THE IMPLEMENTATION OF VARIOUS VOCABULARY TEACHING STRATEGIES ON YOUNG LEARNERS

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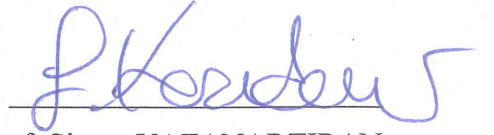GRADUATE SCHOOL OF EDUCATIONAL SCIENCES
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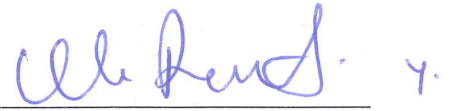IN THE DEPARTMENT OF ENGLISH LANGUAGE TEACHING

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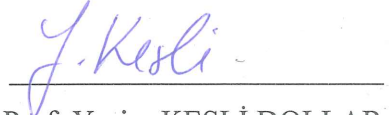Approval of the Graduate School of Educational Sciences

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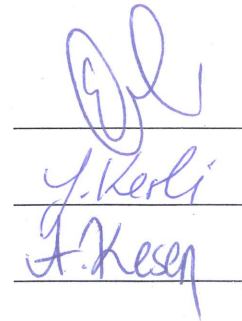
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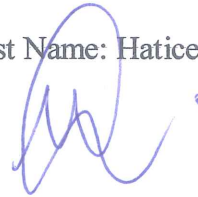
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ABSTRACT

THE REFLECTIONS OF VARIOUS VOCABULARY TEACHING STRATEGIES ON YOUNG LEARNERS

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Master's Thesis, Master's Program in English Language Education
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The purpose of this research study was to reveal the impacts of presenting target words in various vocabulary clusters on second language learners in short and long term. As the intervention, three different vocabulary sets -semantic, thematic and unrelated were utilized. As the participants, 30 beginner 3rd graders of a private school located in Istanbul were assigned. The total process for data collection lasted for three weeks. After determining target vocabulary groups, the participants completed an immediate recall test right after first instruction. Afterwards, three review lessons ending with a delayed recall test at the end were done. This process – instruction, immediate recall test, review lessons and delayed recall test- was repeated for each vocabulary cluster in the same way. The results of this study indicated existence of a significant variance among vocabulary clusters in terms of effectiveness in L2 vocabulary acquisition. The scores of participants showed that thematic and unrelated sets were easier to grasp for learners whereas they had difficulty in acquiring the words of semantic cluster. From delayed recall tests, the positive impacts of practice through review lessons were obvious, as well.

ÖZ

FARKLI KELİME ÖĞRETİM STRATEJİLERİNİN KÜÇÜK YAŞ GRUBU ÖĞRENCİLER ÜZERİNDEKİ YANSIMALARI

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Bu araştırmanın amacı, hedef kelimeleri farklı kelime kümeleri ile sunmanın ikinci dil öğrenenleri üzerinde kısa ve uzun vadede etkilerini ortaya çıkarmaktır. Müdahale olarak, anlamsal, konusal ve bağlantısız olmak üzere üç farklı kelime grubundan faydalanılmıştır. Katılımcılar, İstanbul'da yer alan özel bir okulun 30 üçüncü sınıf öğrencisidir. Veri toplanması için toplam süre üç haftadır. Hedef kelimelerin belirlenmesiyle öğretimden hemen sonra anında hafıza testini tamamlanmıştır. Sonra, gecikmeli hafıza testi ile sonlandırılan üç tekrar dersi yapılmıştır. Öğretim, anında hafıza testi, tekrar dersleri ve gecikmeli hafıza testinden oluşan süreç her kelime grubu için tekrar edilmiştir. Sonuçlar ikinci dilde kelime ediniminde etkililikte kelime kümeleri arasında önemli bir değişkenlik olduğunu göstermiştir. Katılımcıların puanları göstermiştir ki konusal ve bağlantısız kelime grupları öğrencilerin kavraması için daha kolay iken anlamsal kelimeleri edinirken öğrenenler güçlük çekmişlerdir. Gecikmeli hafıza testinin sonuçlarından da tekrar yapmanın küçük yaş öğrenenleri üzerindeki olumlu etkilerinin olduğu görülmüştür.

Anahtar Kelimer: Küçük Yaş Grubu Öğrenciler, Anlamsal, Konusal, Bağlantısız, Kelime Grubu, İkinci Dil Eğitimi, Anında ve Gecikmeli Hatırlama

To My Parents, My Teachers and My Husband

ACKNOWLEDGEMENTS

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Chapter 1
Introduction

1.1 Theoretical Framework

The issue of language learning strategies has been the focal point of many educational studies for quite some time. As a field for language learning researchers, the concerns of second language acquisition (SLA), have been officially addressed since the 1960s (Pica, 2005). However, the research background aspect of vocabulary teaching has only seen some attention in recent times. Coady and Huckin (1997), Read (2000), Richards and Renandya (2002) and Bogaards and Laufer (2004). These researchers reveal, amongst other things, the fact that there is an apparent interest in vocabulary studies recently (as cited in Erten & Tekin, 2008, p.408).

Through the years, analysis and expectations have shown unequivocally that in the course of learning a new language, it is expedient to handle its various components first. In other words, while studying a new language, the learner has to be carefully and skillfully navigated through its various parts like the phonologies, morphologies, syntaxes, semantics and pragmatics. To enhance the language learning acquisition of such student, a wide range of vocabularies spanning various walks of life need to be introduced, drilled and to some extent, elicited in other to check the L2 progress of the student under consideration. McCarthy (1990) asserts that "the biggest component of any language course is vocabulary" and he emphasizes the impossibility of real success in L2 acquisition without mastering in vocabulary (p.8). Another insight into the importance of vocabulary acquisition offered by Nation and Waring (1997) is the number of frequently used word families a second language learner is supposed to know which is agreed as 3,000, and the invaluable roles of teachers in helping students create their own techniques to handle new words (as cited in Josefsson, 2012, p.6).

When it comes to teaching process of vocabulary, there are some opinions which at best could be termed controversial. In order to increase the effectiveness of

vocabulary instruction and desired learners' success, some are of the beliefs that presenting the target vocabulary in a set consisting of words with similar meanings is beneficial whereas some claim the helpfulness of presenting unrelated words as a set. Gairns and Redman (1986), Hashemi and Gowdasiaei (2005), and Jullian (2000), some of the proponents of presenting semantically related words together, sustain that providing a vocabulary learning process to L2 learners by being exposed to new words which are close in terms of meaning is really functional (as cited in Jang, 2014, p.26). On the contrary, there is a large number of studies disputing the advantages of the use of semantically related sets for ensuring vocabulary improvement. Tinkham (1997) stated that grouping the words that are semantically related in teaching case would impede effective learning because of "interference theory" (p.140). Another hypothesis by Hunt and Elliot (1980), the "distinctiveness hypothesis" affirms the accomplishing outcomes of presenting semantically unrelated words as a set for the reason that learners are not confused of the similarities of target words (as cited in Tinkham, 1997, p.140).

1.2 Statement of the Problem

In the course of language learning, parameters like the focus skills, knowledge, course contents and pedagogy to mention but a few, vary by age group and level of prior knowledge of the L2 under review if any. In the early stages of language acquisition in very young learners or false beginners, the vast majority of teachers fall into the temptation of teaching basic words and sometimes, oversimplifying them in the process where actually young learners could benefit from the teaching and practices involving standard collocations and various grammar structures. Further afield, the scene is different for older age groups in terms of target skills categorization. As a language teacher, working with young learners learning English as a foreign language (EFL) for almost three years, I recognize how crucial the effectiveness of vocabulary instruction is for these absolute beginners because a fundamental vocabulary gain is the first thing needed to guide themselves for the coming levels.

In terms of content, language teaching curriculum bear a common resemblance or rather equivalence both in private and state schools despite the different levels.

For instance, the course books used in the two sides follow an outline with similar word groups. When the contents and organization of the course books are examined, the noticeable fact is the integration of semantically related words in each unit. In other words, a teacher is supposed to teach the words classes divided according to meanings sequentially. Which begs the question whether the lexical grouping in vocabulary teaching avails for rapid word acquisition or rather hinders basic learning owing to the interference theory restricting teachers handling of unrelated new words.

1.3 Purpose of the Study

In the light of all the points mentioned above about how to provide learners with effective vocabulary instructions, this study aims to measure what kind of impacts using three different vocabulary clusters (semantic, thematic and unrelated) have on young learners' success in terms of having an effectual vocabulary acquisition. It additionally tries to dispose which grouping is more assertive when it comes to have lasting consequences in learners' long term memories.

1.4 Research Questions

Throughout this research study, the three following questions will be looked into in other to proffer solutions to them.

1. Does teaching new words in L2 through various vocabulary sets have an impact on young learners' acquiring target words?
2. Is the variation between the outcomes of immediate recall and delayed recall test significant?

1.5 Significance of the Study

As earlier explained in the previous parts, a wide vocabulary gain is a necessary concept for language learners in this day and age especially for a beginner of a new language, young learners are supposed to know approximately 500 words to effectively communicate in that language (Linse, 2005).

Another fact about the language learning process of young learners is the gap between the term and its meaning due to not having improved abstract thinking skills yet. Vygotsky, a famous language researcher, affirms that although young learners start to use "the spoken form" of a word, grasping of its meaning occurs much later (as cited in Linse, 2005, p.122). That is why, language teachers guiding young learners initially should be conscious of the absence of this mental maturity. During such a delicate period, young learners are exposed to different language teaching strategies resulting from teacher's own styles, teacher's occupational experience, and in the main syllabus types of used course books. This situation is same for vocabulary learning. Taking into account all these, as a language teacher teaching young learners, in this study, the effects of implementing various types of word sets into vocabulary teaching on young learners' success are analyzed. Thus, the results of this research study will share more lights on some questions how vocabulary teaching in L2 can be influential.

The existence of many other studies searching for the same goals are obvious such as Tinkham (1997), Gairns and Redman (1986), Hashemi and Gowdasiaei (2005) and Jullian (2000). The bright side of this study is having two other important studies as conducted in Turkey with the similar research topics and ages of participants by Erten and Tekin (2008) and Karabulut (2013). To contrast these two studies, this thesis will use a private school as the setting, which places emphasis on foreign language education a lot in language course hours and study with young learners who are between 8 and 10. These differences make this study a distinctive and consequently significant one. Another point worthy of mentioning in this study is the examination of the latest EFL course books making this investigation more invaluable.

It seems that this research study will advocate for the beliefs propounded about effective vocabulary instruction in a second language, and enable a basis for the forthcoming studies interested in similar subject.

1.6 Definitions of Significant Terms

Young Learners: "Children from the first year of formal schooling (five or six years old) to eleven or twelve years of age" (Phillips, 1993, p.3)

Second Language acquisition (L2): "The language plays an institutional and social role in the community and it functions as a recognized means of communication among members who speak some other languages as their mother tongue" (Ellis, 1994, p.11-12).

English as a Foreign Language (EFL): "Learning the language takes place in settings where the language plays no major role in the community and is primarily learnt only in the classroom" (Ellis, 1994, p.12).

Semantic set: The group of words "which share certain semantic and syntactic similarities". (Tinkham, 1997, p.138).

Thematic set: The group of words which consists of "all closely associated with a common thematic concept" (Tinkham, 1997, p.141).

Unrelated set: The group of words "which does not directly descend from a common superordinate concept (Tinkham, 1997, p.143).

Chapter 2
Literature Review

2.1 Overview

There is common agreement between many a researcher that in the course of learning a new language, it is useful both on the long and short runs to improve on vocabulary as it being the veritable tool through which this language in question will be properly utilized going forward. Nation (1993) stated that:

> Vocabulary knowledge enables language use, language use enables the increase of vocabulary knowledge, knowledge of the word enables the increase of vocabulary knowledge and language use and so on (as cited in McCarthy & Schmitt, 1997, p.6)

The claim asserting the positive impact of having a wide vocabulary on learners' school success has also been evident by lots of studies (Biemiller & Boote, 2006; Bornstein, Haynes & Painter, 1998; Cunnignham & Stanovich, 1997; Tymms, Merrell & Henderson, 1997) (as cited in Richards, Daller, Malvern, Meara, Milton &Treffers-Daller, 2009, p.1). By taking these kind of claims into consideration, the importance given to vocabulary acquisition ESL/EFL contexts by the researchers related has increased gradually for the last 40 years (Coady &Huckin, 1997) (as cited in Karabulut, 2013, p.10). Among them, there are a numerous numbers of the studies which especially seek the effective techniques for a well-presented vocabulary instruction (Al-Jabri, 2005; Erten & Tekin, 2008; Hunt & Elliot, 1980; Marzano & Marzano, 1988; Nation, 2000; Tinkham, 1993, 1997; Waring, 1997).

Taking the above issues into consideration, this study tries to find out the most effective vocabulary clustering for young learners' vocabulary achievement in L2, and throughout this chapter, it is aimed to review the past related literature examining the elementary features of young learners, how they handle new input in memory and the three types of vocabulary clustering "semantic, unrelated, and thematic.

2.2 Young Learners

It is undeniable that in all age groups, the learners display different attitudes both socially and emotionally owing to having changing needs and interests at this stage of their lives. When it comes to learning issue, this circumstance is alike. Čáp (1993) stated that:

At this stage of ontogenesis a half of a year or one year of development and learning means a lot. The children of such different age differ not only in the stature and weight, but also in development of movements, cognitive processes, and motivation. All of them are expected to perform the same behaviour and output at the same time. The six-year-old child say, is at a disadvantage to the older ones (as cited in Janková, 2007, p. 3).

By age, the learners develop various learning habits that can compensate for their present expectations. In literature, there are several definitions explaining the general characteristics of young learners who are the participants of this research study as well. According to Phillips (1993), young learners are "children from the first year of formal schooling (five or six years old) to eleven or twelve years of age" (p.3), and the author adds that young learners do not respond to activities by using complicated, rational and nonconcrete learning skills while being exposed to inputs; however, they handle it through more basic and easier ways. Hence, the author summarizes below how teaching young learners should occur:

- The activities should be simple enough for the children to understand what is expected of them,

- The task should be within their abilities: it needs to be achievable but at the same time sufficiently stimulating for them to feel satisfied with their work.

- The activities should be largely orally based –indeed, with very young children listening activities will take up a large portion of class time.

- Written activities should be used sparingly with younger children. Children of six or seven years old are often not yet proficient in the mechanics of writing in their own language (Phillips, 1993, p. 5).

Healy (2012) is one other researcher investigating the ways in which young learners process what they currently learn. The author mentions certain steps to follow. As the first step of teaching, these young learners should be provided with a lively environment comprising, for the most part, games, audios and visuals. In addition, the integration body movements is another requirement beside the oral language, and to create these conditions, Total Physical Response (TPR) –including the language as orally and physically- can be employed. As the last step, since it appeals to this age group, the appropriate use of pictured story books as earlier mentioned will help learners grasp the meaning in a more concrete way. This is advised (as cited in Karabulut, 2013, p.13).

Another vital topic discussed by many researchers is "critical period hypothesis" which was first introduced by Penfield and Roberts (1959), and then promoted by Lenneberg (1967). This theory claims that there exist a delicate time interval during which a language can be learned, and it encompasses the time from early babyhood to adolescence. The fact that learning a language gets more difficult with increasing age is also advocated by many other researchers (Newport & Supalla, 1987; Towell & Hawkins, 1994). About the concept of "critical period hypothesis", Lenneberg (1967) maintains that:

> Most individuals of average intelligence are able to learn a second language after the beginning of their second decade… A person *can* learn to communicate in a foreign language at the age of forty. This does not trouble our basic hypothesis on age limitations because we may assume that the cerebral organization for language learning as such has taken place during childhood, and since natural languages tend to resemble one another in many fundamental aspects (p.176) (as cited in Birdsong, 2006, p.3)

Motivation is another element triggering successful teaching-learning process in young learner's context. Lots of studies supported how crucial the motivation is

for learners' school success (Gardner & Lambert, 1959). Heinzmann (2013) ascertained that "the ultimate aim of most motivation research is undoubtedly to come up with relevant findings that help practitioners to boost student motivation in the case of unfavorable motivational dispositions or to maintain favorable motivational dispositions"(p. 2).

In conclusion, in terms of age groups, young learners need basic, simple and uncomplicated instructions in lively teaching atmosphere providing them with fun, self-confidence, motivation and age-appropriate teaching materials. Hence, the primary concern of language teachers working with this age group should be the meeting of requirements mentioned all above.

2.3 Memory

As one the basics of this research study, the concept "memory" has been scrutinized for many years. According to Baddeley (1997), the interpretation of memory started approximately 2000 years ago whereas it has been handled scientifically for a 100 hundred years. The researcher identified the term "memory" as "a system for storing and retrieving information, information that is, of course, acquired through our senses" (p.13)

As another view for memory, Alba and Hasher (1983) put forward the schema theory of memory. This theory believes that there are four stages in organizing a new input in the memory, and these process are: "selection (a process that chooses only some of all incoming stimuli for representation), abstraction (a process that stores the meaning of a message without reference with the original syntactic and lexical content), interpretation (a process by which relevant prior knowledge is generated to aid comprehension), and integration (a process by which a single, holistic memory representation is formed from the products of the previous 3 operations) (p.1).

This research study also looks for the retention of previously presented information, and about the nature of retention, İnanç, Bilgin and Atıcı (2004) promoted "the three types of sensory memory, short-term memory and long-term memory; and besides, Mastin (2010) identified sensory memory type as the shortest one and it is known to provide people with recall of a gained information through five senses in a barely short time (as cited in Karabalut, 2013, p. 16). It is claimed

that after being exposed to some kind of stimuli, without noticing, certain part of message is disregarded while some information is received. This received amount is placed into sensory memory instinctively. The sensory memory's fundamental function is to keep this current input which is later transferred into short-term memory. The capacity of sensory memory is considerably large that it can embrace many items at once, and the phase for the duration of this temporary recall is assumed a bit longer for visual data whereas as it is by comparison shorter for auditory data (İnanç, Bilgin & Atıcı, 2004).

After being kept for a short period of time in sensory memory, the information is believed to be transferred into short-term memory. Short-term memory stores temporary information which is gained by sensory memory. The assumed duration of information kept in short-term memory is thirty seconds maximum, and the capacity for the storage of information is also restricted saving a few items between five to nine (Al-Jabri, 2005; Mastin, 2010). As the essential function it is mentioned that is the existence of adequate repetition and exercise does not occur, even the limited information may be vanished because repetition and practice are necessary to enable learners to grasp relations among the presented input process it in the memory efficiently. (İnanç, Bilgin & Atıcı, 2004; Karabulut, 2013).

When it comes to the features of long-term memory, Al-Jabri (2004) stated that the variation between short-term and long-term memory was realized in the early 1960s, Ericsson and Kintsch (1995) claimed that the capacity of long-term memory is by comparison much wider and the time for the duration of input in the memory is also much longer. They also added that since long-term memory provide learners with a more associated concept, the items are more interrelated. The two forms of long-term memory explained by Ericsson and Kintsch (1995):

> "episodic memory and semantic memory. Episodic memory holds personal experiences that took place at a certain time. Semantic memory, on the other hand, involves the storage of facts and general information."(p.49)

To conclude, the three types of memory enabling the storage and organization of input received by a stimuli, are examined by various researchers and they come up

with similar and sometimes different ideas. However, it is assumed by all that there is an obvious relationship among these three memory types because they are all supposed to keep the message to some extent.

2.4 Vocabulary Clusters

Being the main element of this research work, the type of vocabulary cluster used in teaching has been examined and interpreted by many researchers. Bousfield and Cohen (1953) define clustering as "the occurrence of sequences of related words as they appear in the recall of items presented for learning in random order" (p. 67). Almost all those researchers aim to find out what kind of vocabulary clustering is more effective for L2 vocabulary acquisition although they have different research design and settings. Some are addressed in terms of being semantically related and unrelated whereas other researchers study vocabulary clusters by grouping them as semantic, thematic and unrelated sets. Since this study follows this second type of grouping, in this part, how semantic, thematic and unrelated vocabulary clusters are investigated and treated in literary terms. One after the other, the proponents and opponents of these three clustering categories and their assumptions will be explained below.

2.4.1 Semantic Clusters. In this research study semantic vocabulary clusters are utilized for effective vocabulary teaching of word grouping. Gairns and Redman (1986) defined semantic clusters as the word group consisting of words having similar semantic and syntactic features. Another definition of semantic clusters by Tinkham (1997) states that "'semantic clusters': words of the same form-class which directly descend as co-ordinates under a common superordinate concept."(p.143). While studying on semantic clusters, some of the researchers name it as "lexical sets" because the definition of semantic refers having similar lexical meaning. For instance, Hashemi and Gowdasiaei (2005); and Gairns &Redman (1986) have research studies addressing how differences emerge through the outcomes of vocabulary teaching with the aid of lexical sets or semantically unrelated sets. Many other researchers such as Marzano and Marzano (1988); Manning and Kahana (2012); Romney, Brewer, and Batchelder (1993), Tinkham (1994), Erten and Tekin

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(2008); and Karabulut (2013) name these word groups having terms with similar meaning as semantically related.

In the related literature, theories abound of concepts and assumptions which promote the usefulness of semantic clustering for successful vocabulary acquisition and retention of ones already learned. Most studies related with vocabulary acquisition rely on Ausebel's (1968) "advance organizer theory" which claims that the previously learnt structures may affect future learning; in other words, a recently encountered word triggers schema encompassing previous learning (as cited in Schwartz et al., 1998, p.72). By regarding this schema-based theory, researchers believe that learners can grasp the presented vocabulary thanks to the words with similar meaning that are learnt beforehand.

Another theory advocating for the preference of semantic clustering in L2 word teaching is Lehrer's (1974) "semantic field theory" which argues that the organization of target vocabulary is easier when the words are interconnected in terms of meaning. Channell (1981) mentions how "deep processing" occurs in semantic-based learning where the learners encode the meaning of the words and set a relationship between these words and others that bear similarities in terms of forms and concepts (p.116). In view of Tinkham (1994), semantic fields are sources for enabling semantic clusters to be influential in vocabulary acquisition. AlShaikhi (2011) is another researcher handling the concept "semantic field" and claims that the organization of the words in the mind of learners "distinguishing and understanding the boundaries between similar lexicons" are the pursuits of semantic field theory (p. 16).

One of the concepts which is believed to be significant in vocabulary teaching amongst others is Semantic mapping. Baleghizadeh and Naeim (2011), the advocators of semantic mapping, reveal that "The basis of semantic mapping is the relationships among its elements (here, the words). As the relationships among words are established, the learners will remember them more easily" (p.12). The researchers sort out many advantages of using semantic mapping such as its usefulness in enabling learners to grasp the association among the words, and thus, making easier to distinguish more extensive themes. In addition, what they focus on within the scope of semantic mapping is it cognitive aspect. By triggering cognitive force to

understand the relationships among the words, recalling what is previously learnt is boosted (Shapiro & Waters, 2005; Morin & Gobel, 2001) (as cited in Baleghizadeh & Naeim, 2011). Although many constructive sides of semantic mapping are disclosed by the researchers, there exist some weak features as well. Baleghizadeh and Naeim (2011) state that bothering the learners with a paths set in stones say, in other words an inflexible semantic map, may probably hinder their creativeness while dealing with new input words. Erten and Tekin (2008) also oppose to the use of semantic mapping because they believe that the hindrance of recalling of learnt vocabulary is possible due to immense congestion in learners' short-term memory.

Gairns and Redman (1986) put forward another view about semantic clustering that teaching the target words through semantic grouping creates the enabling environment whereby students grasp them coherently and process them in mind in ways more organized linguistically. The researchers identify the concept of semantic clustering as "building blocks" meaning that the enhancement in learners' vocabulary gain resembles an uprising construct with each inserted block (p.69).

About the dominant preference of semantic clustering in ESL and EFL course book in terms of target vocabulary organization, the justified reason is that semantically word grouping would meet the requirements of L2 acquisition techniques (Karabulut, 2013). By the reason of not having enough clear-cut outcomes revealed by related studies explaining the usefulness of semantic clusters, many ESL/EFL course book writers prefer this type of grouping by taking into account their own insights (Nation, 2000; Tinkham, 1993, 1997; Tinkham, 1994) (as cited in AlShaikhi, 2011, p. 12). The following examples taken from current ESL/EFL course books may also demonstrate how the semantic clusters take place in them.

- *Family and Friends 2* groups the words "happy, sad, angry, tired, scared, brave, and nervous under the title "feelings" (Simmons, 2014, p. 14).

- *First Explorers 1* groups the words "chicken, cat, sheep, cow, horse, goat, cat, duck" under the title "farm animals" (Charrington & Covill, 2012, p. 24).

-*Incredible English 1* groups the words "mum, dad, sister, brother, grandma, grandpa, aunt, uncle, and cousin under the title "family" (Phillips, Morgan & Slattery, 2011, p. 13).

-*Kids Box 4* groups the words "swim, sail, skate, climb, dance and play basketball" under the title "sports" (Nixon & Tomlinson, 2014, p.17)

As one having a similar belief with Gairns' and Redman' (1986) idea of blocks, Seal (1991) opine that the presentation of target words in a semantically clustered way is quite favourable because "the learning of one item can reinforce the learning of another" (p. 300) (as cited in Gholami & Khezrlou, 2013, p.154). Seal (1991) affirms that the learners personally realize and feel their own improvement by completing a semantic cluster and moving ahead with a new one.

Theoretical concepts apart, there are numerous research studies seeking the advantageous characteristics of semantic clustering. AlShaikhi's (2011) study tried to explore which vocabulary clustering was more favourable for better vocabulary acquisition and retention presented to Arabic EFL learners. For grouping, the researcher used three different clustering that were semantically-related, semantically unrelated, and thematically related sets. For data collection purposes three vocabulary lists which were prepared in concordance with clusters and immediate and recall tests requiring translation from L2 to L1 were used. In the lists, 15 unfamiliar words from English and their parallels in Arabic were written, and just after presenting these new words, the participants, 58 in numbers all of which were adult students, were asked to complete immediate recall test. Then, a week after, they were given delayed recall test. These 58 students were divided into three groups and each group was assigned one type of clustering. In data analysis process, the researcher employed one-way Analysis of Variance (ANOVA) statistical test, and the findings demonstrated that the difference in the results of immediate recall tests among three cluster types was not significant in terms of remembering the learnt words. However, when it comes to the results of the delayed recall tests for vocabulary clusters, the difference among them was significant where semantically-related and semantically-unrelated clustering seemed more effective than thematic ones.

Hashemi and Gowdasiaei (2005) conducted a study aimed at finding out whether the vocabulary instruction through lexical or semantically-unrelated sets was more useful. They also tried to measure how these two clustering methods might affect the successes of students with low and high proficiency levels in English when

it had to do with vocabulary acquisition success. Using 60 EFL students with intermediate proficiency level studying in an English institute in Iran, and for instruction process, two classes were created consisting of 30 participants in them. One of the vocabulary sets was randomly assigned to these classes, and they started to be exposed to vocabulary instructions in that clustering. As the data collection tool, Vocabulary Knowledge Scale (VKS) was utilized, and the learners' improvement in terms of "vocabulary breadth (VB)" -meaning the number of known words- and "vocabulary depth (VD)"- meaning how satisfactory each word was learnt- were examined (p. 345). The findings of the study showed that both clustering methods were effective for vocabulary gains in terms of their improvement in VB and VD; on the other hand, there was quite a significant difference between the test results of low and upper level students who were exposed to lexical sets and semantically unrelated words proving the effectiveness of LS over SU clustering. Another findings emerged indicating participants with an upper level of proficiency as showing remarkable progress when contrasted with their counterparts with low level. Hippner-Page (2000) carried out a study which was targeted at ascertaining whether semantic clustering or thematic clustering was more effective for vocabulary teaching in second language acquisition. The researcher also aimed to reveal which clustering type was more efficient when it came to retention of learnt words. As the participants, the researcher used ESL students who were already placed into two groups by taking account of their scores on the Language Assessment Scales (LAS) showing students' language proficiency. These students were all at the fourth level of ESL curriculum although they were from third, four, and fifth grades. Each student group was taught the target vocabulary four days a week for forty-five minutes. For instructions and data collections, the researcher benefited from worksheets, questionnaires, lists and letters, and gave place 22 references throughout the study. The findings of Hippner-Page's (2000) research study clearly showed that both semantic and thematic clustering techniques were worthwhile in L2 vocabulary instruction. It was stated that even by combining these two strategies, vocabulary teaching might be effective. Further, it was added that the teachers could follow a mixed process by using semantic clustering in one unit and thematic clustering in the

following unit. That was believed to be quite a useful tool in enabling the students to find out which one was more convenient for their learning profile.

Hoshino (2010) is another researcher seeking to find a more effective technique for vocabulary instructions. Being different from other similar studies, the researcher created five word groupings as treatment which are synonyms, antonyms, categorical, thematic, and arbitrary, and additionally, the learning styles of the participants were also handled as a variable. Another noteworthy feature of this study was its being conducted in a real classroom setting so that the findings would be more validated for other similar settings. For the study, first, the participants, who were 46 Japanese EFL universities were positioned four different groups by taking their learning styles into consideration. For each vocabulary group, 40 new words were determined and the equivalents of these words in Japanese were also written in the lists next to the related word. Instruction process took place as fifteen learning sessions. Three or four days after the learning sessions, testing parts commenced. In that step, the participants were asked to write the equivalents of the target L2 words in Japanese. The students were also required to complete a questionnaire seeking for learner types. The analysis of vocabulary test and questionnaires demonstrated that there was not any connection between vocabulary clusters and students' learning styles, and the participants were more successful at memorizing the words in the semantic list than the remaining ones.

Romney, Brewer, and Batchelder (1993) conducted a study consisting a "process model" searching how powerful semantic clustering was "within homogeneous semantic domains" (p.28). ın the study, the basic feature of this model is the idea claiming that while recalling, clustering the connected items is a purpose of their similarities in terms of semantics. As the participants, 25 undergraduate students from the University of California in Irvine were chosen. For data collection, 17 vocabulary lists were prepared including certain homogenous semantic domains, and the method used could enable the measurement of proximity among items which would be used for similarity scale and it could also generate a list for delayed recalls. The findings showed that there was an extensive difference among these 17 vocabulary lists in terms of the power of semantic clustering. The performance of participants in semantic clustering was almost similar with the predictions of the

model. Additionally, the observed and assumed findings were excessively related with "distributional features" of the words placed in semantic clustering lists (p.28).

The outstanding number of the studies favoring semantic clustering in second language education is obvious. However, in literature, there are several opponents of semantic clusters revealing various judgments about the negative effects of it on students' vocabulary achievements. In the coronary of some theoretical concepts by the related people and the outcomes of various research studies emphasizing the advantageous features of semantic clustering like Ausebel's (1968) "advance organizer theory" and Lehrer's (1974) "semantic field theory", there is a considerable number of researchers claiming frustrate sides of semantic sets (Erten & Tekin, 2008; Finkbeiner & Nicol, 2003; Hoshino, 2010; Tagashira, Kida, & Hoshino, 2010; Tinkham, 1997; Waring, 1997) (as cited in Gholami & Khezrlou,2013, p.155) Finkbeiner and Nicol (2013) also assert that the number of studies having realistic findings about the effectiveness of semantic clustering in vocabulary achievement is quite a little. Tinkham (1994, 1997), a well-known researcher in this area, handled two studies measuring the most effective cluster type, and concluded that the learners spent more time and effort to grasp the target words in semantic clusters than they did for the ones semantically unrelated clusters. Another objection to the usefulness of semantic clustering is made by West (1988) who believes that "semantic sets constitute an unnatural frame for a linguistic group such that semantic sets are not normally encountered by learners in their real lives" (as cited in, Gholami & Khezrlou, 2013, p. 155). Another school of thought on the use of semantic clusters is "interference theory" which proclaims that the resemblance among the words in a semantic set and presenting these similar items together would hinder the learners' grasp of the diversity of the meanings (Tinkham, 1993-1997; Waring, 1997). "Distinctiveness theory" supposing that distinction in the presented input can help learners grasp easily is one other concept refuting the helpful impact of semantic sets on vocabulary achievement (Hunt & Elliot, 1980; Hunt & Mitchell, 1982; Schmidt, 1991).

2.4.2 Unrelated Clusters. As explained above under the heading "semantic clusters", there are lots of research studies and theoretical concepts assuming that the

vocabulary instruction through semantic cluster impedes desirable L2 vocabulary gain. In the related literature, there are numerous researchers supposing that teaching unrelated words together is more influential (Erten & Tekin, 2008, Higa, 1963, Tinkham, 1993, 1997; Waring, 1997). In the shade of distinctiveness theory (Hunt & Elliot, 1980; Hunt & Mitchell, 1982; Schmidt, 1985) and interference theory (Tinkham, 1993-1997; Waring, 1997) that are clarified under the heading "semantic clusters", many research studies have been conducted to find out if it is probable to teach vocabulary better through unrelated sets which are defined as "words that do not share semantic or syntactic characteristics" by Al-Jabri (2005, p.7).

One of the studies held in this subject matter by Tinkham (1993) was aimed to investigate whether the learners' had problems while learning vocabulary through semantic clusters consisting of quietly associated words or not. As the subject of the study, 20 students were used. The researcher created two lists to serve data collection purposes. In one list were words which were semantically related (shirt, jacket, sweater) whereas the other one had unrelated ones (rain, car, frog) (as cited in AlShaikhi, 2011, p.34). The findings of Tinkham's (1993) study revealed that the time spent by the participants while acquitting the words presented in semantic list was quite longer, however, they were much faster in learning unrelated words (as cited in AlShaikhi, 2011, p.34).

Another study in this area by Hunt and Elliot (1980) was conducted to find out how useful the distinction and unfamiliarity among the target words in terms of vocabulary achievement and retention. The participants were 346 undergraduate students, and for data collection, 20 words which were distinct and another 20 which were common in terms of orthography were utilized. The findings of the recalling tests indicated that the learners had better scores in remembering distinct words than they did in associated words. This outcome also proved the judgment asserted by distinctive theory. In another study by Hunt and Mitchell (1982), the goal was similar to the previous one; but in this one, the researchers also wanted to see if conceptual distinction among words mattered.128 undergraduate students were chosen, and the participants were exposed to four "critical" and sixteen "background" words. After the treatment, the findings again indicated the efficiency of distinctiveness in vocabulary teaching (p.82).

Waring (1997) carried out a research study in Japan aiming to find out whether interference issue was in existence in Japanese. The researcher also tried to prove if the findings of Tinkham's (1993) had external validity to generalize other settings. The participants were 18 native and 2 non-native adults who had advance proficiency level in English. By following the steps of Tinkham's (1993) study, the researcher, first, created 6 word groups consisting of semantically related and unrelated items in a mixed way. Then, two separate word groups were formed as one having semantic words and one having unrelated words. After the treatment which was the application of a criterion test to the subjects and the assessment of them in an individual and verbal way, the tests indicated that the participants were faster in recalling unrelated words, and they spent double the amount of time to remember the semantically related ones. Hence, the researcher evaluated this situation and labelled the semantic clusters as "a potential problem for learning" (Waring, 1997, p.270) (as cited in Karabulut, 2013, p. 28).

Altarriba and Mathis (1997) were two other researchers who were interested in the effectiveness of unrelated clusters with the aid of three tasks. The participants were Spanish who were beginners or advance users of English. First, the participants were exposed to a group of Spanish-English translation, they were given a translation recognition test. The other two tasks had similar procedure. In the end, the outcomes revealed that the students had interference problems while handling semantically related words and they were also quite slow while dealing with orthographically related sets. To sum up, both semantic and orthographic relatedness among the target words resulted in difficulties for learners' vocabulary acquisition and caused a slow pace in recalling.

Finkbeiner and Nicol (2003) also conducted a research study focusing on the usefulness of semantic clustering in L2 vocabulary instruction. As the participants of the study, 47 undergraduate studying at the University of Arizona were chosen. To collect data on the researched employed 32 new words that were made up and belonged to four various semantic categories. With the aim of determination on how the length of the words would affect memory, they were divided into two groups according the numbers of syllables. As the pictures of the study, the ones used in Snodgrass' and Vanderwart's (1980) study were implemented. In the assessment

step, the subjects were supposed to translate the words from the mother tongue to English, and then they did it vice versa. The findings of the study showed that while acquiring the target words by placing them into mind in an organized way and remembering them to handle translation task, the issue of semantic interference was faced.

By considering the common use of semantic clustering in EFL course books, Jang (2014) conducted a study to ascertain whether the use of semantic clustering in L2 vocabulary teaching is beneficial to learners or not. For the study, 174 Korean young learners were used, and they were placed in two groups namely as "semantically related" and semantically unrelated". For data collection, 40 words were taught to both groups through diverse clusters, and this instruction process lasted for six weeks. In this comparison study, the results of the vocabulary test confirmed that the students benefited from both clustering in terms of vocabulary gain to some extent. However, the researcher stated that vocabulary instruction presented through unrelated words grouping would be much more efficient for desired L2 vocabulary achievement.

The goal of one other research study conducted by Papathanasiou (2009) was to determine whether semantic sets are preferable for successful L2 vocabulary instruction compared to unrelated clusters. For the study, 3 Greek EFL students whose proficiency level was intermediate and 32 beginner adults learning English as a foreign language were picked as the participants. These participants were divided into two groups named as "A" and "B", and then group A was exposed to semantically-related words and their equivalents in Greece during a period spanning hree weeks whereas group B followed the same procedure with unrelated clusters. At the end of teaching process, the participants were asked to take a short term vocabulary test, and after two weeks, long term test was applied. The results obtained from both tests revealed that the unrelated word sets were really beneficial for beginner adults whereas there was not an evidence showing the effectiveness of unrelated clusters for junior intermediate leaners. About this finding, the researcher professed that "adults, in general, can master certain aspects of a foreign language even well into adulthood", for example, "lexical and syntactical competence become

easier for them in contrast to phonology, which becomes very difficult to acquire" (Papathanasiou,2009, p. 319) (as cited in AlShaikhi, 2011, p. 37).

As having similar setting and data collection procedure with this current research study, Erten and Tekin (2008) also made a research study in the area of vocabulary presentation. Their aim was to discover whether semantically related or unrelated clustering was the more influential one for remarkable L2 vocabulary achievement and retention of the target words. As the subjects of their study, the researchers determined 55 fourth graders studying in a Turkish state school who were all starters of English as a second language. Since the study was held in a real classroom setting, the outcomes had a visible validity for similar teaching settings. Through a pre-test consisting of 100 words, the researchers tried to understand if any of these words were known by the students. The researchers eliminated 20 words which were familiar to the subjects, and they created four word sets including 20 words in each. Whereas two word groups encompassed semantically related clusters, the others had unrelated words. The data collection process lasted for three weeks. In week 1, one of the semantic cluster was taught through several techniques such as flashcards, body language and repetition. Just after the instruction the participants were asked to complete a post-test that was used as the pre-test beforehand. This teaching and immediate pots-test steps were repeated for other word sets. At the beginning of next week, the delayed post-test was given and the task completion time of the students were noted by the researcher. Erten and Tekin (2008) reached out the outcomes showing that the students had better scores in the immediate and delayed post-tests of unrelated cluster. It was another finding that the students spent more time while completing the test of semantic cluster proving the idea that semantic clustering may impede faster recall.

Karabulut (2013), whose study provided a noteworthy guidance for this research study, was another researcher seeking for the most effective vocabulary clustering in foreign language education. Following almost same data collection process with Erten and Tekin (2008), the researcher used 51 very young Turkish learners studying in a private preschool, and all were beginner in terms of English language proficiency. The researcher followed the procedure having the steps pre-test before instruction, cluster instruction through various tools, and immediate and

delayed recall test. Karabulut (2013), as differently from Erten and Tekin (2008), created three vocabulary clusters which were semantic, thematic and unrelated. The results of the research study indicated that the subjects preformed best in the tests of unrelated clusters, and they did better in the tests of thematic clusters compared to the one of semantic clustering.

Whereas the existence of theoretical concepts and research studies explaining why unrelated clustering is more favourable in L2 vocabulary instruction, there are a few opposing views declining the effectiveness of it (Ausebel, 1968; Baleghizadeh & Naeim, 2011; Channel, 1981; Gairns & Redman, 1986; Lehrer, 1974). Tinkham (1997) was one of the researchers who had several studies in this field, and stated that as having a different perspective from semantic and unrelated clustering, thematic clusters examined below might accelerate L2 vocabulary gain (as cited in Gholami & Khezrlou, 2013, p.152)

2.4.3 Thematic Clusters. As a different type of clustering, thematic clusters have been an area of investigation for the researchers handling effective vocabulary presentation in second language education. According to Gholami and Khezrlou (2003):

> A thematic group that contains words such as sweater, changing room, tries on, wool, striped belongs to a specific theme (p.152).

Tinkham (1994) mentioned this new type of clustering with aim of reaching out more satisfying outcomes in learners' L2 vocabulary improvement, and the researcher conducted a study examining if the use of thematic clusters would enable learners to grasp better the target sets in 1997. By taking Tinkham's (1994) guidance, lots of research studies were handled to seek this current clustering (AlShaikhi, 2011; Folse, 2004; Hippner-Page, 2000; Mirjalili, Jabbari & Rezai, 2012). According to Al-Jabri (2005), thematic clusters are:

> "based upon psychological associations between clustered words and a shared thematic concept", and "haunted, ghost, yell, moonlight, and groan, for instance are said to be thematically related, as they are all words drawn from a haunted house schema" (p.30).

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As a theoretical support for the effective use of thematic clusters in vocabulary teaching, Al-Jabri also mentioned Barlett's (1932) "schema theory" focusing on how the experiences obtained from the previous times might affect the way of learners' processing new input.

About the difference between semantic clusters and thematic ones, AlShaikhi (2011) asserted that:

> "The boundaries between semantic clustering and thematic clustering are that semantic clustering is generally a clustering of words on linguistic basis which compromised of homogenous nature of word classes and semantic features. On the other hand, thematic clustering is based on cognitive nature of structuring the lexical items into the human mind without emphasis on semantic features or syntactic relations within the lexical items" (p.38)

Like semantic and unrelated clusters, teaching vocabulary through thematic clusters is an intense research fields for many researchers, and there is a noticeable number of studies searching on it. Tinkham (1997) had a study measuring the effectiveness rate of semantic and thematic word sets. For data collection, the participants -48 university students whose mother tongue was English- were exposed to two different experiments, and in the first instance, they were introduced a list encompassing three semantically y related words and three unrelated words, and these words were matched with simulated ones. In the second steps the subject were presented a list three words that were thematically related and three other words which were unassociated, and again they were matched with simulated words. The second experiment was different since it evaluated the four word groups one by one. Through verbal and written techniques, the lists were taught to the participants and they were asked to complete the tests looking for recall and recognition. By taking account the results of these recall and recognition tests, the researcher informed that the findings confirmed the impeding effects of semantic sets whereas thematic clustering provided the subjects with better scores in vocabulary achievement. The researcher deduced from the findings that:

"EFL teachers and course book writers in particular should take note of these results to ensure that learners do not meet new words that have been grouped semantically (Tinkham, 1997, p.267) (as cited in Karabulut, 2013, p.35).

Mirjalili, Jabbari and Rezai (2012) also conducted a research study recently which again investigated the efficiency of three type of clustering (semantic, unrelated and thematic) through two instructional approaches. As the subjects of the study, 90 females studying in language foundation and whose proficiency level in English were elementary, pre-intermediate, and intermediate were determined. As the target vocabulary, L1 words obtained from Persian and L2 English words were used. While deciding on L2 words to be used, the structures and difficulty levels of them were taken into account, and the similar ones were chosen. Through six grouping types -semantic cluster in context, thematic cluster in context, unrelated cluster in context, semantic cluster in isolation, thematic cluster in isolation, unrelated cluster in isolation- the subjects were exposed to six target lists consisting of eight English words. During the pre-test, which was created with equivalence of L2 words in the mother tongue, the target words were shown to the subjects in order to determine if they were familiar with any of them, and then the known ones were eliminated from the list. Throughout the research, six sessions were done and the participants were presented with the semantic unrelated and thematic word sets in isolation and in context respectively. In each teaching session, the participants were asked to memorize the target words in the given worksheet first for four minutes, and later write the L1 equivalents of given L2 words next to them. This cycle of presenting and assessment of target word list was repeated for each session. One difference between the worksheets prepared for the words in isolation and in context, the ones presented in context were placed into a text, and they were empathized through by being underlined, so that the subject were supposed to read this text first and grasp the meaning. When the scores of the participants in all tests, the results indicated the disadvantageous effects of semantics clustering for L vocabulary acquisition because all participants, no matter the proficiency level they were in, had a trouble while learning and recalling the words in semantic clusters. The results also revealed that the most effective word grouping for the learners was

the unrelated cluster in isolation, and they could recall the thematic ones better in context. Hence, the researchers confirmed that the proficiency level of the participants did not really influence the efficacy of L2 word clusters.

Folse (2004), who examined what kind of myths there were about second language teaching, also coped with the idea supporting the use of semantic clustering in ESL/EFL learning. The researcher stated that the findings of the related research studies could not certainly name the most influential vocabulary clustering but claims may have emerged about the faulty one. The researcher mentioned the preference semantic clusters by course book writers with the reason that it enabled them to organize the sketch. In addition, by stating that the findings of many studies indicated the usefulness of thematic word grouping, Folse (2004) continued with a short paragraph presenting how the words grouped under the semantic word sets (family members, animals, and days of the week) could be handled thematically:

> "Last Saturday I went to the beach with my brother and cousin. My brother wanted to take his pet bird with us, but my cousin and I talked him out of such a crazy idea. My cousin called his parents to make sure it was all right for him to go with us. Of course they said yes. We had a great time at the beach. We saw lots of people and lots of fish. When we got home Saturday night, we talked about going to the beach again on Sunday. We were really tired, so we decided to get up late on Sunday morning (p.4)."

One other experimental study by Motallebzadeh and Heirany (2011) examined whether the vocabulary instructions done thematically would be trigger for improving reading comprehension skills. As the subjects of the study, 80 EFL adult learners with intermediate proficiency level studying at Meraj-e-Andishe English Language School, Mashhad, Iran were chosen. After "employing the Oxford English Language Placement Test (OELPT, 2009) as homogenizing tool", 50 of them were decided as the participants of the research (p.12). These participants were placed in experimental and control group through being assigned randomly. As the first step, all participants were given a pre-test with the aim of analyzing the current general reading comprehension ability of them. The participants were exposed to reading text

in intermediate level developed via thematic clustering and through ten instruction sessions, the target words were practiced through thematic clustering whereas the ones in control group were given the same reading copies as extra classroom task. At the end of ten sessions, the subjects of both groups were wanted to complete the post-test which was given as the pre-test before.   The findings indicated that the use of thematic clustering in L2 vocabulary teaching was useful in terms of helping the learners get high reading comprehension scores, and hence; the researchers confirmed the facilitative features of the thematic associations among the words in second language acquisition.

Beside the defensive views favoring the preference of thematic clustering in L2 vocabulary instruction, it is seen that there are a few studies claiming inadequacy of it. For instance, Hoshino (2010) stated that the memorization of semantic vocabulary list by the learners was more effective whereas there was not a significant finding indicating the usefulness of thematic clustering. AlShaikhi (2011), another opponent of thematic clustering, had a study to determine the most effective word grouping for EFL vocabulary teaching. The participants were 58 Saudi adults with advance proficiency level in English. Both the subjects and target words were divided into three groups, and the three lists (semantic, unrelated and thematic) were created. Each subject group was exposed to one cluster type. In the lists, there were target English words with their equivalents in L1. After being taught these words in the assigned cluster, the participants were asked to complete an immediate and a delayed recall test. The outcomes showed the fact that there was not a significant variance among cluster types in the cores of immediate recall test, However, when tic comes to long term achievement in L2 vocabulary learning, the scores of delayed recall test showed semantic and unrelated clustering techniques were more useful for the participants which thematic clustering did not serve as a facilitator for plausible vocabulary gain.

Chapter 3
Methodology

3.1 Overview

This chapter, for the main part, is aimed to explain what kind of research method and procedures are used for the study. Emphasis would be on five points under this title; philosophical paradigm, research design, setting, participants and data collection and data analysis procedures. As the guide of this research study bothers on effective vocabulary clustering, the following research question are employed:

I. Does teaching new words in L2 through various vocabulary sets have any impacts on young learners' acquiring target words?

II. Is the variation between the outcomes of immediate recall and delayed recall test significant?

3.2 Philosophical Paradigm

It is obvious that drawing the lines of a philosophical frame of a research study is vital, Denzin and Lincoln (2005) Express that to grasp a manner, it is important to use a philosophical framework , and the three elements of research study "ontological, epistemological and methodological parts" be taken into account as well (p.130).

In research studies, the two research models mostly known are quantitative and qualitative research studies. About the concept of quantitative research design, Dyer (1995) and Goodwin (2008) state that since the quantitative data is presented in digital format, it is assumed as empirical norms of scientific research while Creswell (1994) affirms that quantitative studies try to search if the ascertained theories are true or not by using variable, number and statistical steps. For the research design of this study, the researcher decided to use quantitative research design which consists of numerical data because it was more appropriate to measure the research questions and employ data collection instruments.

3.3 Research Design

The researcher of this study aims to find out what kind of impacts using three different vocabulary clusters (semantic, thematic and unrelated) have on young learners' success in terms of having an effectual vocabulary acquisition. It is also targeted to dispose which grouping is more assertive when it comes to have lasting consequences in learners' long term memories. As the research design of this study, the researcher uses quantitative research method based on numerical scores. According to Creswell (2013), a quantitative study aims to clarify the trueness of the target theories "by examining the relationship among variables" (p.4). About the usefulness of quantitative research design, Hochman (2006) affirms that the results of quantitative studies enable researchers to examine the common and specific features of the determined population, and it also provides them the chance of generalizing the outcomes. In this study, the researcher manipulated three independent variables which were semantic, thematic and unrelated vocabulary clusters. By utilizing these means the retention of acquired L2 words was identified as dependent variable.

The researcher's goal was to discover the relationship between the presented vocabulary cluster and the retention of the words placed in this cluster by the participants. During the instruction and testing sections, the researcher made sure that here was not any confounding variables which might affect the results and mislead the researcher. The setting and the subjects of the study were settled, and the vocabulary clusters for each category were prepared by the researcher. Besides, the immediate and delayed recall tests were also made ready to measure the retention of L2 words. For the analysis of the quantified data, IBM SPSS 22.0 version of statistical analysis program was utilized. Since the sampling of study was convenience sampling and the variables were decided by the researcher, this research study could also be termed a quasi-experimental one. Another characteristic of this study was that the person doing the research and handling the instruction and testing processes was same; hence, it was a primary research.

3.4 Setting

As the setting of this research study, the researcher selected a private primary school located in the European Side of İstanbul, Turkey. The school had certain features mentioned below.

The mother tongue of almost all students in Turkey is Turkish, and English is agreed upon as of course a foreign language of the country. About the difference between foreign language and second language, Littlewood (2006) states that a second language is the one used by the community in social settings; however, the foreign language mostly functions largely outside of the community and is usually taught in a school setting (p.2) (as cited in Karabulut, 2013, p. 43). Hence, English, as the foreign language of the Turkish people, is taught and learnt in the classroom and it helps learners communicate with people whose mother tongue is not Turkish. Therefore, in many schools of Turkey, English lessons are handled delicately. Especially in private schools, the expectations of parents and students in terms of having higher language proficiency in English are considerably high. Since the present school chosen for the study is a private school as well, the class hours designated for English lesson are quite many. For English classes, the administration employs both Native speaker of English and Turkish teachers who learn English as a foreign language and designs its curriculum accordingly. Although German is another foreign language being studied at this school, more focus in is on English.

Another feature of this private school is its binary education system. The school has been accredited to implement all organs of the International Baccalaureate (IB) programs. In line with the mission and vision of the IB, the following statement is released:

> The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who in turn, help to create a better and more peaceful world through intercultural understanding and respect. To this end the organization works with schools, governments and international organizations to develop challenging programs of international education and rigorous assessment (www.ibo.org, 2013, p. 4).

IB programs demand its member schools to carry out all requirements in terms of teaching and assessments. As a school under the Ministry of education as well, the present school needs to fulfil the requirements stipulated by Ministry of education. Consequently, this private school hosts a mixed curriculum encompassing the necessities of both systems. As an IB member, the school is conscious about how important English language teaching for international goals which is another reason for increasing the emphasis on English. What is more about the language education arrangement of the school, there are after school and weekend courses aimed at fortifying students in terms of desired language skills in English.

3.5 Target Population and Participants

As the subjects of study, 30 students studying in 3rd grade of a private school settled in European Side of İstanbul were determined. Thus, the researcher assumed that target population of this study consisted of all young learners studying in private schools settled in European Side of İstanbul.

To determine the subject of the study, the convenience sampling was applied; thus, 30 young learners with an age range from 8 to 10 from two different classes studying in third grade of a private school were used 15 students from Class A and 15 from Class B were involved. 17 of all these students were girls whereas the other 13 were boys. 28 of the subjects were Turkish and 2 were from Egypt and Syria. These two foreign ones had almost same proficiency level in English with their classmates, and they used Turkish to communicate at the school as well.

All subjects began to study within the scope of formal education in 2014-2015 academic year, and before that they had preschool education for at least one year. From the beginning of preschool, all subjects were exposed to English language as a foreign language. Especially since first grade, they have been studying English for 8 hours in a week and 6 hours with a Turkish teacher. The rest with a native speaker of English. Each class hour lasted for 40 minutes. Hence, their proficiency level in English was beginner. The classroom materials, class books and other teaching tools were organized properly to provide the students with favorable language learning environment, and in terms of clustering type, semantic clusters were used in lesson

planning and class books. All chosen students were able to follow the instruction, review lessons and take the immediate and delayed recall tests.

3.6 Procedures

In this part, sampling method, data collection instruments, data collection procedures and data analysis procedures of the study will be explained.

3.6.1 Sampling method. Before conducting a research, the researcher needs to decide what sampling type will be proper for the study. In order to generalize the outcomes of research, the sample chosen from the entire population is considerably crucial. That is why there are a few articles handling types of sampling as one of them, Doherty (1994) mentions the existence of two sampling which are probability and non-probability sampling. In probability sampling, each individual of the target population has the equal chance to be chosen for the sample. On the other hand; in non-probability sampling, there is no equality among the individuals of the population to be chosen for the sample of the research. Simple random sampling, systematic sampling, stratified sampling, stage sampling and cluster sampling are the types of probability sampling while non-probability sampling includes convenience sampling, sequential sampling, quota sampling, purposive sampling and snowball sampling. As a kind of non-probability sampling, convenience sampling occurs when the researcher chooses individuals from population by taking their accessibility and closeness into consideration. Since the researcher of this study focused on the accessibility of the subjects for the research, the convenience sampling was employed.

3.6.2 Data collection instruments. For data collection, the researcher benefitted from pre-test, instruction and review lessons focusing 3 different clusters, and immediate and delayed recall tests. The instruction and testing process took place from December 16 to January 13.

3.6.2.1 Pre-test. With the aim of choosing the words of target vocabulary clusters the researcher applied a pre-test (Appendix A) to all subjects of the study.

The researcher intended to determine if any of the words be used for the research was known by any participant and if so, to replace it with another unknown one. Since the familiarity of any word with the subject would decrease the reliability of the results, the researcher was quite careful in this process. As Hippner- Page (2000) and Erten & Tekin (2008) did, the participants were asked to match given L2 words with the correct picture. When the students matched a word with a correct picture, the word was eliminated, and another substitute and tested instead. This matching process determined the vocabulary clusters which were used for instruction lessons. There were three vocabulary clusters in the pre-tests, and each consisted of 10 English words which were chosen by the researcher in regards to the type of cluster. The ones in the semantic cluster were the types of landforms. The thematic clusters encompassed the words related to wedding, and the ones in unrelated cluster were not related in any way. The pre-tests were applied one week before instruction lessons.

3.6.2.2 Instruction and review lessons with three cluster types. As the treatment phase of the research, one week after pre-test, instruction and review lessons commenced. Throughout the instruction and review lessons, the researcher teacher's purpose was to present L2 words of the target clusters to the participants and reinforce them through review classes. Each instruction lesson which was split into three stages lasted 40 minute. In the first 15 minutes of the lesson, the teacher introduced the target vocabulary through flash cards (Appendix B). In the next 15 minutes, the new words were practiced through PowerPoint presentation (Appendix C), and during the last 10 minutes the words were reviewed through flashcards and web-based games (Appendix D). These instruction lesson were aimed at making the participants ready for immediate recall test. The instruction lessons were done at the beginning of the week. The aim of review lesson was to reinforce what the participants acquired during instruction lesson. The review lessons lasted for 30 minutes. In the first half, PowerPoint presentation was used, and the rest was done through flashcards. Review lesson were repeated for three days a week.

3.6.2.3 Immediate and delayed recall tests. With the aim of assessing to what extent the students could acquire the presented L2 words, the researcher teacher prepared a test (APPENDIX A) asking the students match the pictures with the correct words. The test used for immediate recall assessment was also used for delayed recall assessment. Immediate and delayed recall tests were developed for this. About the function of recall tests- in other words post-tests, many views were stated in the related literature. The researchers aim to measure the quantity of retention of presented words through recall tests. There are some types of recall tests such as asking for the translation of the word, telling or writing the equivalence target word in L1 or L2, and matching the pictures with proper words. ın the present study, the researcher preferred the last type of -demanding the correct match of pictures with L2 words-, because this was the most appropriate one for young learners who could recognize the given pictures and match them with the target words.

Just after the instruction lessons, the researcher applied an immediate recall test to examine the students' retention of the words in the target vocabulary cluster in terms of short-term acquisition. This process was repeated for each cluster, so the outcomes of the three clusters could be compared by the researcher. After being exposed to target cluster, the participants were given an immediate recall tests including ten pictures and ten L2 words. Then, they were asked to find the proper word for each picture and write them under the correct picture. The wrong matches and unmarked pictures were counted as wrong answers by the researcher. The researcher teacher did not help in any way while the subjects were taking the immediate recall test. The researcher did not give information to the subjects about their incorrect answers however, they were informed about their overall score.

Like immediate recall test, at the end of the week, the subjects were also exposed to a delayed recall test after three review lessons. The process implemented during immediate recall test was repeated for delayed recall test as in the same way. The participants were given a test requiring matching target L2 words with the correct picture. This time, the researcher's propose was to measure the retention of reviewed L2 words in terms of long-term acquisition and determine the variation among the scores of three vocabulary clusters.

3.6.3 Data collection procedures. After determining the sample group from the target population as the subjects of this study and deciding on research design, the researcher first created three vocabulary clusters –semantic, thematic and unrelated- encompassing ten L2 (English) words. To determine these ten words, the subjects were asked to match the shown pictures with the correct picture. By this way, the known words by any of the students was replaced with another one which was new to all. At the end of this part, the researcher was sure about the unfamiliarity of these L2 words (30 in total) with the participants. This clarification was quiet crucial for the reliability of research outcomes. While choosing these words, the advantage of the researcher was to have been the teacher of these students for almost three years. The teacher could easily grasp what their students knew or did not know. The researcher teacher took some important points into consideration while deciding these words. For instance, Karabulut (2013) used six concrete words for each cluster types due to working with very young learners. She tried to avoid any confounding variables such as the difficulty of overloading and abstractness. Like Karabulut's study, for the present study, the researcher also tried to use more concrete words to make them cognizable for young learners; however, since the participants were third graders studying English from kindergarten, the number of the chosen L2 words was ten.

After the process handling the preparation of target L2 words, on the first day of the week, all participants began to take instruction lesson presenting new vocabulary for the target cluster. The lessons for both classes lasted for 40 minutes. For the instruction, multiple material were utilized addressing the cognitive level of young learners such as colorful flashcards, PowerPoints slides including visuals and interactive web-based games. While showing the pictures, the researcher pronounced their names as well. Thus, they were exposed to both visual and auditory input. In the first 15 minutes of the lesson, first introduction of new words was done by the teacher through flashcards. Here, the aim was to present target vocabulary clusters to the students. Then, the students could practice these words through PowerPoint presentation during 15 minutes. In Power Point slides, there were guiding points for the students which appreciating the correct answer via applause, warning for incorrect answer through a noisy sound and asking repetition for incorrect answers. .

Lastly, they reviewed the words through flashcard game or web-based games for 10 minutes. Throughout the instruction lessons, the teacher was clear about the proper presentation of the words, and she corrected students' mistakes where any existed.

In the next step, just after the instruction lesson ended, the subjects were given an immediate recall test in which they were supposed to recognize the given pictures and L2 words, and write proper word under the correct picture. The researcher's goal was to measure what the participants could acquire in very short time, and she also waited to see the impacts of the three clusters on short-term memory. The students completed the test without any help, and their various scores were a part of data which would be analyzed later.

After applying the immediate recall test, the review lessons aiming to reinforce the students' learning in the target cluster were done. As being different from the instruction lessons, the target of review lesson was to help the students convey what they had in their short-memory to long-term memory, and keep them here for a long time. The review lessons were repeated for three days a week and done for each vocabulary cluster. The review lessons lasted for 30 minutes. In the first half, PowerPoint presentation was used, and the rest was done through flashcard and web-based games.

As the final step of the procedure, at the end of the week, the participants were asked to complete the delayed recall test which was in same format with immediate recall test. The students were supposed to recognize the given pictures and words, then, they needed to write the correct word under the proper picture. The difference between immediate and delayed recall test was that in delayed recall test, the researcher wanted to find out the student's retention of practiced L2 words in terms of long term memory whereas this was vice versa for the immediate one. The students completed the test without any help, and their score were another part of the data. Both immediate and delayed recall test were constructed to measure the effects of three clusters on learners' vocabulary acquisition.

The process from applying to pre-test to the subjects to applying delayed recall test lasted sixteen days encompassing three weeks. For instruction and review lessons, as 4 hours a week, 12 hours in total were separated. The steps including respectively pre-test, instruction lesson, immediate recall test, review lessons, and

delayed recall test were employed for all three vocabulary clusters in the same format.

Table 1

Procedure of the study

Pre-test with both Class A and Class B		
WEEK 1	*CLASS A*	*CLASS B*
Day 1	- Semantic cluster instruction lesson - Semantic cluster immediate recall test	- Semantic cluster instruction lesson - Semantic cluster immediate recall test
Day 2	- Semantic cluster review lesson	- Semantic cluster review lesson
Day 3	- Semantic cluster review lesson	- Semantic cluster review lesson
Day 4	- Semantic cluster review lesson	- Semantic cluster review lesson
Day 5	- Semantic cluster delayed recall test	- Semantic cluster delayed recall test
WEEK 2	*CLASS A*	*CLASS B*
Day 1	- Unrelated cluster instruction lesson - Unrelated cluster immediate recall test	- Unrelated cluster instruction lesson - Unrelated cluster immediate recall test
Day 2	- Unrelated cluster review lesson	- Unrelated cluster review lesson
Day 3	- Unrelated cluster review lesson	- Unrelated cluster review lesson
Day 4	- Unrelated cluster review lesson	- Unrelated cluster review lesson
Day 5	- Unrelated cluster delayed recall test	- Unrelated cluster delayed recall test
WEEK 3	*CLASS A*	*CLASS B*
Day 1	- Thematic cluster instruction lesson - Thematic cluster immediate recall test	- Thematic cluster instruction lesson - Thematic cluster immediate recall test
Day 2	- Thematic cluster review lesson	- Thematic cluster review lesson
Day 3	- Thematic cluster review lesson	- Thematic cluster review lesson
Day 4	- Thematic cluster review lesson	- Thematic cluster review lesson
Day 5	- Thematic cluster delayed recall test	- Thematic cluster delayed recall test

3.6.4 Data analysis procedures. For data collection, the researcher utilized the students' scores in immediate and delayed recall tests. The data obtained from these tests was analyzed through IBM SPSS 22.0 version of statistical analysis program. While doing this, certain descriptive statistics such as percentage, standard deviation, average and number were kept in sight. To start data analysis, the researcher first figured out whether the use of parametric or non-parametric method would be proper for this study. Since the elements of study did not meet the assumptions of Skewness and Kurtosis test for values of the study and Shapiro-Wilk and Kolmogorov-Smirnov test for the normal distribution of study, non-parametric method was followed. With the aim of determining the variance among three vocabulary clusters in short and long term word retention, non-parametric related-samples Wilcoxon Signed Rank Test was utilized.

Table 2

Overview of Research Questions and Corresponding Procedures

Research Questions	Data Collection Instruments	Data Analysis
I. Does teaching new words in L2 through various vocabulary sets have an impact on young learners' acquiring target words?	Pre-test Instruction and review lessons Immediate recall test Delayed recall test	SPSS (Statistical Package for Social Sciences) 17.0 version for Windows Non-parametric related-samples Wilcoxon Signed Rank Test
II. Is the variation between the outcomes of immediate recall and delayed recall test significant?		

3.6.5 Trustworthiness. About the importance of trustworthiness in research studies, Guba and Lincoln (1994) released several criteria.

- Credibility (internal validity): ensuring that the study measures or tests what is actually needed.

- Transferability (external validity): the extent to which the findings of one study can be applied to other situations.

- Dependability: showing that the same findings are consistent and could be repeated if the work were repeated in the same context with the same methods and participants.

- Confirmability: the extent to which the results of a research are formed by the subjects not the researcher's prejudices, motivation or interest (as cited in Erakman, 2015, p.37)

The researcher of this present study was also the teacher handling research process at chosen setting; hence, she was quite sure what was being measured. This could provide the research with much needed credibility. The number of participants was 30. This number may affect external validity, and the outcomes may not be generalized for the whole population. The procedure of the study was clearly explained, and this process would result in same findings if all requirements were met. The results were derived from totally quantitative data and there was not any interpretation or judgement by the researcher. This could increase the confirmability of the research.

3.6.6 Limitations. Throughout the research process, the points which might affect the reliability of the study were treated by the researcher. In order to enhance credibility, three tests –pre-test, immediate and recall tests- were utilized. The format of the tests and instruction lesson were appropriate for the age group; however, the number of subjects was small.

3.6.7 Delimitations. The number of participants would be more, and the number of 30 might be a risk for internal validity. The sampling type was convenience sampling; hence, this limited sample group may not represent the real population and the outcomes may be generalizable in a limited way. In order to avoid confounding effects of overloading and abstractness, the researcher that preferred concrete and rational amount of words be tested.

Chapter 4
Results

4.1 Overview

This chapter will see the statistical analysis of quantitative data obtained from immediate and delayed recall tests of each vocabulary set and the description of the corresponding results. As the beginning step of the data collection procedure, the participants were asked to fulfil the immediate test encompassing ten matching items just after being exposed to first instruction in the target vocabulary cluster. This phase was repeated for all three sets. The results of all these three immediate tests were utilized to investigate if there was a significant variation among the outcomes of three vocabulary sets. With the aid of immediate recall tests, the researcher's desire was to determine the differences among the clusters in term of short term retention whereas she aimed to reveal if the type of used vocabulary cluster could have an impact in long-term vocabulary gain through delayed recall tests.

When it comes to the difference between the scores of immediate and delayed recall tests, the researcher focused on the expectations of both first and second research questions addressing which vocabulary cluster is beneficial to students memorizing L2 words in the short run and which one helps them acquire these words in the long run. Thanks to the immediate recall tests applied just after the first exposure to target words and delayed recall test given at the end ow teaching week, the researcher reached out the necessary data.

By using IBM SPSS 22.0 version of statistical analysis program, the researcher reported the findings addressing the research questions of the study stated below:

Research Question 1 : Does teaching new words in L2 through various vocabulary sets has an impact on young learners' acquiring target words?

Research Question 2 : Is the variation between the outcomes of immediate recall and delayed recall test significant?

4.2 The Findings of Research Questions

In order to explore the research questions of the present research, results of the immediate tests and delayed tests filled by the same students were compared to find out if there was a significant difference between the groups. Therefore, paired sample tests (specifically, non-parametric related-samples Wilcoxon Signed Rank Test as it is explained below) were used for the comparison of the mean scores of the participants. Before the analysis, data was checked for the assumptions of parametric tests (etc. normal distribution, continuous variables, outlier analysis). For the detection of the significance, an alpha level of .05 is used. In other words, significance levels below an alpha level of .05 is taken as statistically significant results.

First of all, for the exploration of the assumptions of the parametric analysis mentioned above, outlier screening is applied. Outliers are screened with the use of Skewness and Kurtosis values of the continuous variables. After, the Kurtosis and Skewness values are calculated, variables' z scores were found. The z scores which do not fall between -3 and +3 are aimed to be excluded from the further analysis. No outliers were found according to the z scores in this part of data screening. Secondly, normal distribution assumption of the parametric tests is checked. In order to check normal distribution, both Shapiro-Wilk and Kolmogorov-Smirnov test results are found. According to the results, the data showed a violation of normal distribution assumption because, both tests are found to be significant ($p < .05$). If the sample size were larger ($N > 40$), some studies (e.g. Meyers, Gamst, & Guarino 2006; Elliott &Woodward, 2007) suggests the use of Q-Q plots' evaluation for further steps to work with parametric methods but in the present case ($N = 30$) the only interpretation of the data must be with the use of non-parametric analysis.

As summary for the assumption check in the present study, it is found that data met all the assumptions but normal distribution assumption. Thus, to explore the research questions, non-parametric tests are used. The appropriate non-parametric test for the paired sample data were acquired as related-samples Wilcoxon Signed Rank Test. Therefore, research questions of the present study are explored with related-samples Wilcoxon Signed Rank Test.
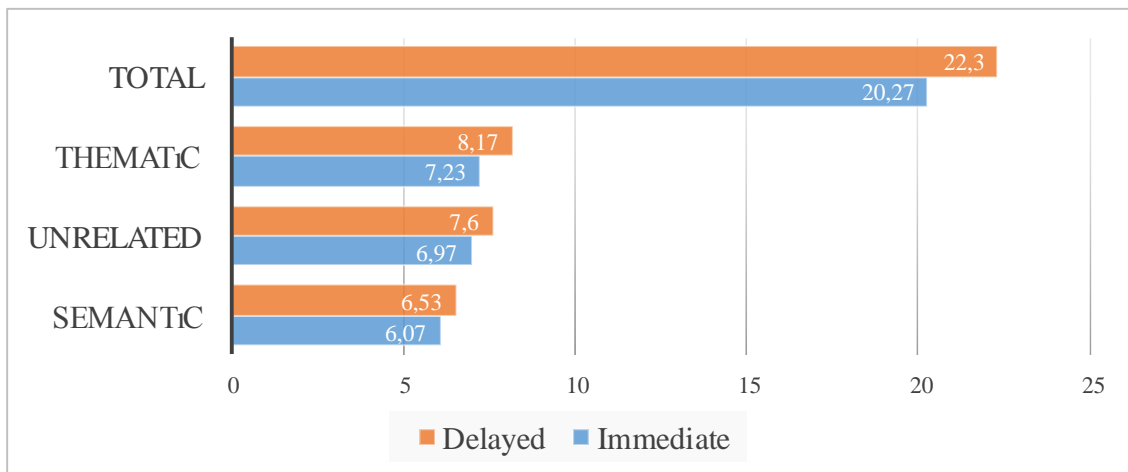
Figure 1. Mean Scores of Word Groups

In the base of the research, the first research question looks for how the type of used vocabulary cluster can affect the learning success of participants in terms of L2 vocabulary gain. Hence, the results of recall tests of all vocabulary clusters and other comparisons among three sets helped the research answer the first research question. In order to find out whether immediate tests are significantly different from delayed tests, a related-samples Wilcoxon Signed Rank Test is used with the use of overall immediate scores and delayed scores are compared and it is found that immediate recall and delayed recall scores are significantly different from each other ($p = .002$). It is seen that delayed test scores ($M = 22.30$) are higher than immediate test scores ($M = 20.27$; *see* Table 3and Figure 1).

As the core point the first research question seeks, the variance among three vocabulary clusters –semantic, thematic and unrelated- in immediate recall tests is clearly illustrated through a related-samples Wilcoxon Signed Rank Test. It was obvious that with means scores "7.23" and "6.97", thematic and unrelated vocabulary sets were substantially remembered in short run by the subjects whereas the target words of semantic cluster were not immensely retained in learners short-term memory (see Figure 1).

The second research question, which was seeking the significance of variation between immediate and delayed tests, was answered through the total comparison between the results of immediate and delayed recall tests applied for each cluster. Table 3 was created to present the mean scores of participants' results in three

immediate and delayed recall tests. After first instruction lesson and immediate recall test, the participants were exposed to three review lessons and a delayed recall test at the end, and this phase was repeated for each vocabulary cluster. The outcomes of these three delayed recall tests enabled the researcher to compare the difference among three vocabulary sets in terms of long term vocabulary gain. In order to find out which word groups' immediate tests are significantly different from delayed tests, three separate related-samples Wilcoxon Signed Rank Test are calculated.

Table 3

Descriptive Statistics

	N	Min.	Max.	M	SD
Semantic immediate	30	0	10	6.07	2.33
Semantic delayed	30	0	10	6.53	2.84
Unrelated immediate	30	2	10	6.97	2.71
Unrelated delayed	30	4	10	7.60	2.28
Thematic immediate	30	2	10	7.23	2.87
Thematic delayed	30	4	10	8.17	2.04
Immediate total	30	9	30	20.27	6.31
Delayed total	30	12	30	22.30	6.01

Firstly, semantic word group is explored with Related-Samples Wilcoxon Signed Rank Test Significance (*see* Table 4). It is found that there is no significant difference between immediate test and delayed test ($p > .05$). Therefore, it can be said that in semantic word group, training does not differentiate remembering words more as the immediate and delayed recall scores are not statistically different.

Secondly, unrelated word group is explored with Related-Samples Wilcoxon Signed Rank Test Significance (*see* Table 4). According to the yielded results, it is found that immediate recall and delayed recall scores are significantly different from each other ($p = .03$). It is seen that delayed test scores ($M = 7.60$) are higher than immediate test scores ($M = 6.97$; *see* Table 3 and Figure 1). Therefore, it can be said that after the training, students statistically significantly remember more words in unrelated word category.

Thirdly, thematic word group is explored with Related-Samples Wilcoxon Signed Rank Test Significance (*see* Table 4). The results showed that immediate

recall and delayed recall scores are significantly different from each other ($p = .04$). It is seen that delayed test scores ($M = 8.17$) are higher than immediate test scores ($M = 7.23$; *see* Table 3 and Figure 1). Thus, it can be said that after the training, students statistically significantly remember more words in thematic word category.

All in all, the existence of an increase between the numeric results of immediate and delayed recall tests is obvious no matter what the vocabulary set the research uses. This was an expected outcome since the researcher enabled the participants to practise the target words through review lessons and get higher scores in delayed recall tests. Related-samples Wilcoxon Signed Rank Test clearly illustrates to what extent the scores of delayed recall tests become better than the ones in immediate recall tests.

Table 4

Related-Samples Wilcoxon Signed Rank Test Significance Results

	Related-Samples Wilcoxon Signed Rank Test Significance
Semantic immediate Semantic delayed	.20
Unrelated immediate Unrelated delayed	.03
Thematic immediate Thematic delayed	.04
Immediate total Delayed total	.002

To conclude, the scores obtained from three immediate and delayed recall tests enabled the researcher to answer the research questions of related to the study. Through similar-Samples Wilcoxon Signed Rank Test, the analysis proved that the type of used vocabulary cluster in L2 vocabulary teaching resulted in significant variation among learners' success in terms of short-term and long-term retention. The findings of the analysis indicated that presenting L2 vocabulary especially through thematic clusters could promote desired learning process, not only on the short run but also in the long-term. The scores for unrelated immediate and recall test were also evaluated as promising for effectual L2 vocabulary teaching whereas the

findings disfavored the usefulness of semantic sets due to is not having any significant impact on learners' immediate and delayed recall test results.

Chapter 5
Discussion and Conclusions

Throughout this study, the researcher aimed to find out the reflections or rather effects of using various vocabulary clusters on students' vocabulary gain in second language learning. The differences among the vocabulary clusters in terms of short-term acquisition and long-term retention were also examined by the researcher. As the participants, 3rd grade students from a private primary school were chosen and quantitative research method was utilized for data collection. For intervention, the researcher/teacher first determined three vocabulary clusters -semantic, thematic and unrelated- and ten new words for each cluster assuredly unfamiliar with students. In the beginning, the students were exposed to ten words of each vocabulary set, and right after, they were then supposed to complete a matching exercise asking for writing the proper word under the correct picture. This was called immediate recall testing. In the course of the following three days, the subjects could practice and memorize those new words by means of review lessons which consisted of various vocabulary games and revision. At the end of three review lessons, the matching exercise was given again to the participants. This was termed delayed recall testing. Thanks to the students' scores obtained from immediate recall tests of three vocabulary clusters, the researcher could have enough data to answer the first research question looking for the variation among vocabulary sets in terms of short-term positive impacts of them on learners. In addition, the scores of the delayed recall test of each cluster was helpful to reveal the differences among three sets in terms of long-term vocabulary retention.

In this chapter, the numerical findings elicited from the outcomes of immediate and delayed recall tests which were analyzed in previous chapters were discussed and the resulting overall conclusions that were deduced as a result were revealed. Furthermore, in the end, the researcher also presented various implications which would be useful for curriculum planners and developers, text book writers and foreign language teachers. There are several recommendations for further research handling similar issues in order to increase reliability and validity of a research.

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5.1 Discussion of Findings for Research Questions

In this study, the quantitative data created an enabling environment whereby the researcher could not only answer but interpret the research questions "Does teaching new words in L2 through various vocabulary sets has an impact on young learners' acquiring target words?" and "Is the variation between the outcomes of immediate recall and delayed recall test significant?". The findings of this study indicated that presenting target L2 vocabulary to young learners through different vocabulary sets formed as semantic, thematic and unrelated certainly resulted in significant effects on learners' short-term word acquisition and long-term retention. Basically, the indications drawn from related-samples Wilcoxon Signed Rank Test demonstrated that the participants were more successful in matching exercise of thematic and unrelated vocabulary sets whereas one of semantic set was quite challenging for them to fulfil. That was a clear outcome for the researcher that presenting new words in semantic clusters had a frustrating impact on young learners in EFL classrooms. One other outcome to note was the words kept in mind by the students in terms of short-term acquisition belonged to mostly thematic vocabulary set. In terms of short-term vocabulary gain, the unrelated clustering was ranked as number two. This success rating among the vocabulary sets occurred in the same way for long-term gain when the delayed tests' scores were examined.

When it comes to finding out the justification of this effectiveness sequencing, the interference theory which was mentioned before in the study may be treated as the cause (Tinkham, 1993-1997; Waring, 1997). For the participants ranging in age from 8 to 10, keeping ten words belonging to the same semantic category might increase confusion and impede influential learning and retention. By taking the classroom observations of the researcher, it was obvious that the young subjects struggled considerably even in practicing the words of semantic set, and it was inevitable that the learners got confused while answering the matching questions of this section which ultimately resulted to the giving of incorrect answers. As distinctiveness theory alleges which can be assumed as an opposite view of the interference theory, the participants' tests scores in unrelated vocabulary set were quite high, and they acquired these words faster which were profoundly distinct from each other (Hunt & Elliot, 1980; Hunt & Mitchell, 1982; Schmidt, 1991). Among

three clustering ways, it was noticed that the young participants fared better in thematic clustering tests as they could correlate those new words with their background knowledge. That circumstance might be based on Barlett's (1932) "schema theory" claiming the positive correlation between the previous experiences and effective learning process.

The overall outcomes of the present study have certain similarities and differences with other studies in the related literature. It is possible to encounter many studies coming up with the similar outcomes which reveal participants' success rate in various vocabulary sets like this present study. Here are some examples from the ones advocating for the usefulness of thematic vocabulary clustering in EFL classrooms. As one of the studies handling same vocabulary clusters and reaching out similar outcomes with the present study, Al-Jabri (2005) conducted a research study comparing the effectiveness of thematic, semantic, unrelated and contextualized word grouping through an immediate recall test right after the intervention and a delayed recall tests a week later. Besides, some of the participants who were quite successful in the tests were asked some reflective questions addressing four vocabulary sets. The findings of Al-Jabri's study revealed that the vocabulary category from which the learner recalled most words was thematic clustering and the semantic one was ranked as the least effective cluster for L2 vocabulary acquisition. In the light of these findings, it was clear that the present study highlighted parallel findings with Al-Jabri's study which advocated the practicality of thematic clusters and the inefficiency of semantic ones.

One other study focusing on the effectiveness among vocabulary clusters by Mirjalili, Jabbari and Rezai (2012) averred that the participants got low scores in semantic testing whereas they were quite successful in thematic set tests. For that hindering impacts of semantic grouping, the researchers opined that interference and distinctiveness theories were the reason. The researcher of this present study mentioned these theories as the basis of ineffectualness of semantic sets, as well. Mirjalili, Jabbari and Rezai (2012) explained how the findings confirmed schema theory promoting the positive effects of previous experiences on present learning. As a well-known researcher in vocabulary clustering, Tinkham (1993) reached out significant outcomes over effective word grouping. By utilizing 24 subjects, the

researcher found that semantic clustering had a frustrating impact on L2 vocabulary achievement, and although unrelated set was noted as more influential than semantic one, the participants felt quite confident the got highest scores in answering thematic tests. As Tinkham (1993) found out, the findings of present study displayed how thematic and unrelated sets were considerably effectual whereas the semantic ones were marked as unhelpful. Motallebzadeh and Heirany (2011), two other researchers focusing on the use of thematic grouping on desired L2 gain with 80 participants, found out that in reading comprehension classes, the integration of thematic clusters was pretty effective. The researcher came to this conclusion with the aid of the findings of studies conducted by Finkbeiner and Nicol (2003) and Tinkham (1997) which highlighted the impeding sides of semantic sets and encouraging features of thematic clustering. In parallel with the findings of Motallebzadeh's and Heirany's (2011) study, the present study concluded that semantic clusters had hampering impacts on learning process and discouraged learners because the scores of students in both immediate and delayed recall tests of semantic clusters were quite low.

From the outcomes of the present research study, the helpfulness of thematic grouping was obvious. However, apart from the studies promoting usefulness of thematic grouping like the present study such as Tinkham (1997), Waring (1997), Finkbeiner and Nicol (2003) Al-Jabri (2005), Motallebzadeh and Heirany (2011), and Mirjalili, Jabbari and Rezai (2012), there are a few studies promoting both thematic and semantic sets as well. A research study comparing the outcomes of semantic and thematic vocabulary clustering in second language vocabulary acquisition by Hippner-Page (2000) demonstrated that the learning styles of participants may affect the usefulness of handled vocabulary clusters. In other words, the findings of this study concluded that both thematic and semantic vocabulary clustering can be effective in L2 word teaching and planning should be arranged by taking into consideration learners' individualities. However, the findings of present study did not correspond with those of Hippner-Page's (2000) study as they declared that semantic vocabulary clusters were not valuable for promising L2 acquisition. Mehregan's (2013) study was one other supporting that both semantic and thematic teaching would be helpful for desired vocabulary acquisition. By including 60 participants, the researcher stated that the difference between the scores of the two

groups was not really significant. Therefore, semantic word grouping was as effective as thematic one. As it had almost same findings with Hipnner-Page's (2000) study, Mehregan's (2013) study, supporting the usefulness of semantic clusters, was not consistent with the present study.

The present study indicated that unrelated clustering can be more effective than semantic sets by decreasing interference and increasing distinctiveness. From the literature, here are some studies advocating this outcome. Waring (1997), who replicated Tinkham's (1993) study, applied two experiments to Japanese participants and through the tests given after those experiments, the comparison of effectiveness of both semantic and unrelated group was done. The findings of study affirmed that the words belonging to semantic set caused to interference in subjects' minds and they could not get high scores whereas the situation was vice versa for thematic set, and this outcome was similar to the ones that present study showed. That is why, Waring (1997) mentioned some implications for classroom teaching briefly explaining how semantic vocabulary cluster would impede L2 word acquisition and to what extent thematic sets would facilitate vocabulary acquisition as the researcher of present study did. Finkbeiner's and Nicol's (2003) study was one of the important studies refuting the use of semantic grouping in L2 teaching. The researchers tried to discover how semantic grouping would result in translation tasks. What they found was the time for the translation of semantic group was quite long; therefore, they agreed upon the fact that semantically formed tasks impeded learning process. Since it was, to a large extent, disputable among researchers whether semantic grouping would hinder learning or not, Papathanasiou (2009) decided to study on this issue as well. The researcher worked with 31 intermediate EFL students and 32 beginner EFL adults. He presented target words through semantic and unrelated clusters. The findings demonstrated that there was not a significant difference between intermediate subjects' scores in semantic and unrelated tests. However, semantically formed vocabulary set was considerably discouraging for beginner EFL learners. That finding of Papathanasiou's (2009) study was alike with what the present study revealed. 3rd grade beginner EFL learners experienced same difficulties during the acquisition of semantic words. As Finkbeiner and Nicol (2003) and Papathanasiou (2009) already revealed, the researcher reported the visible negative impacts of

semantic vocabulary sets on learners' vocabulary achievement by initiating interference in their minds.

Karabulut (2013) ascertained that the number of retained words from unrelated cluster was the highest, and the subjects succeeded better in thematic tests than they did in semantic ones. The findings of present study favored the use of mainly thematic sets and then the use of unrelated ones whereas Karabulut's (2013) presented unrelated clustering as the most effective. The reason of this variance could result from the age group of participants as very young learners might not be matured enough to associate the words of thematic sets and be better in grasping the words with non-semantic or thematic resemblance. However, when it comes to the usage of semantic clustering in L2 vocabulary teaching, both studies agreed upon its impeding effects on learners.

Jang (2014) was another researcher coming up with similar outcomes with the present study. As many EFL text book writers created the general design of their books semantically, Jang (2014) desired to figure out if this widespread ritual was effective in L2 classroom or not. Through 174 primary school students and vocabulary tests, Jang (2014) concluded that both clustering types helped participants acquire target words; nevertheless, they outperformed in unrelated clustering tests. Choi and Chung (2016) were two other researchers whose findings again supported the idea of semantic clusters having negative impacts on L2 vocabulary achievement. Since it compared semantic and phonological vocabulary clustering, Wilcox's and Medina's (2013) study might be assumed different from the present study due to the examination of different vocabulary categories; however, it still handled whether semantic grouping was efficient or not. The findings of Wilcox's and Medina's (2013) study indicated that semantically formed words were more challenging for the subjects than phonologically formed ones. As in Jang's (2014), Choi's and Chung's (2016), and Wilcox's and Medina's (2013) studies, the present study discovered how the subjects had difficulties while answering the test questions of semantic sets and they were motivated during the assessment of thematic and unrelated clusters with tease created by distinctions among the words.

From the test scores of immediate and delayed recall tests of the present study, it was concluded that presenting target L2 words through semantic clustering might

hinder effective vocabulary achievements. This finding was interpreted by being grounded on "interference theory" and "distinctiveness theory". Quite a few studies came up with similar conclusions like Tinkham (1997), Waring (1997), Finkbeiner and Nicol (2003) Al-Jabri (2005), Motallebzadeh and Heirany (2011), and Mirjalili, Jabbari and Rezai (2012) whereas there were some others alleging the effectiveness of semantic clustering. "Semantic mapping", a theory promoting semantics sets, was claimed as a useful method for influential word teaching (Marzano & Marzano, 1988; Morin & Gobel, 2001; Baleghizadeh & Naeim, 2011). The idea laying in base of semantic mapping was the direct positive correlation between words having a relationship among each other and learners' easier retention. However, in the present study, the outcomes did not correspond with this claim.

AlShaikhi (2011) was another research whose findings were not similar at all with those of the present study. The results of AlShaikhi's research indicated that semantic grouping was more effective than the thematic one. These different outcomes may be explained through assorted reasons such as utilizing different research designs, participants and instruments. Hashemi and Gowdasiaei (2005) were two other researchers who advocated the integration of semantically grouped words into L2 teaching. Their research findings showed that no matter what L2 proficiency level the subjects had, they performed higher in semantic tasks than they did in unrelated category testing. In addition, Manning and Kahana (2012) mentioned "free call" issue which supporting that typical words would come into mind faster. Their findings revealed that semantic clustering would be really effective in vocabulary teaching; however, the measurement of semantic similarity among words should be ensured.

To sum up, when the overall interpretation and discussion of the findings of present study are done, it is obvious that the types of presented vocabulary cluster has a crucial impact on young learners' acquiring second language vocabulary. Whereas thematic and unrelated word grouping have positive impacts on learners' short-term and long-term retention, the semantic clustering considerably impedes vocabulary achievements. Since the young learners get easily confused because of interference due to semantic similarities and with lack of distinction among the

words, curriculum planning of EFL classroom teaching should be arranged accordingly.

5.2 Theoretical Implications

This research study focusing on using various vocabulary clusters in EFL classrooms enabled certain implications for textbook writers, curriculum and lesson planners, language teachers, researchers and other minds related with EFL areas. The findings of this study demonstrated that presenting new L2 vocabulary through thematic and unrelated clusters encourage learners to grasp and learn better. Hence, while planning language education curriculum and designing text books for EFL classrooms, this issue should be taken into consideration. Contrary to the usefulness of thematic and unrelated clustering, L2 learners might be hindered due to the interfering effects of semantic grouping. Owing to this, curriculum developers and text book writers ought to arrange teaching materials and foreign language teachers should plan lesson activities accordingly.

As the findings of this study demonstrate, there are some vital points in L2 teaching-learning process which should be revised and rearranged. One of them is the current model of ESL/EFL curricula that is mostly based on semantically processed strategies. The outcomes drawn from many contemporary educational research studies like this present study advise all people related to second language teaching to discern the impeding effects of semantically formed teaching on leaners' comprehension and how encouraging the use of thematic and unrelated clusters are for them. All curriculum planners and developers need to follow these recent findings of EFL/ESL related research studies focusing on effective vocabulary teaching and reorganize what they have accordingly.

Another issue upon which the findings of study touch is the course materials used in L2 classrooms. Almost all present EFL/ESL text books are, for the most part, generated through the units consisting of sematic word groups. About the distribution of semantically related words into a textbook, Waring (1997) stated that semantic vocabulary sets should be avoided whereas the words having quite close semantic links such as days, months and numbers should not be separated which would result in infeasibility (as cited in Karabulut, 2013, p.71). To enable this proper distribution

decreasing interference among learners, the units of text books should be formed through theme based or real-life situations. This planning can bring about more thematic and unrelated vocabulary sets in language education materials as this present study suggests.

As the guide of second language education process, the foreign language teachers are the main interlocutors of this study. The fact that most available ESL/EFL course materials are formed through certain units encompassing semantic word sets which do not correspond with the finding of study. As many researchers find out, semantic clusters may trigger learners to get confused because of semantic interference (Finkbeiner &Nicol, 2003; Erten &Tekin, 2008; Papathanasiou, 2009; Mirjalili, Jabbari & Rezai, 2012). Right here, the essential role of language teachers should be the creation of their own lesson contents consisting of more thematic and unrelated vocabulary sets which can encourage the learners grasp faster. Especially while determining the text books, they should ensure that the units go through theme-based topics and real-life incidents. The three review lessons done right after the immediate recall test showed how important making practice with new vocabulary through interactive and entertaining games for young learners are. Hence, the language teachers should always keep in mind the significance of reviewing what is presented.

In conclusion, as this present study and many others indicated, the use of semantic vocabulary clusters might impede L2 vocabulary acquisition process and discourage learners whereas thematic and unrelated sets help them gain target vocabulary more effective. Hence, CLIL based course materials should be designed and implemented in young learners EFL classrooms. Therefore, it is worth stating that all minds engaged in EFL/ESL fields such as curriculum planners and developers, foreign language teachers, educational researchers and text book writers should be aware of the findings and implications of latest educational research studies and rearrange the existing mechanism to reflect this where necessary.

5.3 Conclusions

The results of this study denote that the types of presented vocabulary cluster have a crucial impact on young learners' acquiring second language vocabulary.

Whereas thematic and unrelated word grouping have positive impacts on learners' short-term and long-term retention, the semantic clustering impedes vocabulary achievement unignorably. Since the young learners get easily confused because of interference due to semantic similarity and with lack of distinction among the words, curriculum planning of EFL classroom teaching should be arranged accordingly.

To conclude, the use of semantic vocabulary clusters might hinder L2 vocabulary acquisition process and discourage learners whereas thematic and unrelated sets help them gain target vocabulary more effective. Consequently, all population engaged with EFL/ESL fields such as curriculum planners and developers, foreign language teachers, educational researchers and text book writers should be aware of the findings and implications of latest educational research studies and rearrange the existing mechanism when necessary.

5.4 Recommendations for Further Research

Going forward, here are some significant recommendations of this research study for further research that will handle similar issues. The first one is the number of samples used for data collection. The researcher included 30 young learners available at that fleeting time in history. However, to increase generalizability of outcomes for an entire population, this number should be increased in further research.

The second issue worth remarking on is that, for immediate and delayed recall tests, matching exercise asking the match of pictures and words were used. This testing process may include more alternatives such as multiple choices fill-in- the blanks or reordering question types.

The third recommendation to state is the research design of the study. While planning the instruments and data collection process, the researcher preferred quantitative method. However, in order to increase the amount of data, more instruments such as journals and surveys can be considered.

The last but not the least point to mention is the vocabulary size of the target clusters. The total number of presented words was ten for each cluster. This number was quite enough for young learners; nevertheless, if the age level of further research is higher, this number may be increased.

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APPENDICES

A. Immediate and Delayed Recall Tests

SEMANTIC SET

Look at the pictures below and match them with the correct words into the box.

Strait	Valley	Peninsula	Continent	Pond
Bay	Plain	Cliff	Harbour	Archipelago

_____   _____   _____

_____   _____   _____

_____   _____   _____

_____

UNRELATED SET

Look at the pictures below and match them with the correct words into the box.

Goose	Pharmacist	Beverage	Feather	Teapot
Scales	Muddy	Trip	Iron	Zipper

_____   _____   _____

_____   _____   _____
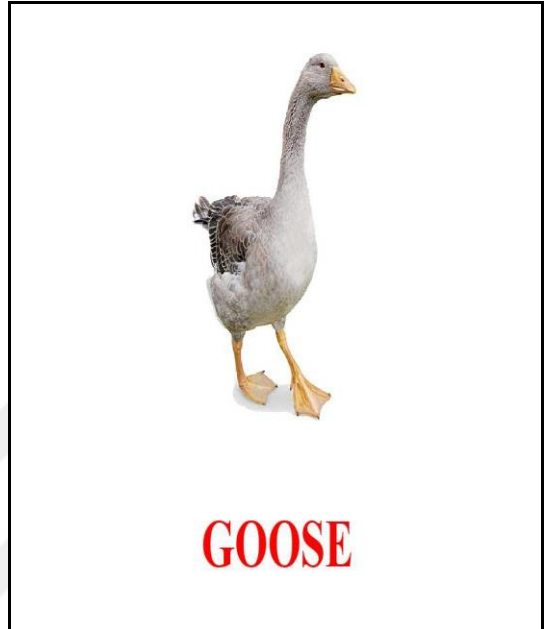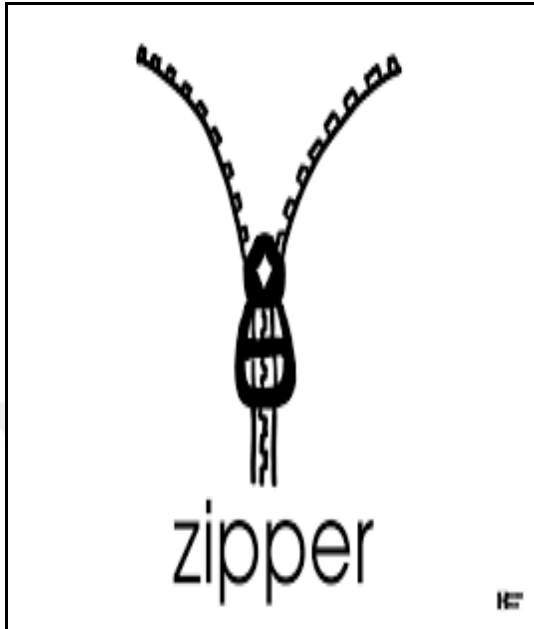
_____   _____   _____

_____

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THEMATIC SET

Look at the pictures below and match them with the correct words into the box.

Wedding	Bride	Band	Firework	Groom
Tiara	Invitation		Feast	Gift	Veil

_____   _____   _____

_____   _____   _____

_____   _____   _____

_____

B. Examples from Flashcards Used in Instruction and Review Lessons

C. Examples from PowerPoint Slides

Question slide

Which is a cliff?

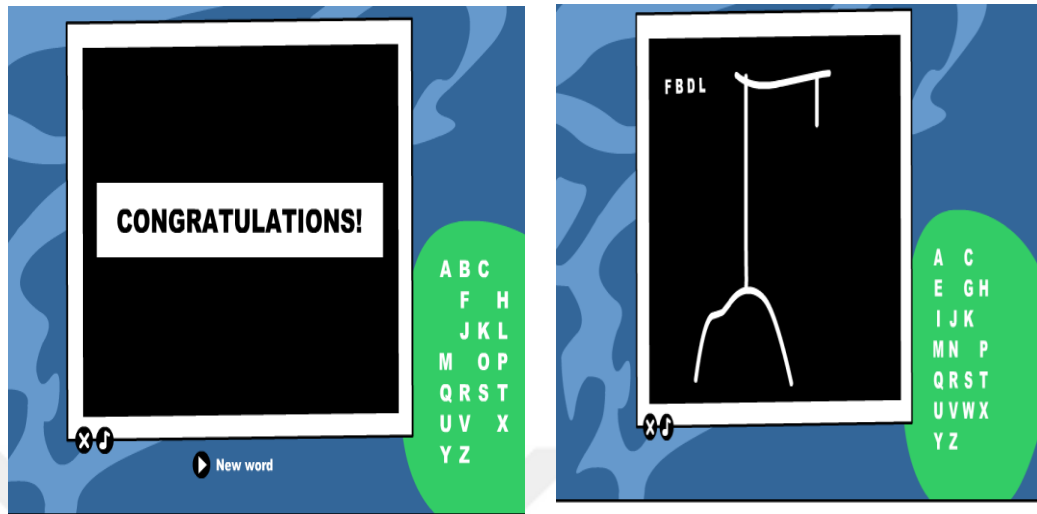Correct answer slide

Incorrect answer slide
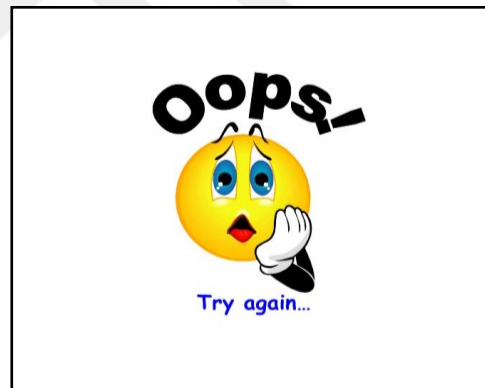
D. Examples from Web-Based Practice

W E D D I N G
_ _ _ _ _ _ _ _

_ O O _ _
_ _ _ _ _

E. Curriculum Vitae

PERSONAL INFORMATION

Surname, Name: Gök, Hatice

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EDUCATIONAL BACKGROUND

(2014-2017): Bahcesehir University, MA in TEFL, Istanbul

(2010-2014): Boğaziçi University, English Language Education, Istanbul

(2006-2010): Ürgüp Tesan Anatolian Teacher Training High School, Nevşehir

(1999-2006): Derinkuyu Primary School, Nevşehir

WORK EXPERIENCE

(August 2014 - …): English Language Teacher, Beykent Primary School, Istanbul

SKILLS

Computer-Related Skills: MS Office Tools, Internet & Microsoft Operating Systems, Google Applications

Foreign Languages (Oral & Written): English: Advanced, Spanish: Elementary

Social Skills: Extensive communicative, organizational and interpersonal skills

Interests: Reading, listening to music, playing volleyball, swimming and travelling.

Job-related Skills: Teaching skills in English language teaching (Reading, Writing, Listening and Speaking), classroom management, creating exams, computer skills, maintaining a quality learning environment, evaluating students, preparing grades

CERTIFICATES

(March 2016) Certificate of attendance to 3rd Educational Technologies Summit

(November 2015) Certificate of attendance to the conference "Celebrating Differences" arranged by Doğuş and Beykent University

(March 2015) Attendance to Educational Technologies Platform Conference arranged by Turkish Private Schools Association

(March 2015) Certificate of attendance to 13th IB Day arranged by Arel Schools

(August 2014) Certificate of attendance to the workshop "An Introduction to the PYP Curriculum Model" organized by IB Global Centre

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