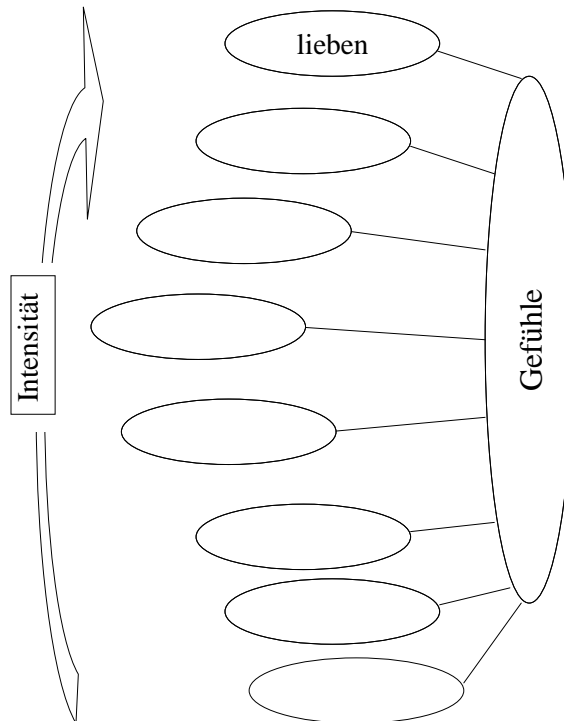
informelle/ lockere Beziehung  
 (casual relationship)

enge Beziehung  
 (close relationship)



b) Sortieren Sie die folgenden Wörter nach Intensität der Gefühle für eine andere Person.

- |                    |
|--------------------|
| a) verliebt sein   |
| b) lieben          |
| c) sich verlieben  |
| d) gern haben      |
| e) lieb haben      |
| f) sich mögen      |
| g) funken          |
| h) befreundet sein |



c) Welche Wörter von 6b kann man für die Beziehungen benutzen?

\_\_\_\_\_ der Freund      \_\_\_\_\_ die Freundin      \_\_\_\_\_ der Beakannte  
 \_\_\_\_\_ die Bekannte      \_\_\_\_\_ der Kumpel

## 7. Welche Beziehungen beschreiben die Sätze?

1. Maria kennt Susi seit dem Kindergarten. Sie treffen sich fast jeden Tag und sprechen über alle Sachen.

Maria und Susi sind \_\_\_\_\_

2. Tom und ich arbeiten bei der gleichen Firma. Wir gehen manchmal zusammen zum Mittagessen. Ich arbeite gern mit Tom. Er ist mein

\_\_\_\_\_

3. Stefan mag Susi. Sie gehen seit drei Monaten miteinander. Susi ist Stefans

\_\_\_\_\_

4. Ich kenne Anna seit fünf Monaten. Wir sind in der gleichen Yogagruppe. Wir haben einmal pro Woche Yoga. Anna ist eine \_\_\_\_\_ von mir.

5. Hans und Gregor haben sich im Golfclub kennengelernt. Sie spielen zweimal im Monat Golf. Gregor ist ein \_\_\_\_\_ von Hans.

6. Sigi und Armin kennen sich seit drei Jahren. Sie gehen oft zusammen ein Bier trinken oder spielen Fussball. Sigi ist ein \_\_\_\_\_ von Armin.

**8. Welche Frame –Elemente gibt es in den Sätzen in Übung 7? Unterschreiben Sie die Elemente und benennen Sie die Elemente.**

**Appendix M:  
Traditional Group Lesson Plan**

Time	Activity Description
5 minutes	First encounter using listening: Participants watch videos from the <i>Deutsch im Blick</i> website and underline/mark the words they hear that are listened on the vocabulary list they received at the beginning of the class. (Videos will be shown twice.). Videos: 1. Berna: <a href="http://coerll.utexas.edu/dib/vidt.php?f=08_04_int_bg_beziehungen">http://coerll.utexas.edu/dib/vidt.php?f=08_04_int_bg_beziehungen</a> (00:00:22) 2. Eva: <a href="http://coerll.utexas.edu/dib/vidt.php?f=08_01_int_ek_beziehungen">http://coerll.utexas.edu/dib/vidt.php?f=08_01_int_ek_beziehungen</a> (00:00:34) 3. Christian: Willst du mit mir gehen?: <a href="http://coerll.utexas.edu/dib/vidt.php?f=08_06_sik_christian-dating">http://coerll.utexas.edu/dib/vidt.php?f=08_06_sik_christian-dating</a> (00:00:31) 4. Guidos Meinung zum Dating: <a href="http://coerll.utexas.edu/dib/vidt.php?f=08_07_sik_guido-dating">http://coerll.utexas.edu/dib/vidt.php?f=08_07_sik_guido-dating</a> (00:01:03)
4 minutes	Discussing results: As a class: students discuss what words they heard
30 minutes	Note cards: Participants receive note cards (20 cards for each participant). Participants write the German word on one side and the English translation on the back side (they use the vocabulary list they received at the beginning of class.) After participants wrote down all 20 words they start memorizing the words using the note cards.
7 minutes	Unscrambling activity: Students have 8 words on their handout with scrambled letters. They had to unscramble the word and provide the translation.
3 minutes	Discussing results: As a class: students discuss what words they have listed on their handout
6 minutes	Translating activity: Students provide a lexical item and ask another students for the correct translation (they can give the lexical item in English or German and the selected student has to give the respective translation) – use a ball (students throw ball to select their peer to answer)
20 minutes (+ up to 15 minutes after class)	Pre-Treatment Tests – VKS & VAT



**Appendix N:  
Frame Semantics Group Lesson Plan**

Time	Activity Description
3 minutes	Brainstorming: Participants write down as many words as come to mind for the concept of <i>Beziehungen zwischen Personen</i> ('relationships between people') and words that come to mind for feelings used in relationships.
14 minutes	Sorting Activity: Participants sort the words they found into the sub-frames provided on the handout – students work in groups of 3-4 students to sort their words (Assign groups prior to activity) Class Discussion: Participants results are collected on the blackboard and sorted as a class. (Items that do not fit under relationships between people or feelings are sorted under their respective frames)
6 minutes	Videos: 1. Christian: Willst du mit mir gehen?: <a href="http://coerll.utexas.edu/dib/vid.php?f=08_06_sik_christian-dating">http://coerll.utexas.edu/dib/vid.php?f=08_06_sik_christian-dating</a> (00:00:31) 2. Guidos Meinung zum Dating: <a href="http://coerll.utexas.edu/dib/vid.php?f=08_07_sik_guido-dating">http://coerll.utexas.edu/dib/vid.php?f=08_07_sik_guido-dating</a> (00:01:03) Participants use their vocabulary list to underline/mark the words they hear. Results discussed as class: students say what words they heard
7 minutes	Discuss personal_relationship frame, frame elements Discuss additional terms with regards to frames and frame elements - Students give examples of lexical units and the frame elements they could be
15 minutes	Scales: Participants (in pairs) sort lexical items on handout on a scale 1. relationships 2. terms describing feelings and relationships Usage: What feelings would you use for a person you have a relationship with (friend, buddy, date, etc.)? Discussing results: As a class: students discuss their choices during the ranking/scale activity and appropriate usage activity (Participants provide reasons for their choices/selection)
10 minutes	Descriptions: As a class – Participants have to provide the correct personal relationship term for a definition given to them on the handout and name the frame elements in each situation described
20 minutes (+15 up to minutes after class)	Pre-Treatment Tests – VKS & VAT

**Appendix O:  
Frame Semantics Group Orientation Day Lesson Plan**

Time	Activity Description
6 minutes	<p>Ask students to collect as many words as come to mind for the word <i>BACHELOR</i>. (e.g. male, single, large house, fancy house, ..., TV show, ...) -&gt; already show that two different frames are activated (one of which is absolutely culturally determined -&gt; TV show) Ask if the Pope can be considered a BACHELOR? - he is single, male, has a large and fancy house... ➤ NO! because in western culture we have additional information with regards to rules that are part of the catholic church</p>
8 minutes	<p>Write on board: Sandra got up in a hurry and ran downstairs. She was excited when she saw all the presents under the tree. She checked the sofa table and all the cookies were gone and the glass was empty. Ask: What comes to mind? -&gt; Christmas morning, Santa Clause Students know from GER 506 about the German Christmas tradition – ask them about that tradition and collect information on blackboard (e.g. Christmas eve, Christkind, no cookies, no milk Collect aspects side by side to show differences. -&gt; Known L1 concepts needs to be expanded to understand the differences. Additional Examples: Mary was invited to Jack’s party. She wondered if he would like a CD with Barney-songs. (-&gt; child’s birthday party) Sandra is due in 1 month and we are going to celebrate on Saturday. I bought her a stroller. (-&gt; baby shower) ➔ We do understand the underlying meaning b/c we have background knowledge that helps us understand the intended message the author is referring to without mentioning the events such as birthday party, baby shower or Christmas day.</p>
6 minutes	<p>Word with similar meaning contact vs. touch ➔ When may we contact Mr. Ostyn? ➔ When may we touch Mr. Ostyn? ➔ Can I contact the dog? ➔ Can I touch the dog?</p> <p>ground/land or shore/coast - We have been on land for 4 hours / We have waited on ground for 4 hours. =&gt; flying vs. sea journey</p>

	<p>vermissen vs. verpassen  both mean to miss in English but in German they have a different meaning  vermissen = to miss someone (a person) – emotional component  verpassen = to miss something (train) – temporal component  or to miss out on something  → Ich habe meine Freunde vermisst.  → Wir haben den Zug verpasst.</p>
3 minutes	<p>Words with different intensities  upset – unhappy – distress – miserable – forlorn  I got a B- in my test. I am so upset/forlorn</p>
5 minutes	<p>Words that do not exist in English in that way, need a more explanatory phrase (not just one-word translation = no translational equivalent) or use the L2 word  Schadenfreude, Schmah, Gemutlichkeit, Weltschmerz  English words with not equivalent in German:  Baby/Bridal Shower, Soccer Mom, frown, smirk, sneer</p>
8 minutes	<p>In order to understand words we need to know concepts  → e.g. alimony  We need to know or be familiar with the notion of divorce – to be familiar with divorce we need to know about the concept of marriage (marriage frame)  a frame is schematic representation of a situation involving various participants, props, and other conceptual roles, each of which are frame elements  Commercial Transaction Frame:  Buyer – Seller – Goods – Money  buy, sell, charge, spend, pay, cost, debit, credit, etc  Revenge Frame  Offender – Injured Party – Injury – Avenger – Punishment  avenge, revenge, retaliate, etc.</p>
11 minutes	<p>to run – different frames (frames taken from FrameNet)  He ran down the stairs (Self_Motion frame)  She ran the company with a stern hand (Leadership frame)  The river ran fast after the heavy rain (Fluidic_Motion frame)  He ran a pyramid scam (Operating_a_System frame)</p>

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