COMPUTER ASSISTED VOCABULARY LEARNING: A STUDY WITH TURKISH 4TH GRADE EFL LEARNERS

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M.A. THESIS

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YÜKSEK LİSANS TEZ ÖZÜ

BİLGİSAYAR DESTEKLİ SÖZCÜK ÖĞRENİMİ: YABANCI DİL OLARAK İNGİLİZCE ÖĞRENEN DÖRDÜNCÜ SINIF ÖĞRENCİLERİYLE YAPILAN BİR ÇALIŞMA

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Bilgisayar destekli dil öğrenimi, öğrenenlere gerek kendi hızlarıyla bireysel olarak çalışma, gerekse birebir etkileşimde bulunabilecekleri motivasyonu artıran bir atmosfer sağlaması açısından son yıllarda dil öğreniminde önemli bir yere sahiptir. Bilgisayar destekli sözcük öğrenimi, bilgisayar destekli dil öğreniminin en yaygın kullanımlarından biridir. Bu araştırma, bilgisayar ortamında hedef sözcükleri çalışan öğrencilerin, aynı sözcükleri sınıf ortamında öğretmen yardımıyla çalışan öğrencilerle karşılaştırıldığında, sözcük öğrenmede ve öğrenilen sözcüklerin hatırlanmasında daha başarılı olup olmadığını incelemiştir. Bu çalışmaya Eskişehir ilindeki M. Akif Ersoy İlköğretim Okulu'ndan 68 dördüncü sınıf öğrencisi katılmıştır. Bu öğrenciler, bilgisayar ve öğretmen destekli grup olmak üzere iki gruba ayrılmıştır. Bilgisayar grubu, bilgisayar laboratuarında 'Word Bird's Land' CD' sini kullanarak araştırmacı gözetiminde hedef sözcükler üzerinde bireysel olarak çalışırken, aynı sözcükler öğretmen grubuna sınıf ortamında öğretmen tarafından öğretilmiştir. Her iki grup da 2007-2008 eğitim-öğretim döneminin ilk yarısında, bir hafta aralıkla iki uygulamaya katılmış ve bu uygulamalar sonucunda toplam 40 sözcük üzerinde çalışmışlardır. Her bir uygulama sonunda öğrencilere tanıma veya üretme testi verilmiştir. Öğrenilen sözcüklerin kalıcılığını ölçmek için aynı testler, her bir uygulamadan iki hafta ve bir ay sonra tekrar verilmiştir. Test sonuçlarının ortalamaları bağımsız t-test ile analiz edilmiştir. Araştırma sonucunda, hem

uygulamadan hemen sonra hem de daha sonraki zaman aralıklarında verilen testlerde, bilgisayar grubunun öğretmen destekli gruptan daha fazla sözcük kazanımının olduğu ortaya çıkmıştır. Aynı zamanda, yapılan istatistiksel analizler, bilgisayar grubu ile öğretmen grubu arasında tanıma testinde her zaman istatistiksel olarak anlamlı bir fark olduğunu, üretme testinde ise sadece uygulamadan hemen sonra verilen testte anlamlı bir fark olduğunu ortaya çıkarmıştır. Bu sonuç, bilgisayar destekli sözcük öğreniminin, sözcükleri tanıma boyutunda daha etkili olduğunu göstermektedir.

ABSTRACT

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In recent years, computer assisted language learning has come to fore in language learning. Indeed, it can help learners to study language individually at their own pace in a motivated atmosphere with a high level of interactivity. Computer assisted vocabulary learning has been considered to be one of the most common applications of CALL. This research paper aims to determine whether learning and retaining of foreign language vocabulary would prove to be profitable for students who study vocabulary instruction in a computer environment when compared to students who study the same vocabulary instruction material in a classroom environment under the guidance of their teacher. The subjects of this research consisted of 68 fourth grade students who enrolled in M.Akif Ersoy Primary School in Eskişehir. The students were equally assigned to a computer assisted vocabulary instruction (CAVI) group and a teacher-led group. The CAVI group studied target words by using 'Word Bird's Land' CD in a computer lab whereas the teacher-led group was instructed the same words by their teacher in the classroom. Both groups participated in two implementation sessions which were conducted in two subsequent weeks in the first semester of 2007-2008 academic year. Totally, they studied 40 words at the end of the two implementations. After each implementation, both groups were evaluated on recognition or production tests. The same tests were also assigned two weeks and one month after each implementation session in order to determine vocabulary retention. The results of mean scores were interpreted by using independent-sample t-test. The outcome of the research indicated that the CAVI group performed better on both

immediate and delayed tests when compared to the teacher-led instruction group. The statiscal analysis also revealed that while there were significant differences between the CAVI and teacher-led group in both immediate and delayed recognition posttests, the only significant difference occured in the immediate production posttest. Conversely, there were no significant differences between the groups on delayed production tests. This indicates that by practicing with CAVI, students learned more receptive vocabulary than productive vocabulary.

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CHAPTER I
INTRODUCTION

1.1. Introduction

Vocabulary is accepted as being the central element of language learning. Many researchers have acknowledged that vocabulary learning is an essential component of second and foreign language proficiency (Coady and Huckin, 1997; Harley, 1996; Nation, 2001; Read, 2000). Krashen (1989) states that most of the meaning in language is transpired by words and lack of vocabulary is the greatest obstacle in using target language effectively. As such, we can argue that it is a fundamental element that links the four language skills together. Therefore, firstly, students should acquire an adequate number of words and moreover, should comprehend how to use them accurately in order to communicate well in a foreign language (Huyen and Nga, 2003).

Broadly speaking, students experience problems relating to a deficiency of vocabulary while reading, speaking, writing and listening in the target language. Needless to say that, if students do not possess the necessary vocabulary for successful communication, they cannot express themselves effectively. For this reason, in the field of foreign language learning, numerous efforts have been made to facilitate and enhance the complex process of L2 vocabulary learning. In recent years, computer technology has made inroads on foreign language learning and educational programs have become available to enhance on the vocabulary learning process. To illustrate, computer assisted vocabulary learning (CAVI), a kind of technological application, serves to facilitate learners' vocabulary acquisition. As this learning medium has been viewed to be a new tool of vocabulary instruction, it has recently given rise to the interest of language teachers and researchers. As a result, a great deal of empirical research has been applied to determine CAVI's effectiveness on vocabulary achievement. However, some research results were inconclusive when it comes to its effectiveness, especially when compared to teacher-led instruction. Although some studies indicated that CAVI did not promote vocabulary achievement as much as teacher-led instruction (Jafer, 2003; Liu, 1998; Tokaç, 2005), numerous studies revealed that CAVI fares better than teacher-led instruction in terms of vocabulary achievement (Al-Seghayer, 2001; Chun and Plass,

1996; Duquette, Renie, and Laurier, 1998; Fu, 2002; Ghadirian; 2004; Groot, 2000; Pajtek, 2002). The researchers assert that CAVI can be an effective instructional tool if it is used properly in a foreign/second language environment (Davies, 2002; Jones, 2001; Levy, 1997). The researchers pinpoint to the facilitating effect of CAVI by admitting that students can learn at their own pace, receive immediate feedback and become motivated owing to games and animations incorporated in the CAVI programs. However, the majority of these empirical studies have come to this conclusion within the framework of one implementation session (Fu, 2002; Nagata, 1998; Siribodhi, 1995; Sun and Dong, 2004). Hence, the question as to whether CAVI is effective in two or more implementation sessions still remains vague. Kern (2006) asserts that it is crucial that researchers conduct more than one implementation session to examine the computer's instruction effect on long term linguistic development. Kenning and Kenning(1983) state that if educators are aware of what computer assisted vocabulary learning provides to the learning and teaching process in the both short and long term, teachers would be better equipped to analyze CAVI's effectiveness on learners' vocabulary acquisition. If this state of affairs emerges, teachers can benefit from this technological tool by adapting it into the curriculum. As such, examining the effectiveness of computers on vocabulary achievement remains still at the core of many studies in EFL environment. In addition, the studies in this area examined either receptive or productive vocabulary of learners with only one type of test (Siribodhi, 1995; Fu, 2002). Some argued that two dimensions of vocabulary, both recognition and production of words, should be fully explored to determine the precise vocabulary knowledge (Nation, 1990; Waring, 2002). At times, in CAVI research, the participants were mostly adult or adolescent learners (Chen, 2004; Chun and Plass, 1997; Dequette, Renie and Laurier, 1998; Yoshii, 2006). However, there is a limited number of research which has examined computers' impact on children's vocabulary learning in an EFL environment (Fu, 2002; Siribodhi, 1995). In the light of this framework we can easily argue that further research focusing on the effectiveness of computer assisted vocabulary learning on beginner level children's vocabulary acquisition should be administered. Hence, this particular study attempts to explore whether computer assisted vocabulary instruction helps young learners to learn and retain receptive and productive vocabulary.

1.2. Statement of the Problem

It is not radical to say that learning vocabulary is a fundamental component of foreign language learning at the initial stages (Read, 2000; Zimmerman, 1997). To extend on the topic in question, Nation (1990) states that students should learn and build on their vocabulary input during the initial stages of learning a foreign language. However, when compared with ESL learner, EFL young learners do not have adequate opportunities to receive language input out of the classroom. In addition, EFL learners may not have sufficient time to learn adequate amount of words in classroom environment. Moreover, language educators in the field of language teaching should facilitate the process by devoting sufficient time for teaching and preparing materials for all the required vocabulary, namely, they should do their utmost to discover new ways to make language learning engaging for the beginner level students. Language teachers also state that in a short time students would not be able to retain the desired achievement even if they learn the necessary words. For these reasons, a new medium of vocabulary instruction is necessary for the beginner learners at the initial stages.

As indicated in the literature, learning sufficient vocabulary is very difficult for EFL beginner learners. To the same degree, fourth grade students in M. Akif Ersoy Primary School have also encountered the same problem. Learning a foreign language at initial stages involve many core vocabulary learning. However, such a long time cannot be dedicated to vocabulary instruction in class environment. In addition, there are some slow learners who may not catch up with their friends' learning pace. Therefore, slow learners do not participate in the learning sessions, they tend to behave introverted in class. As such, CAVI can be an aid to complement on this learning stage. It is considered to be effective for the beginner level students to learn and retain vocabulary in a shorter time when compared to teacher's instruction because students can learn the vocabulary items individually at their own pace through studying by CAVI and it might increase the students' attention span (Fu, 2002; Siribodhi, 1995). CAVI may also accelerate the slow learners' pace, thus, they may catch up with those more capable. In doing so, students would shoulder more responsibility for their learning and might become more autonomous in their further learning sessions (Benson, 2001). Warschauer (2002) acknowledges that language learning environment involving autonomous

learning motivates students to continue learning inside and outside the classroom. In this respect, students can study the vocabulary out of the classroom. Owing to CAVI's feature, fourth grade learners are expected to develop their vocabulary achievement with CAVI expertise.

1.3. Background of the study

Researchers state that innovative ways of teaching language are necessary in order to overcome mechanical implementations in classroom environments (Goodfellow, 1995; Jones, 2001; Moras, 2001). As such, facilitators have become more aware of using new technologies in the classrooms. Hence, in recent years, computer technology has been considered to be a valuable and innovative tool to assist in learning a foreign language (Jones, 2001; Salaberry, 2000). Indeed, computer instruction creates a new language learning environment by promoting self-pace, motivation and eagerness in learners (Chapelle, 1990; Siribodhi, 1995; Warschauer and Healey, 1998). Computers can also be programmed to tailor instruction for each learner so students can learn language items which complements their learning style. In this way, students can assess and control their own language learning progress. In such situations, students take responsibility for their own learning, which leads more learner-centered sessions conveying learner autonomy.

The computer instruction processes make the input easier for students as it integrates voice, music, video, pictures and text into the lessons (Bordonaro, 2003; Pajtek, 2002). Owing to these features, many language educators promote its use as it is considered to be an essential component in English language instruction. On the other hand, more emprical research should be conducted to confirm that CAVI is an appropriate instructional tool for EFL learners.

1.4. Significance of the Study

Language teachers in Turkey carry a heavy workload; they have to prepare most of the materials, present and practice language items for students to improve language skills. That is to say that, teachers need to allocate a great deal of time to have a desired language learning environment. On the other hand, computer use may be an aid for both teachers and students to accelarate learning sessions. As computer programs have the

required materials, language teachers need not prepare vocabulary materials and they may be able to allocate more time for teaching other aspects of the target language. Students can also use computer programs out of the classroom to practice unfamiliar vocabulary. Therefore, computers provide an opportunity to make better use of students' time and expertise (Kenning and Kenning, 1983).

Although private schools have already been using this instructional tool, state schools in Turkey have been late in discovery the use of computers for educational aims. For this reason, the exploitation of this new technological tool may advance useful insights into teaching language to state school learners.

The implementation of Computer Assisted Vocabulary Instruction at primary schools may also improve the quality of the education offered to primary school students studying English. Computer laboratories can be widely used by offering access to computers in language instruction. Hopefully, CAVI may become a part of curriculum in Turkey. However, before implementing such an instructional tool into any language program, it would be wise to test whether computerized instruction is effective on primary school learners' vocabulary learning.

1.5. Research Questions

In this study, the effectiveness of computer assisted vocabulary instruction is examined in terms of learners' receptive and productive vocabulary achievement. The main aim of the study is to investigate whether computer assisted vocabulary instruction helps students to learn and retain vocabulary more than teacher-led instruction. Thus, this study aims to answer the following questions:

1) Does a computer assisted vocabulary instruction group learn more vocabulary than a teacher-led group?

2) Does a computer assisted vocabulary instruction group retain more vocabulary than a teacher-led group?

1.6. Definition of Terms

CALL (Computer Assisted Language Learning): A term commonly used to describe the use of computers as a part of a language course (Levy, 1997). The acronym, CALL has been the most standard one featured in the literature. It is commonly used for all types of implementation by computers.

CAI (Computer Assisted Instruction): A general term that is used to define the usage of computers to receive instruction in one area. The term instructional emphasizes the teaching or tutorial role of computers.

CAVI (Computer Assisted Vocabulary Instruction): Used for the practices involving the use of computers for vocabulary instruction purposes.

CHAPER II
REVIEW OF LITERATURE

2.1. Vocabulary Learning

To make an interpretation in broad terms, vocabulary is generally defined as a single unit or lexical phrases that convey one single meaning (Read, 2000). Knowing a word is generally considered as comprehending the meaning and its pronunciation. Conversely, Nation (2001) proposes different kinds of knowledge in order to master a word; the meaning of the word, its written form, the spoken form, word parts, collocations and its register. He also indicates that these different types of knowledge for a word cannot be learned at the same time because of the incremental nature of vocabulary learning. Waring's (2002) definition relates to a word which comprises both the ability to recognize the meaning of the word and the ability in producing it. He also concedes that one can recognize a word in a text or conversation but may not necessarily use it appropriately. This signifies that the vocabulary learning stage of the learner has not fully materialized yet. In this study, vocabulary learning is examined in terms of both the ability to recognize and produce target words.

2.1.1. The ways of learning vocabulary

There are two general approaches to vocabulary learning; intentional and incidental learning (Schmitt, 2000). Intentional vocabulary learning requires directly an attention to the information to be learned (Gas, 1999). It involves a conscious operation such as a demonstration, a picture, a real object, or a requirement of L1 translation. In contrast to intentional learning, incidental vocabulary learning refers to the learning of vocabulary in terms of the product of another activity such as understanding of a reading text or a conversation (Paribakht and Wesche, 1999). Learners need to encounter a particular word several times in different contexts to acquire it completely. In addition, Nation (1990) states that a foreign language learner needs to know approximately 2.000 high-frequency words to understand approximately 85% of any text and learn the words incidentally. Where it is possible to learn vocabulary incidentally, this method is not encouraged for young learners who have limited

opportunities for language input out of classroom. As incidental vocabulary learning tends to be incremental and slow compared to intentional learning, it is not sufficiently efficient to produce. Coady (1993) also states that basic or core vocabulary should be thought intentionally, hence, incidental learning is not recommended for the initial stages or beginner levels. Many researchers disclose that young learner can learn better when they are thought explicitly (Cain, Lemmon and Oakhill, 2004; Sun and Dong, 2004). In fact, there is a great emphasis on the explicit teaching of words in the early stage of vocabulary learning, proceeding to incidental vocabulary learning in the later stages (Nation, 1990). Therefore, in the early stages of learning, intentional vocabulary learning is crucial for young learners.

2.1.2. Aspects of Vocabulary Knowledge

There are some features of vocabulary learning which are justified by many studies. These features need to be taken into account while teaching and learning vocabulary.

One of these features is concreteness of the words. The general consensus testifies that concrete words are learned more readily and faster than abstract words. Concrete words are also more frequently recalled than abstract ones (Nikova, 2002; Sadoski, 2005). This stems from the fact that concrete words have authentic representatives in real life and can be exploited well by human perceptions. Therefore, concrete words have low cognitive load when they are compared to abstract words. Siribodhi (1995) explains that learners expose concrete objects and develop a storage house of images that represent their knowledge. Such a connection allows learners to imagine and retain the words easily. Ellis and Beaton (1995) also recognize that nouns are more imaginable and concrete than other word classes. As such, nouns are mostly recalled more easily than other word classes such as adjectives or adverbs.

Another salient feature is incremental nature of vocabulary knowledge. It refers to gradual learning of different types of knowledge that belong to a single word (Schmitt, 2000). Schmitt stresses that different aspects of knowledge about a certain word cannot be mastered completely in a short time; it becomes incremental. For example, firstly, one can learn the basic meaning of a word and then learn other meaning(s) of the same

word. Therefore, complete mastery of a word takes time due to the incremental nature of vocabulary learning.

The other aspect is receptive and productive vocabulary knowledge. Receptive vocabulary is defined as the vocabulary one can recognize and comprehend, whereas productive vocabulary is defined as the lexical item that one can not only recognize and comprehend, but also produce either in speaking or writing tasks (Oxford and Crookall, 1990). In the model of L2 vocabulary acquisition, receptive knowledge precedes the more complex productive knowledge (Laufer, 1998; Meara, 1990; Waring, 2002). It is stated that in learning a second/foreign language, most of the vocabulary moves along a continuum, from receptive to productive. This indicates that one has to meet a word in recognition before producing this word so that one's receptive vocabulary is larger than his/her productive vocabulary. The study of McEven (2006) confirmed that learners did better in recognition tasks than production tasks. He explained that as productive vocabulary requires extra learning of new spoken or written output, it is more difficult than recognition. Melka (1997) also states that some aspects of a word may exist in the production level. However, its other aspects may remain at recognition level, so learners may recognize the word in a reading text but cannot spell the words correctly.

Retention fragility of a word is the other important feature of vocabulary learning. Forgetting what has been learned is inevitable in vocabulary learning because vocabulary is made up of individual units rather than a series of rules (Schmitt, 2000). Read (2000) states that nouns are more frequently retained than other vocabulary units because nouns are more imaginable. Schmitt (1998) claims that lack of vocabulary retention occurs more frequently in beginner level learners compared to more proficient learners. As beginner learners have not so much experience with foreign/second language learning, they cannot recall the words easily. Therefore, words should be revised systematically in order to be retained in the initial stages.

Besides revision of the words, there are some important issues which help their retention. Learning a word in a semantic field is an accurate example. The semantic field suggests that language is treated as a collection of interrelating networks of relations among words (Hatch and Brown, 1995). It shows a relation of lexical items within a field such as body parts, occupations, animals etc. The words are presented in a particular field and they establish an overall familiarity within a subject matter so that

the words are learned and retained more easily in a semantic field when compared to learning the words separately. The study of Amer (2002) revealed that learners were better at remembering words from lists that contain semantically related subsets than words from lists of unrelated words. He admits that the human mind takes account of such similarity of meaning in organizing words. Therefore, the words can be learned and easily retained by learner.

The other salient feature to foster retention of the words depends on the material which is used to present a word. Coady and Huckin (1997) state that communicative activities, such as using pictures and games are very efficient techniques to enhance learners' word acquisition, especially at beginner level. Pictures are one of the most common materials which are used to present words in the foreign language classrooms. Their contribution encourages interest, motivation and a sense of context in the language. However, the words are mostly presented by still pictures in the classrooms, whereas motion pictures are rarely used. Rieber and Kini (1991) explain that in contrast to static or still graphics, motion graphics can provide additional information about a word with two important visual attributes: motion and trajectory. The motion pictures create the illusion of movement which helps to clarify abstract concepts. On the other hand, still pictures become more abstract than motion pictures. Rieber and Kini (1991) also add that animation can provide information about whether the object's motion changes over time. The study of Al-Seghayer (2001) supported the findings of Rieber and Kini's study (1991). Al-Seghayer (2001) indicated that a video clip is more effective than a still picture in teaching vocabulary. He suggests that videos help learners to build better mental images and create curiosity that help intense concentration. In addition, the combination of modalities (visual image, background sound and animation) presented in the video clips could also be a factor that enhances learning and retention of words (Iheanacho, 1997).

Learning vocabulary through games is also an effective way which is used to foster retention. Games create contexts for the words and encourage the learners to sustain their interest. Being amusing and interesting, they increase the students' motivation as well. Since students can get involved in the learning sessions, the games involved lower their anxiety. In a relaxed atmosphere, which is created by using games,

notably, the young language learner remembers things faster and better (Lewis and Bedson, 1999)

2.2. Computer Assisted Language Learning (CALL)

CALL is considered to be the most innovative area in the practice of foreign/ second language items (Davies, 2002; Jones, 2001; Levy, 1997). Since the initial introduction of computers into the field of second/foreign language education, many researchers naturally tried to evaluate the effectiveness of this new medium and its applications on language learning. Research on CALL has increased markedly in recent years. Studies have examined the effectiveness of CALL on all language skills for the past 20-30 years. The studies have highlighted different results. Mostly, a positive correlation has been found between CALL and increased performance on posttest exams. They also revealed that CALL programs make the learning process more stimulating and enriching than classroom applications (Brett, 1997; Chapelle, 1998; Chen, 2005; Coniam, 1998; Fu, 2002; Grene, 2000; Grezel and Sciarone, 1994; Levine, Frenz and Reves, 2000; Nagata, 1998; Silver and Repa, 1993; Williams, 2004; Zhu, 2005). We can easily argue that CALL has more facilitating effect on language learning when compared to face to face teacher-led instruction. These facilitating effects stem from the advantages of CALL.

2.2.1. Advantages of CALL applications

CALL offers many advantages in language classrooms. Some of them consist of affective factors such as lack of anxiety, risk-taking and motivation, all of which are considered to be influential factors in language classrooms (Horwitz, 1995). Some learners in traditional classroom settings experience fear of making mistakes and being the object of ridicule in the classroom. The computer offers a forum where learners encourage their attempts (Jones, 2001). As most CALL programs offer one to one interaction with the learner and do not expose the learners when they make any mistakes, they create a relaxed atmosphere which conforms to the shy learners need (Brett, 1997). Learners can also take control of their own learning and often are more willing to take risks when working with a non-human interlocutor. Hence a sheltered environment can be seen as a trump card which CALL presents to the students (Egbert,

Paulus, and Nakamichi, 2002). Krashen (1982) notes that this sheltered environment serves to 'lower affective filters' (p.32). Affective filter compels an individual to be less responsive to input. This prevents students from adopting effective learning practices. However, if a learner has a low affective filter, he/she learns more efficiently. Huang and Liu (2000) suggest that CALL can also reduce a learner's anxiety. Indeed, CALL activities provide the learners with a sense of control and with a reinforcement of its negative and positive immediate feedback. These perceptions, in turn, lead students to acquire more self-confidence in learning (Lee, 2000; McGreal, 1988).

Other affective contribution of CALL is triggering off learner's motivation. Motivation is an important factor in second /foreign language classes (Gardner and Tremblay, 1994; Oxford and Shearin, 1994) because increase in motivation develops on the learning process. The teacher's task also becomes easier when students are motivated. Studies have shown that CALL has a potential to increase motivation as it usually offers students the opportunity to learn language items at their own pace and attractive graphics, games, animation and high interaction (Egbert et al., 2002; Levy, 1997; Kramsch and Andersen, 1999). Notably, games in most software programs have a great motivational role besides their instructional role. Specifically, animation in the games increases students' interests and curiosity as well as retention of language items. Therefore, it is assumed that CALL programs are extremely helpful for students who need extra teacher attention.

Briefly, Krashen (1982) states that if a student has low anxiety, high motivation and self-confidence, s/he is said to have a low affective filter, so that the student can learn easily. CALL provides all these affective contributions for language learners.

One common justification for the use of CALL in language teaching and learning is that it promotes learner autonomy. In recent years, there has been a gradual shift from teaching towards learning in language classrooms. It is claimed that a language learners' own effort to a learn language is more important than that of the teacher (Jaber, 1997). In other words, there is an emphasis on learner-centered settings in language classrooms. CALL provides a learner-centered environment because with CALL practices, students take responsibility for their own learning. Learners can spend more time on the difficult language items at their own paces. Indeed, CALL helps learners to control their own learning pace which runs independent learners from the

teacher' instruction pace (Huyen and Nga, 2003). Eventually, this leads the learners to be autonomous (Benson, 2001; Dickinson, 1995). Autonomy is a desirable goal in all language learning as learners become responsible for their own learning. A student who carries having responsibilities of his/her own learning and studying independently also contributes to intrinsic motivation (Dörnyei, 1997). As a result, the learner becomes eager to learn the other language items.

The other impressive feature of CALL is that it provides an interactive process in language learning. When a learner studies through a computer, it processes the learner response and gives verbal or written responses immediately. Therefore, a high interactivity between the learner and computer occurs. Students receive instant feedback with two way learning sessions in CALL programs. As computers provide input to the learner and provide an interaction with the learners, they are considered as a participant in language tasks (Chapelle, 1998). Nikolova (2002) states that in the traditional classroom settings, it may not be possible to provide immediate feedback to each individual learner. On the other hand, CALL provides instant feedback with the touch of a button. Students can develop high interactivity by clicking on pictures, texts etc., especially, interactive self-checking exercises provide the learners with an opportunity to examine their output. In addition, Ghani and Deshpande (1994) and Nagata (1998) assert that the prompt in a CALL program also enhances students' positive attitudes towards language learning.

Other facilitating effect of CALL stems from the versatility of computer programs to present language items. In presenting an item, computer programs usually provide a mixture of multi-sensory materials comprehensively such as text, graphics, audio and video. The multi-sensory input of computer helps students to learn and retain more language items. Though it is possible to learn an item through only a text or a graphic, integrating all the modalities for specific item increases word retention (Chun and Plass, 1996; Hulstijin, Hollander and Greidanus, 1996; Roby, 1999). Specifically, animations in most of the CALL programs make the language item more memorable. In addition, Al-Seghayer (2001) states that video builds a better mental image, creates an interest leading to increased concentration. Due to the combination of different modalities like vivid or dynamic image, sound and printed text and rich graphics, multimedia software receives the learners' attention and fosters learner motivation.

Therefore, computers are considered to have the engagement power to draw students into the word learning mode intensively.

Owing to these facilitating features of CALL, learners acquires positive attitudes towards CALL instructions and their positive attitudes help them to learn and retain the language items better (Chen, 2004; Jones, 2001).

Running counter to these facilitating effects, there are some disadvantages of CALL on language learning. Firstly, it is more tiring to read from a screen than a printed text (McKnight and Richardson, 1988). Hence, learners can be tired easily in a CALL session. The study of McKnight and Richardson (1988) indicated that learners became tired by reading a text from computer screens in a short time. This led to a lack of concentration from the learners. In addition, learners sometimes may concentrate only on the features of the computer program, rather than the target language items. As such, the aim of language instruction may not be fully fulfilled. This usually happens when the focus of the application is not made clear in advance.

The other disadvantage of CALL may appear when the learners are not accustomed to learner-centered environment. In cases when the majority of students are likely to be interested in learning English through computer programs, it is also possible that some learners prefer learning under the direction of the teacher in a classroom environment. Such learners could be classified as technophobic, as they are afraid of using computers. For these types of learners, computers may not be appropriate medium of instruction.

In addition to advantages and disadvantages of CALL, there are restrictions involved in the usage of computers in the language classrooms. The most common restriction involves the financial barrier to afford the necessary computer program and finding high quality CALL software. Since CALL programs are mostly expensive, lack of funds in state schools may affect its purchases. Moreover, language teachers should carefully choose the appropriate programs taking into account the learner's age and needs. Possessing the necessary technical knowledge about computer programs is also another restriction to implement CALL in language classrooms. Therefore, language teachers should be trained how to use CALL programs effectively and how to deal with the problems which might arise in the lab.

2.2.2. The roles of computers in CALL applications

In CALL applications, the computer may have three different roles according to its function; it can be a tutor, a tool or a medium (Kern, 2006). In the tutor's role, computers provide instruction, feedback, and testing in vocabulary, grammar etc. This provides the learners with an opportunity to choose a target language item by providing high interaction. This is the most common role of computers in language learning. Computers usually take on a tutor's role in computer assisted instruction (CAI) programs as they provide instruction to the learner.

In the tool role, computers provide access to visual or audio materials relevant to the language. They also provide immediate and wide language items such as online dictionaries and concordances for corpus analysis. In this situation, students become more proficient at specific tasks, but the computer itself does not teach anything. It enables the learner to understand and use the language, such as spelling and grammar checks programs, similar to process writing.

In the medium role, computers provide a medium for interpersonal communication, distance learning or community participation. This appears in Computer-Mediated–Communication (CMC) when computers serve a medium of communication. At this phase, they are mostly used to exchange cultural features by using language.

In this study, the computer takes on a tutor's role as it supplies control to the learners with an instructional aim and provides high interaction with the learners during applications.

2.2.3. Teacher & Learners' role in CALL Instruction

It is commonly stated that teachers and learners have different roles in a CALL environment when compared to a traditional classroom environment (Huang and Liu, 2000; Sandholtz, Ringstaff and Dwyer, 1990; Tsai, 2005). In a CALL environment, teacher's role is altered moving from an expert to a facilitator or a director (Huang and Liu, 2000). Tsai (2005) confirms that in traditional classroom settings, the teacher's role is mostly that of a knowledge transmitter; however, in a CALL environment the teacher's role is a facilitator because students learn by themselves without depending on teacher-instruction. Jafer (2003) states that EFL classrooms are mostly teacher-centered.

In teacher-centered classroom, the role of students is simply to follow the instruction of the teacher and the teacher's role is to initiate actions and interactions by setting a limit on activities. The activities are mostly a teacher's domain (Sandholtz, Ringstaff, and Dwyer, 1990). Conversely, in a learner-centered environment, individual learners control their own learning and use of language at their own pace (McDonough, 1992; Oxford and Crookall, 1990). CALL applications trigger the learner-centered environments as CALL promotes learners' responsibility in language learning (Liaw, 2001). Learners can control their own learning pace and become responsible of their own learning. Therefore, in CALL applications, the students' role takes another direction as they are in control of their own learning. Some teachers might think that as students learn by themselves, the teacher's role is restricted. They might also compare CALL and their teaching methodology but it is crucial to state that CALL is not a method or technique; it is only a new medium of instruction. Therefore, it wouldn't be wise to compare the effectiveness of methodology with CALL application.

2.3. Computer Assisted Vocabulary Instruction (CAVI)

Vocabulary learning has always been a popular subject in CALL programs since the early stages of CALL applications (1980s). In the field of foreign language learning, numerous computer assisted vocabulary instruction (CAVI) treatments have been made to facilitate the complex process of L2 vocabulary learning. Some studies only examine the effectiveness of a computer program to test whether it is efficient or not in vocabulary learning (Goodfellow and Laurillard 1994; Siribodhi, 1995). Primarily, in addition to examining the effectiveness of one CAVI program on students' vocabulary acquirement, many studies have compared teacher-led instruction and computer instruction in terms of vocabulary acquisition. Although some research reveal that computer assisted vocabulary instruction is not more effective than teacher instruction (Goodfellow and Laurillard 1994; Jafer, 2003; Liu, 1998), most of them indicated that CAVI promotes greater vocabulary achievement than teacher-led instruction (Al-Seghayer, 2001; Chun and Plass,1996; Cobb, 1999; Duquette, Renie and Laurier, 1998; Fu, 2002; Ghadirian; 2004; Groot, 2000; Levine, Frenz and Reves , 2000; Neff , 2006; Pajtek, 2002; Roby, 1999; Van Aacken, 1996). The studies on CAVI effectiveness have also remarked salient issues about the applications.

First of all, the research of Goodfellow and Laurillard (1994) indicated that the CAVI program could not facilitate learner's vocabulary. In the study, the researchers observed vocabulary learning process of an L2 Spanish learner at elementary level. In this case study, one CAVI program was developed by the researcher. A concordancer, dictionary and note-saving device were attached to the program. The learner received instruction on some words that he reported he did not know during a two weeks period. The computer recorded all learner behaviors during the learning sessions. At the end of the CAVI sessions, the results indicated that the learner could not learn most of the target words. The researchers verified that the learner's inexperience with the program led to this situation. In addition, the learner behavior record indicated that the learner failed to use some of the features of the CAVI program, therefore the intended outcome could not be obtained. Goodfellow and Laurillard (1994) suggest that learners should receive a training session on how to use a CAVI program effectively and should be informed about the aims of different types of exercises presented in a program.

The studies of Fu (2002) and Levine, Frenz and Reves (2000) indicate that CAVI increases the receptive vocabulary of learners more than teacher-led instruction. In these studies of Levine, Frenz and Reves (2000), CAVI and teacher-led groups were compared according to their mean scores of recognition test. The results of the studies indicated that the experimental group with CAVI got significantly higher mean scores in vocabulary recognition tests compared to the teacher-led group.

The study of Fu (2002) also confirmed this result. The researcher used three different CAVI program for the learners and compared them with each others. The learners took two recognition tests at the end of the applications and the results indicated that all groups received high scores in the recognition tests. They indicated a facilitating effect of CAVI on receptive vocabulary acquisition. The researcher also acclaimed that in addition to the recognition test, production test is also necessary to examine CAVI's effect on vocabulary acquisition because knowing a word embodies its recognition and production (Waring, 2002). As their studies lack production tests, the researches could not indicate an exact result in CAVI effectiveness on vocabulary learning. In contrast to these studies, Groot (2000) examined the vocabulary gain of learners with different types of tests and found different results. The study of Groot (2000) indicates that CAVI does not facilitate students' receptive vocabulary as much as

teacher-led instruction. In the study, traditional list learning and computerized vocabulary learning were compared in terms of vocabulary achievement. The subjects participating in the study ranged from senior high school to first university freshmen. The subjects took both recognition and production tests at the end of the implementations. The recognition test included matching the target words with L1 definitions. The production test was a cloze test and learners were asked to write the target words in the blanks. The results of the study indicated that learners who used list of words and their definitions in L1 scored higher than the computer group on vocabulary recognition test. However, the computer outperformed the list learning group in cloze tests. This result indicated the facilitating effect of CAVI on productive vocabulary. Moreover, the results from the delayed posttests showed that the decrease on immediate and delayed posttests test scores was larger in the list learning group. This implies that list learning does not lead to deep processing and successful retention. At the end of the study, the researcher concluded that different types of tests are necessary to examine computer effectiveness on vocabulary learning.

The study of Cobb (1999) confirmed the results of Groot's study (2000). The researcher examined the effectiveness of concordance software on vocabulary knowledge and compared with word list learning. In the study, the experimental group used concordance and the control group used dictionary and word lists to learn the words. Both groups took a definition matching and cloze test after the applications. The vocabulary gain of both groups was compared in terms of both tests. The overall findings of the study indicated that the control and experimental groups both made substantial gains in terms of definitional knowledge, while only the experimental (computer) group showed high mean scores on the production test. The delayed test also revealed that the control group did not retain the words as much as the experimental group. This stems from the fact that the software served several varied contexts to the experimental group in a shorter time than the dictionary group. The study also indicated the effectiveness of CAVI in terms of the time that learners were engaged in learning vocabulary.

Van Aacken (1996) acclaims that the less proficient students learn better with CAVI compared to teacher-led instruction. The study examined both the effectiveness of CALL on Kanji words and attitudes of learners toward the CALL program. First -

year university students participated in the study. The result of the research revealed that individualized instruction of the CALL program and learning at one's own pace could increase learner motivation. As learners' motivation increased, retention of words also followed suit. The result also indicated that lower achievement students had the advantage of catching up with the higher achievement students with CALL program.

The results of Neff's study (2006) were consistent with those of Van Aacken (1996). He tried to find out whether using computer assisted vocabulary instruction increases learners' vocabulary skills or not. After one implementation session, a posttest was administered to assess their improvement. Learners showed a significant increase on using word structure after using the program. The survey after the treatment also demonstrated that especially low-achieving learners had enjoyable experience and were interested with CAVI application. Therefore, they learned more words through CAVI as compared to high-achieving learners. That means that especially low-achieving learners benefited from computer instruction with regard to vocabulary learning.

Although there are a lot of studies which examine the effectiveness of CAVI on vocabulary achievement of adult or adolescent learners at intermediate level of language knowledge (Al-Seghayer, 2001; Chun and Plass, 1996; Ghadirian; 2004; Levine, Frenz and Reves, 2000; Roby, 1999; Van Aacken ,1996), there are only a few studies which examine CAVI effect on beginners level or young learners' vocabulary achievement (Fu, 2002; Pawling, 1999; Siribodhi, 1995).

The study of Pawling (1999) evaluated the feasibility of a vocabulary software program as a medium of instruction for the sixth grade learners. The researcher focused on two case studies. The participants implemented a computer program called 'Directions 2000'. They learned vocabulary by experimenting with the sentences in their own way without any interference. The study indicated that immediate feedbacks and students' learning at their own pace helped them to upgrade on their vocabulary than classroom instruction. The researcher concluded that computer-based learning is more motivating and efficient for children compared to teacher-fronted classroom application. Thus, computer instruction has a major contribution to make to the development of language teaching and learning.

Siribodhi (1995) confirmed the facilitating effect of computer on children's vocabulary learning. The researcher investigated the effects of three different formats of

interactive multimedia in a vocabulary software program which was designed by the researcher. One hundred and two beginner level EFL learners participated in the study and were randomly assigned to three groups. The groups learned the same words about body parts but in different formats. One of the groups learned words with L2, L1 translation and sound. The other group learned the words with still picture, L2 and sound whereas the last group learned the words by L1, L2, still picture and sound. They clicked on the body parts of a cartoon character and received the words in different multimedia. Both immediate and delayed tests (three days later) were administered to measure vocabulary achievement of the learners. The groups were tested with a word matching and picture matching test. The results of the study indicated that all groups learned most of the words and there was no significant differences between the groups. In the delayed test, there was a significant decrease in the word matching test; however, there was no significant decrease in picture matching test in all groups. The researcher pinpointed that this has resulted owing to the pictures which positively influenced students' recall and students were able to maintain their memory of the words with a pictoral task. As there was no animation in the software program, the researcher suggested that future studies should incorporate usage of animated software to examine children's vocabulary achievement.

Apart from the other studies, Fu (2002) compared CAVI with teacher-led instruction in terms of vocabulary gain. The study investigated whether CALL could facilitate better vocabulary acquisition of the 5th grade Taiwanese students than teacher-led instruction. 80 fifth grade EFL learners participated in the study and they were required to learn twenty words that contain seventeen nouns, two verbs and one adjective. In the study, while the control group learned the vocabulary with teacher-led instruction in the classroom, the experimental group learned the same vocabulary by a commercially available software instruction. All learners took an immediate posttest and a retention test (one week later). After the treatment, both groups were evaluated on a recognition task (matching words with the pictures) and the scores of both groups were compared. The results of the research revealed that the experimental group scored significantly higher than the control group both on the posttest and the retention test. The researcher stated that feedback that learners receive from the computer and its effect in lowering affective filter, enhancing input and fun element in the program

helped the children to learn more vocabulary than the teacher-led instruction. The study also revealed that nouns were easiest to learn, followed by adjectives, whereas verbs were the most difficult to learn.

As stated above, most of the studies examined the effectiveness of CAVI on vocabulary learning but there is not a consensus on both short and long term effect of CAVI on vocabulary achievement. The studies have usually been implemented in a short time span with only one implementation session. The other salient point is that vocabulary achievement of learners was usually examined with only one type of test, only recognition or production tests. The effectiveness of CAVI on receptive and productive vocabulary has become vague. Therefore, the need arises for more research on CAVI in order to provide rich and effective vocabulary learning experiences to the learners.

2.4. CALL Research in Turkey

The studies on CALL have accelerated in Turkey in recent years. These studies have usually been qualitative in which the attitudes and perception of both teachers and students on computer applications are concerned (Eney, 1994; Önsoy, 2004; Özmen, 1990; Tuzcuoğlu, 2000). Generally, the quantitative studies have compared CALL and teacher-led application in terms of writing (Eney, 1994; Öz, 1995) or grammar (Kaplan, 2002; Makaracı, 2004; Odabaşı, 1994). The studies which examine CALL applications on vocabulary learning are scarce. There are three studies which compare CALL and teacher-led application in terms vocabulary learning and they produce different findings and suggestions for further research (Koçak, 1997; Özdemir, 2001; Tokaç, 2005).

Özdemir (2001) tried to find out whether online media tools help or discourage young learners. Forty eight 6th grade students from Gazi University private school participated in the study. The experimental group (CALL) learned six words by using an online multimedia tool which was specially developed by the researcher. The control group learned the same words in the classroom with teacher-led instruction. Data were collected pre-test, posttest and interview with the students. Right after the implementation session, a cued recall test were given to the students to test productive vocabulary knowledge. The results indicated that online tool was more effective than classroom learning instruction on students' productive vocabulary. The researcher

explained that as CAVI triggers students' motivation and students can study individually at their own pace during the application, CAVI group could do better in the production test. The researcher suggested that further research should apply the same material for the state school students and with more application sessions. The researcher also offers both recognition and production tests to witness CAVI efficacy in two dimensions of vocabulary.

Koçak (1997) investigated the effectiveness of CALL on vocabulary learning and compared the effectiveness of CALL with textbook based approach on vocabulary learning. The subjects of the research were secondary school intermediate level students at METU. The experimental group learned the target words by using the Longman Interactive English Dictionary CD in a computer lab. The control group learned the same words using their textbook in the classroom under the instruction of their English teacher. Both groups were given a pretest and posttest in respect to 20 vocabulary items practiced in four-hour treatment period. The posttest result showed that the experimental group learned more vocabulary than the control group as the mean score of CALL group was significantly higher than that of teacher-led instruction group. The results of the questionnaire also indicated that the experimental group was positively motivated to use software materials. In addition, the students stated that they could get extra practice, on the spot practice and could work at their own speed. Since the software proofed to be entertaining, they learned vocabulary easily in the CALL application. The researcher suggests that further research can use different software packages for vocabulary instruction to examine CALL effectiveness on vocabulary learning.

Tokaç (2005) came up with different findings about CAVI application. The researcher compared the computer-assisted vocabulary instruction with teacher-led vocabulary instruction and spaced repetition technique with repetition at one time. The participants of the study were freshman students at Selçuk University. The CAVI group learned the words with annotations in computer program. The other group learned the same words in the classroom with a teacher-led instruction. After a treatment session, all participants took a matching test to examine vocabulary achievement. The results of the posttest indicated that the teacher-led group had more vocabulary gain than computer assisted vocabulary learning group; however, there was no statistically

significant differences between the groups. According to the researcher, the students' ineffective use of time in computerized vocabulary learning task and inefficacy of the computer-provided feedback might have contributed to this result. Therefore, the researcher suggests a training session about a computer program before implementing such a research. The researcher also suggest for further studies to apply a delayed test in order to measure learners' vocabulary retention.

Although cited previous studies have provided useful insights of CAVI effectiveness on vocabulary achievement, they have not applied both recognition and production tests to compare productive and receptive vocabulary of learners. The vocabulary achievement of learners was usually examined only in terms of recognition (Tokaç, 2005) or production (Özdemir, 2001). The studies mostly allocated one implementation session to see CAVI's effect on vocabulary achievement. However, the present study investigates computer assisted vocabulary instruction on primary school students' vocabulary learning at the end of two implementation sessions. In addition, it aims to find CAVI's effect on both learners' receptive and productive vocabulary in discrete time intervals with immediate and delayed tests.

CHAPTER III
METHODOLOGY

3.1. Introduction

This chapter describes research design, participants, instruments, data collection procedures and data analysis.

3.2. Research Design

The study possess a quasi-experimental design since it is not possible to control all variables such as learning environment, backgrounds and abilities of the learners. The groups in this study were naturally organized in order to obtain realistic results in Turkish primary school environment. Thus, it allows for some generalizations to be made about population.

Sixty eight students from two classes participated in the study. Half of the students (34 students) from each class were assigned randomly to CAVI group and the other half were assigned to teacher-led instruction group in order to make the groups homogeneus. The groups were also split into two groups due to the physical constraint of computer laboratory. The computer lab equips with twenty computers. Since the study intends to provide CAVI group with individual learning, CAVI group was split into two groups to assure individual learning setting. Teacher-led group was also split into two groups in order to provide equal number of participants with CAVI group in all applications. The study contains two implementation sessions.

One week before the first implementation session, CAVI group practiced the software in the computer laboratory for one class hour. During the first application period, the CAVI group studied the target words by using a vocabulary software in the computer lab while the teacher-led group studied the same words under the teacher-led instruction in the class. Both groups (CAVI and Teacher-led) studied body parts for two class hours (80 min.). Right after the implementation, both groups took an immediate recognition and production tests respectively.

The second implementation session was conducted one week after the first implementation. In the second implementation session, the students studied the words that belong to clothes for two class hours. The same design was applied in the second

session. However, right after the implementation, learners who had taken a recognition test before, took a production test and vice versa. It was intended to sustain equality among subjects and abstain from effects stemming from the interaction between class characteristics and the nature of tests. The students studied 40 words totally at the end of two implementation sessions (Appendix A).

The first and second delayed tests were applied to both groups two weeks and one month after each implementation session. Table 1 displays application of vocabulary tests.

Table 1. Application of Vocabulary tests.

	CAVI group		**Teacher-led group**	
	Orientation session	Orientation session		
Body parts **(immediate test)**	Recognition	Production	Production	Recognition
Clothes **(immediate test)**	Production	Recognition	Recognition	Production
Body parts **(delayed test 1)**	Recognition	Production	Production	Recognition
Clothes (**delayed test 1)**	Production	Recognition	Recognition	Production
Body parts **(delayed test 2)**	Recognition	Production	Production	Recognition
Clothes **(delayed test 2)**	Production	Recognition	Recognition	Production

3.3. Participants

The study was conducted with the participation of sixty-eight 4th grade students in M. Akif Ersoy Primary School. All students were native speakers of Turkish and their ages are 9 or 10 years old. The students were assumed to belong to similar socio-economic class, since they live in the same neighbourhood. None of the students had

attended any special English course before and according to the ministery of the national education's curriculum, students were required to have English lessons at the fourth grade for the first time. Therefore, the students were considered to be complete beginners. They had three subsequent class hours per a week for English lesson. They had already attended computer and technology lesson before. Thus, they were familiar with basic computer skills such as using deleting, typing, clicking and going back.

3.4. Instruments

This part presents the software program, flashcards and testing materials which were used in the study.

3.4.1. The CAVI software and flashcards

A commercially available software was chosen as a CAVI instrument. CAVI group studied vocabulary by using a software program named 'Word Bird's Land' CD (Perrett, 1995). This CD has been specially designed for young foreign language learners as it contains colorful pictures, animations, enjoyable games and songs in it. The program contains 20 semantic fields and each semantic field comprises 20 words (Figure 1)

Figure 1. Semantic fields in the Word Bird' land CD.

This software program possesses some notable features. First, it provides both positive and negative immediate feedbacks which foster vocabulary achievement (Ellis, 1997). Second, it serves multi-sensory input for each student. Students click on different picture cards and then can see written form and hear the pronunciation of the words at the same time, namely, it appeals to both senses simultaneously. Third, it provides a flexible learning environment as students can select the same word and receive pronunciation of it as many times as they want. Students can also go back and forward whenever they want. Hence, they have an opportunity to study at their own pace. Lastly, the program contains a lot of interesting animations which appeal to learners' interest. Regarding these features, this software program was especially chosen as a CAVI instrument.

In this study, target words comprised 40 words from two semantic fields; 'Body parts' and 'Clothes' (Appendix A). These two semantic areas were especially chosen on two grounds. First, these semantic fields consist of concrete nouns and difficulty level of the words is considered appropriate for the initial practices of the fourth grade students. Since all the words consist of concrete nouns, it was considered that students can learn and retain these words easily (Nikova, 2002; Sadoski, 2005). Second, students had to learn these words because they were part of the students' curriculum.

To match the material with that of CAVI group, the colorful flashcards were used for the presentation of target words in teacher-led group (Appendix B, C). Most of the flashcards were taken from a book named 'Vision's Flashcards Albums' (İnce, 2005). The album has already existed in the school and it has been used by English teachers to teach core vocabulary. It comprises many colorful flashcards. However, it does not contain some of the flashcards that represent target words in this study. The flashcards which were not found in the album were retrieved from http://images.google.com. After the selection of pictures, experts' opinions were also obtained regarding their appropriateness as research material.

3.4.2. Testing Materials

Since this study examines both receptive and productive vocabulary of the learners, both recognition and production tests have been applied in the study. A picture-matching test and a picture-cued writing test were prepared as recognition and

production tests and they were administered for each semantic field. Matching test demanded the ability only to recognize target vocabulary whereas picture-cued writing test demanded to provide an English equivalent of each picture.

The picture-matching tests involved matching associated pictures for the twenty target words including two distracters (Appendix D, E). Namely, students had to select proper target word for a picture out of twenty two words. The students were asked to match the pictures with their English word equivalents by drawing a line or writing the letter of the words.

The picture-cued writing contained twenty pictures which were also used in the recognition test and students were asked to name the pictures in English (Appendix F, G). The students had to write the target vocabulary items next to the associated pictures.

The same recognition and production tests were given two weeks and one month after each implementation session to measure long term retention of target vocabulary items. The delayed tests were the same with the immediate tests; however, the words and pictures were displayed in different orders to minimize the effect of test familiarity. These unannounced delayed tests were applied in students' regular class hours.

The tests were scored by both the researcher and another English teacher together. One point was given for each correct answer, and the total score was 20 for each test. In the production test, one spelling mistake was considered correct in condition that it would not change the meaning of a word, for instance; *shirt* instead of *skirt* was determined incorrect even if there was only one spelling mistake.

3.5. Procedure and Data Collection

This section covers pilot study, procedure of the CAVI and the teacher-led group and data analysis procedure.

3.5.1. Pilot study

The pilot study was conducted in the second term of 2006-2007 academic year in M. Akif Ersoy primary school. Sixty 4th grade students from two classes participated in the pilot study. Each class was randomly assigned to one of the groups; CAVI or teacher-led. Both groups studied same words but with different medium of instructions. Firstly, they studied body parts and then clothes one week later. After the application

sessions, the students took both a recognition and production test. The recognition test involved matching the target words with the body parts of a baby figure. The students' task was to draw a line from a word to a body part that represented it. The same test design was applied for the clothes recognition test. Students were asked to match the target words with the clothes of two human characters. For the production tests, students were asked to name the pictures of body parts and clothes. During the study, the researcher kept a record of adequate time for each implementation and test. Possible problems and related precautions were noted down during the sessions. At the end of the pilot study, the researcher and another English teacher made adjustments to the viewing time and implementations. It was agreed that the flashcards and program was appropriate for the applications. Two class hours for an implementation session and 15 minutes for each test were considered to be enough for the students. Additionally, it was detected that the recognition tests were not well designed as students were confused with the position of body parts and clothes of the figures. Students could not select the correct parts that represent target words. Therefore, the design of the recognition tests was changed for the present study; the pictures that represent the target words were placed separately in recognition test.

3.5.2. Procedure of the study

Before the implementations, the researcher wrote the target words on the board in each class and asked the students to give Turkish equivalents of them to check whether they know any of these words. It was found out that none of the students knew any of these words. The students were not informed that an experiment would be conducted. Instead, in order to provide students' involvement and increase motivation, it was announced that they would receive tests after the implementations and their test scores would be taken into consideration as extra grades.

As stated in the research design, two implementation sessions were conducted and each implementation session was applied during the students' regular class hours. As two class hours were assigned for each session, all students received four class hours of instruction totally at the end of the study.

3.5.2.1. Procedure for CAVI Group

Before the implementations, CAVI group practiced the software in 40 minutes orientation session to diminish the effect of students' inexperience with the software. In this session, the researcher explained all the icons and buttons in the program.

One week later, the students participated in a CAVI session in the computer lab. They studied the words which belong to body parts by using three sections of the program, namely *read, find,* and *spell*. The researcher guided the students to use these three sections of the program and helped students whenever they had a problem with the software or computer during the implementation session. However, the researcher never interfered with the students' practices and learning pace. The students studied individually and at their own pace.

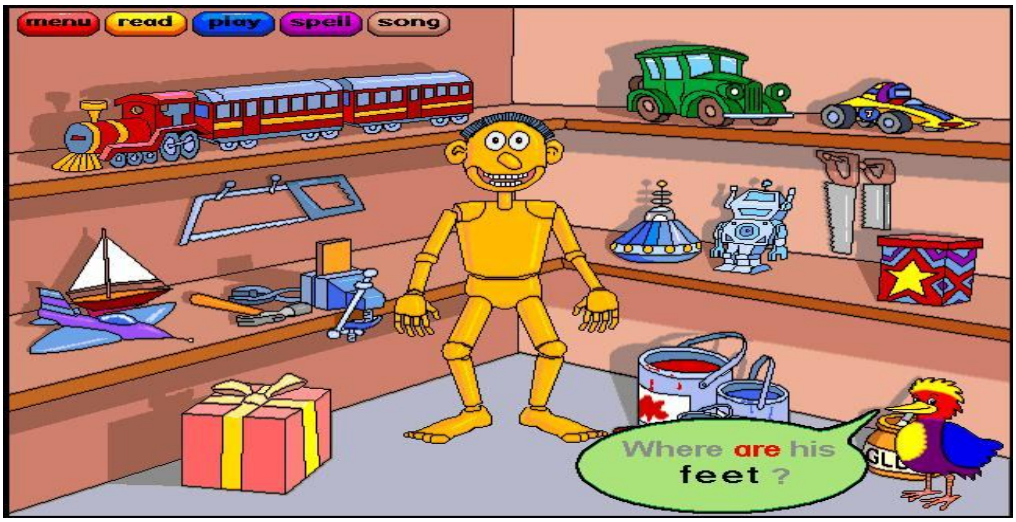
In the first section of the program, students clicked on different picture cards to get the name of the objects and hear the pronunciation of the words (Figure, 2). They had a chance to click on a word as many times as they want.

Figure 2. The first section of the program (Body Parts)

In the second section, students practiced the target words. The students were asked to click on a robot's body part which was pronounced by Word Bird (Figure, 3). In case they clicked on the correct body part, the robot gave a positive feedback like *excellent!, brillant !* and an animation appeared on the screen. For instance, when a student heard the word *hair* and clicked on robot's hair, robot's hair got long and then a

pair of scissors cut it. In case the students clicked on incorrect body part, the robot gave negative verbal feedback like *try again!, noo!* etc. and showed its disapproval by shaking its head.

Figure 3. The second section of the program (Body Parts)



In the third section of the software, students were required to write the name of the picture which they selected from the screen (Figure, 4).

Figure 4. The third section of the program (Body Parts)

Students were expected to write the correct form of a word under the chosen picture. They received a tick (√) in case they wrote a word correctly and received a

cross (X) in case they wrote incorrectly. Right after a students' incorrect answer, correct form of the word was displayed on the screen.

At the end of the second and third section, students received a score for their correct answers. In case they were not satisfied with their scores, they had a chance to do the exercise again. At the top of the screen, there was an 'exit' icon to go back to the previous sections. During the implementation, the researcher announced that they could go back whenever they need. For this reason, students had a chance to study at their own pace. The prodecure was the same in the second implementation session in which the students studied clothes.

Since CAVI applications have offered a different learning experience, at the end of the study, two open-ended questions were asked to CAVI group to determine their opinions about applications: The first question was whether they liked studying vocabulary by CAVI or not and the reason(s) of it. The second question was whether they would like to study any other vocabulary items by CAVI.

3.5.2.2. Procedure for Teacher-Led Group

The students in teacher-led group received ordinary classroom applications in each implementation session. In the first implementation session, the teacher of the class instructed the students for body parts according to a particular lesson plan (Appendix L).

Firstly, the teacher presented the words by using flashcards. The teacher showed the flashcards to the students and pronounced the target words which were written at bottom of the flashcards. Second, the teacher asked the students to repeat the words after her chorally. Third, the teacher sticked flashcards to the board and asked the students to write target vocabulary items on their notebooks. After the presentation session, teacher checked students' comprehension by drawing pictures on the board and asking them to name the pictures in English.

Right after checking understanding stage, the students received two activities which were designed to practice the target words. In the first activity, students had to choose and circle the correct word for each picture (Appendix H). In the second activity, the students were asked to unscramble the vocabulary items and write them

next to the pictures (Appendix I). After each activity, teacher checked students' answers.

The prodecure was the same in the second application when the students studied clothes. The teacher followed a lesson plan which was prepared to teach clothes vocabulary items (Appendix M). First, vocabulary items were presented by the teacher, then students practiced the words with two activities. (Appendix J, K). Lastly, teacher checked the answers of the students and made a correction when it is necessary.

During the classroom applications, students were required to follow the teacher's instruction and this means that students had to regulate their learning pace according to the teacher.

3.6. Data Analysis Procedure

Since the present study compared CAVI with teacher-led instruction with regard to students' receptive and productive vocabulary achivement, data was collected through both recognition and production tests. Besides, two medium of instructions were compared in terms of vocabulary retention. Therefore, the independent variable of the study was two different medium of instruction. Recognition and production test scores were dependent variables and there were two different measurements for each dependent variable: immediate and delayed test scores.

As two groups were independent from each other during the implementation, an independent-samples t-test was conducted for the analyses. 'The Statistical Package for Social Sciences' software program (SPSS 15.0) was used to analyze the data. An alpha level of .05 was used for statistical tests performed on the data. The data was analyzed with reference to the question whether there is any difference between the CAVI and teacher-led group in terms of immediate and delayed recognition and production tests scores.

CHAPTER IV
RESULTS AND DISCUSSION

4.1. Introduction

In this research, CAVI and teacher-led instruction were compared in terms of students' vocabulary learning and retention. In order to compare the means of test scores between CAVI and teacher-led group, independent-samples t-test was used for immediate and delayed recognition tests as well as for immediate and delayed production tests. This chapter presents the results of the analysis of data. Each research question will be presented individually in conjunction with the relevant data and findings.

4.2. Research Question 1: Does a Computer assisted vocabulary instruction group learn more vocabulary than a teacher-led group?

In order to find out whether CAVI group learned more vocabulary than teacher-led group, both groups were compared according to their immediate recognition and production test scores separately. Firstly, mean scores of both groups were compared in the immediate recognition test. Table 2 presents the t-test comparison between two groups in the recognition test.

Table 2. Independent-samples t-tests comparing computer and teacher-led group in terms of immediate recognition tests

Test	Group	N	Mean	SD	t	df	sig.
Immediate recognition test	CAVI	18	13,333	3,593	3,463	34	0.001*
	Teacher-led	18	9,194	3,577			

Note: N=Number; M= mean; Sig= significant level * p <.05

As seen in table 2, the mean score of the CAVI group (M=13,333) is considerably higher than the teacher-led group (M=9,194) and there is a significant difference between two groups in immediate recognition tests (t=3.463, p<0.05). This analysis indicates that CAVI group is more successful than teacher-led group in immediate recognition tests.

In the second step, the production test results of both groups were compared. Table 3 presents independent samples t-test comparison between two groups in the production test.

Table 3. Independent-samples t-tests comparing computer and teacher-led group in terms of immediate production tests

Test	Group	N	Mean	SD	t	df	sig.
Immediate production test	CAVI	18	10,778	3,140	2,066	34	0.046*
	Teacher-led	18	8,528	3,389			

Note: N=Number; M= mean; Sig= significant level * p <.05

As table 3 illustrates, the CAVI group scored considerably higher than the teacher-led instruction group on the immediate production test. The t-test results revealed a significant difference between CAVI and teacher-led group (t=2.066, p <0.05). This analysis implies that CAVI has an immediate facilitating effect on the learners' productive vocabulary.

Both immediate recognition and production test scores revealed that CAVI group scored significantly higher than teacher-led instruction group. This result implies that CAVI has more facilitating effect on immediate vocabulary achievement compared to teacher-led instruction.

4.3. Research Question 2: Does a Computer assisted vocabulary instruction group retain more vocabulary than a teacher-led group?

This research question aims to determine both groups' vocabulary retention. To answer this question, the first delayed and second delayed test scores were computed

separately. Firstly, delayed 1 recognition tests of the groups were examined. The descriptive statistics produced from the analysis of the recognition test results are provided in table 4 below:

Table 4. Independent-samples t-tests comparing computer and teacher-led instruction groups in terms of Delayed 1 recognition tests

Test	Group	N	Mean	SD	t	df	sig.
Delayed 1 recognition test	CAVI	18	15,833	3,330	2,560	34	0.015*
	Teacher-led	18	13,139	2,974			

Note: N=Number; M= mean; Sig= significant level * p <.05

As can be seen in table, computer group outperformed the teacher-led group in the delayed 1 recognition test. The analysis of t-test revealed a statistically significant difference between CAVI and teacher-led group for the delayed 1 recognition test ($t=2.560$, $p<0.05$). This analysis indicates that the students in CAVI group retained more receptive vocabulary compared to teacher-led group.

The first delayed production test scores of both groups are also computed to see productive vocabulary retention. Table 5 illustrates independent-samples t-test results for both groups.

Table 5. Independent-samples t-tests comparing computer and teacher-led groups in terms of Delayed 1 production tests

Test	Group	N	Mean	SD	t	df	sig.
Delayed 1 production test	CAVI	18	11,333	3,258	1,718	34	0,095
	Teacher-led	18	9,111	4,414			

Note: N=Number; M= mean; Sig= significant level * p <.05

As shown in Table 5, CAVI group had a higher mean score (M=11.333) than teacher-led group (M= 9.111) on the first delayed production test. However, the analysis of independent-samples t-test did not reveal any statistically significant difference between the groups in the first delayed production test (t=3.258, p>0.05). This implies that in the delayed production test, the mean scores of both teacher-led group and CAVI group were comparable.

As a result of the first delayed recognition and production test, it can be concluded that CAVI group retained more vocabulary than teacher-led group two weeks after the implementations. The statistical analysis also indicates that while CAVI group had statistically higher scores in the first delayed recognition tests, it did not provide such a significant difference in the first delayed production test as test scores of both groups were comparable.

The second delayed tests were conducted one month after each implementation sessions. Table 6 illustrates t-test results of both groups in second delayed recognition test.

Table 6. Independent-samples t-tests comparing computer and teacher-led groups in terms of Delayed 2 recognition tests

Test	Group	N	Mean	SD	t	df	sig.
Delayed 2 recognition test	CAVI	18	16,306	3,227	3,027	34	0.005*
	Teacher-led	18	13,333	2,635			

Note: N=Number; M= mean; Sig= significant level * p <.05

Table 6 indicates that the mean score of computer group (M=16.306) is higher than that of teacher-led group (M=13.333) in the second delayed recognition test. The analysis of t-test revealed a significant difference between CAVI and teacher-led group in the delayed 2 recognition test (t= 3.027, p<0.05). This implies that CAVI group retained more vocabulary than teacher-led group in terms of vocabulary recognition. This result is consistent with delayed 1 recognition test result as CAVI group retained more receptive vocabulary than teacher-led group.

The table 7 indicates the mean scores of second delayed production tests of both groups.

Table 7. Independent-samples t-tests comparing computer and teacher-led groups in terms of Delayed 2 production test

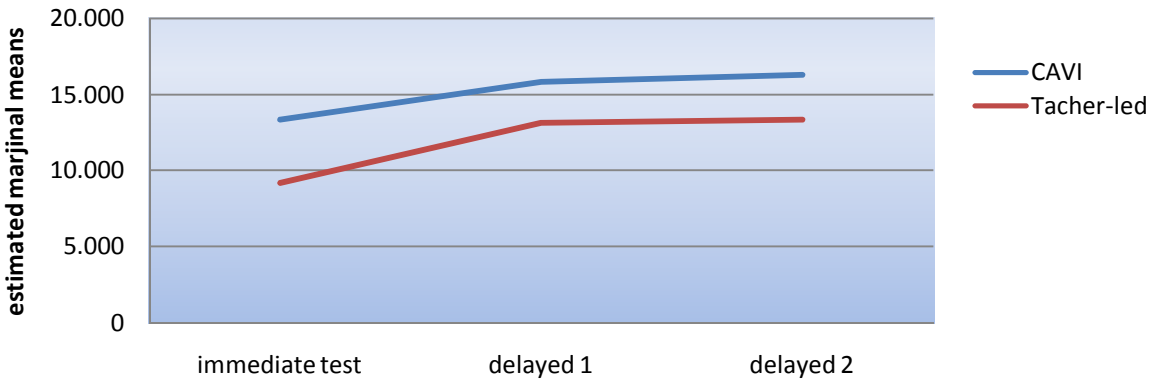
Test	Group	N	Mean	SD	t	df	sig.
Delayed 2 production test	CAVI	18	12,028	3,336	1,725	34	0,094
	Teacher-led	18	9,778	4,413			

Note: N=Number; M= mean; Sig= significant level * p <.05

As can be seen from the table, there is no significant difference between the groups in the second delayed production test (t=1.725, p>0.05). This implies that the scores of teacher-led group and CAVI were comparable in the delayed production test. It can be inferred from the data that teacher-led instruction facilitated the learners' productive vocabulary retention as much as computer assisted vocabulary instruction.

Briefly, figures 5 and 6 indicate both groups' immediate and delayed tests scores regarding recognition and production tests.

Figure 5. The mean scores of CAVI and teacher-led group in both immediate and delayed recognition tests.

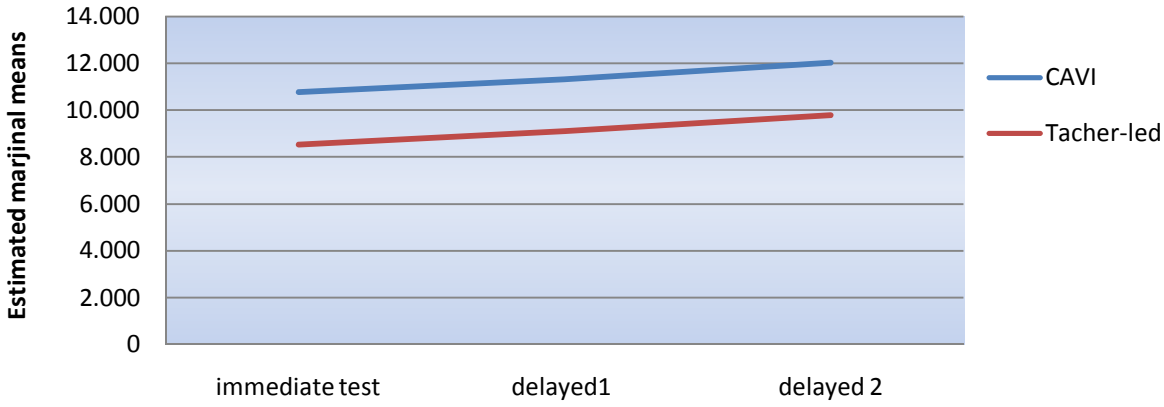


As indicated in Figure 5, in terms of word recognition, CAVI group's mean scores surpassed that of teacher-led group in three tests. It can be inferred from the

figure that CAVI group learned and retained more receptive vocabulary than teacher-led group. The figure 5 also shows that the scores of both groups increased in the first delayed test and became stable in the second delayed test. This means that students in both groups could easily retain vocabulary even if the tests were applied two week and one month later the applications.

The figure 6 indicates the production test scores of both groups in three tests.

Figure 6. The mean scores of CAVI and teacher-led group in both immediate and delayed production tests.



The figure above demonstrates that CAVI group had higher means than teacher-led group in all tests in terms of production. Even though, t-test revealed statistically significant difference for immediate production test ($t=2.066$; $p<0.05$), no significant difference was found in delayed 1 and delayed 2 production tests. This means that the scores of teacher-led group and CAVI are comparable in the delayed 1 and delayed 2 production tests. The figure also shows that in contrast to an immediate increase in delayed recognition test, there is a slight increase in the delayed tests. This result confirms that production is more difficult than recognition (Laufer, 1998; McEven, 2006; Meara, 1996)

4.4. Discussion

The present study compared the effect of computer asssisted vocabulary instruction and teacher-led instruction on fourth-grade Turkish students' vocabulary

learning. The results of the study revealed that CAVI groups did better than teacher-led group in both immediate and delayed tests. This indicates that CAVI group learned and retained more vocabulary than teacher-led group. The success of the CAVI group on vocabulary achievement might be explained with the following factors:

First, learners had control over their learning process and learned at their own pace during the implementations. This individualized learning might have promoted learners' motivation (Lee, 2000; McGreal, 1988). Thus, students' motivation might have facilitated students' vocabulary learning.

Second, one to one interaction between a student and the computer might have facilitated students' vocabulary achievement. CAVI software made the students actively involved in the learning process. For each enterprise of a student, the computer program provided an instant feedback and opportunity to correct a mistake. A student's enterprise and answers were only seen by himself. Hence, students might have had lots of enterprise without fear of making mistakes. This situation may have contributed to having low affective-filter environment that facilitates language learning (Krashen, 1982).

The other possible reason may be animations in the program. Especially in the second section of the program, there were many animations which helped the students to build better mental images and create curiosity (Al- Seghayer, 2001; Iheanacho, 1997). The open ended questions which were asked after the implementations also supported these findings. The opinions of CAVI group indicated that all students liked using computer to learn vocabulary. The response of the students also indicated that they were eager to use software program and found it enjoyable and educational because they could both play game and learn words during the CAVI sessions. The students also stated that characters in the software were very interesting and they would like to use the program for the other vocabulary items too.

The other notable finding of the study was that there were statistically significant differences between two groups in both immediate and delayed recognition tests. CAVI group did better in the recognition tests compared to than teacher-led group. This indicates the facilitating effect of CAVI on receptive vocabulary learning. The significant difference might have stemmed from the second section of CAVI program. The animations in this section might have helped CAVI group to learn more words as

animations help learners to build better mental images and provide additional information about a word with two important visual attributes: motion and trajectory (Rieber and Kini, 1991). This result is in line with the findings of previous research that indicate facilitating effect of CAVI on receptive vocabulary (Fu, 2002; Levine, Frenz and Reves, 2000). Contrary to recognition tests, there was no consistent significant difference between two groups in the production tests. The only statistically significant difference occurred in the immediate production test. The immediate significant difference in production test may have stemmed from the third section of program in which students could get instant feedbacks for their writing entries. Instant feedbacks from the computer may have accelerated students' immediate productive vocabulary. However, this could not have a long lasting effect on productive vocabulary as there were no statistically significant differences between the groups in the delayed production tests. Teacher-led instruction helped the students to retain productive vocabulary as much as computer instruction. This can be explained that in the application sessions, teacher of the students might have put stress on the spelling of target words in production activities. In addition, the teacher may have highlighted common mistakes that students made in production activities. These factors may have helped students to retain productive vocabulary and succeeded in writing the words correctly in the delayed production tests.

Another result which was obtained from this study is that all groups seemed to be more successful in subsequent measurements as total scores of groups increased in the delayed tests. Both computer and teacher-led groups were able to retain the target words two weeks and one month after the implementations. Moreover, there was a slight increase in test scores by the time. This finding of the study did not correlate with findings of Fu's study (2002). In his study, the target words consisted of different word class such as adverb, verb and adjective. The result of the study indicated that young learners could not retain most of the target words in recognition test. However, in the present study, target words comprised only concrete nouns. As stated in Chapter II, nouns are the easiest word class to be retained as nouns are more imaginable and concrete than other word classes (Ellis and Beaton, 1995; Read 2000). Therefore students could retain most of the target vocabulary. The effect of test familiarity may be another reason for the slight increase in delayed tests. Even if there were different

distractors in each test, target words were presented in the same format so that they could do better in the delayed tests. Besides, the pictures in both recognition and production tests might have helped them to retain target vocabulary. Owing to the pictures in both recognition and production tests, students might have maintained their memory of the word (Coady and Huckin, 1997). Another reason for the slight increase may be explained that since they have continued to learn English during one month, their exposure to English has also increased. As their exposure increase, they could learn and retain the words easier.

Lastly, it was observed that recognition test scores in each group seem to be higher than production test. The higher scores in recognition tests can be explained that recognition of a word is easier than the production of it (Laufer, 1998; McEven, 2006; Meara, 1990; Waring, 2002). However, a production task is more demanding than a recognition task. Another explanation for this result may be the inherent ability to guess the words in matching tests. Even if there are some distractors in a matching test, there is always a chance to guess correct answer. This study did not compare the recognition and production tests scores statistically within the groups; however, further studies may compare recognition and production test scores of both groups.

CHAPTER V
CONCLUSION AND IMPLICATIONS

5.1. Conclusion

The present study made an attempt to investigate the effectiveness of computer-assisted vocabulary instruction on young learners' vocabulary learning and compared CAVI with teacher-led instruction in term of both receptive and productive vocabulary achievement. The study also examined the vocabulary retention of the students in discrete time intervals, immediate, two weeks later and one month later after the application. The comparison of both group scores revealed that the students in CAVI could learn and retained more vocabulary than teacher-led group. This shows that computer instruction may offer a noteworthy experience to students with respect to vocabulary learning, but it does not mean that computers should substitute teachers as teachers' guidance is essential in CALL applications.

5.2. Implications of the study

This study provided an evidence for facilitating effect of CAVI on young learners' receptive vocabulary learning. Therefore, language teachers may use such commercially available CAVI programs to enhance learners' receptive vocabulary in computer laboratory. Since computer programs present all materials for language items, teachers need not waste time in finding and preparing materials for vocabulary instruction. In addition, the study revealed that both CAVI and teacher-led instruction have facilitating effect on students' productive vocabulary. Therefore, language teachers can provide classroom instruction and oral and written activities to facilitate students' productive vocabulary learning. In the present study, students' receptive vocabulary seems to be lower than their productive vocabulary. For this reason, language teachers should use more and different activities that enhance students' productive vocabulary.

In the present study, individualized learning, instant feedbacks and animations of the program might be considered fundamental grounds for CAVI effectiveness on students' vocabulary learning. The individualized learning promotes autonomy as learners can control over their learning process and learn at their pace. Students can also

evaluate their own pace and make provision for their language learning pace. Hence, learners have a responsibility of their own language learning in CAVI. For this reason, CAVI can be an integral part of foreign language learning. In addition to using CAVI programs for vocabulary instruction in language classes, such kind of programs can be also used by students in extra class hours. Thus, students take responsibility for their own learning and teachers may allow time for other language units and skills.

CAVI programs can also be used to improve students' pronunciation. In EFL environment, students are rarely exposed to foreign language input out of classroom and their only exposure to the target language's oral form is their teachers' speech in the class. CAVI programs expose students to native pronunciation and this will help to eliminate teacher induced pronunciation errors. From this point of view, CAVI provides a valuable opportunity to EFL learners.

In brief, computers have become so widespread in schools that their uses have expanded dramatically. The results of the study suggest that computer assisted language learning may be one type of supplement to the regular curriculum in teaching English. However, before integrating computers into the curriculum, teachers should be trained on how to use computers efficiently. The teachers should also know the content of the software and confirm its convenience for their learners. In addition, financial barriers, availability of software, technical knowledge and acceptance of technology are most common restrictions to use computer programs for language classes so that the ministery of education should encourage teachers to use software materials by organizing a training course for CAVI applications. In addition, ministery of education should provide teachers such commercially available programs for language instruction.

5.3. Limitations

This study possess two limitations. First, two implementation sessions have been conducted in the study and students received four class-hours instruction at the end of two implementation session. However, a longer time could have been allocated to explore the impact of the CAVI on vocabulary learning. A longitudinal study would provide reliable insights on the effectiveness of CAVI applications.

The other limitation is that students in CAVI group studied the target words through computer but they were tested with traditional testing procedure. Tests were

given on pen and paper rather than on-screen. In this respect, teacher-led instruction group may have an advantage over CAVI group. Therefore, this might have effected the results of the research.

5.4. Suggestions for Further Research

This research was conducted on primary school students who are beginner levels. A study on different age group and proficieny levels can be conducted to see whether CAVI has different effects on them.

In this study, target words consisted of concrete nouns, future reseach may examine CAVI effect on abstract words and other word classes such as verbs, adjectives, etc. They may obtain different results in different word classes.

In this research, gender differences among the participants were not taken into account, but future research may examine CAVI effectiveness in relation to gender differences.

In this research, learners' receptive and productive vocabulary were examined with both writing and matching tests. Further research can also administer listening and speaking tests to examine vocabulary learning. In addition, in this study, productive vocabulary was measured only with regard to students' writing the correct form of English equivalent of a concrete word depicted in a picture. Further studies may examine students' productive vocabulary in oral and written contexts by making them use target words.

This study investigated students' vocabulary retention two-weeks and one-month after the implementations. A study that examines students' vocabulary retention in a longer period of time may provide more reasonable results.

Lastly, the present study investigated computerized instruction on vocabulary learning. Future research may examine computerized instruction on different language units or skills. Thus, more generalized result may be obtained about computerized instruction on foreign language learning.

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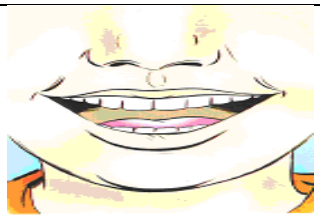
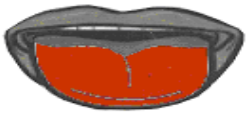
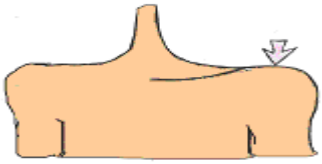
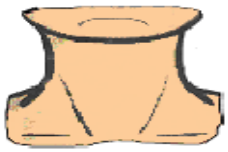
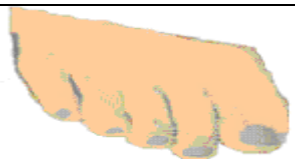
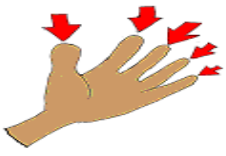
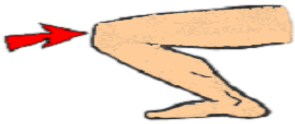
APPENDIX A

Target Words

BODY PARTS			CLOTHES		
leg	knee	thumb	skirt	shoes	t-shirt
feet	nose	hand	boots	jacket	hat
finger	ear	mouth	bow-tie	trousers	dress
arm	elbow	tongue	shorts	overall	socks
neck	toes	hair	trainers	coat	sweater
teeth	head	chest	scarf	gloves	belt
shoulder	eye		shirt	tie	

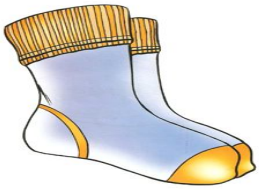
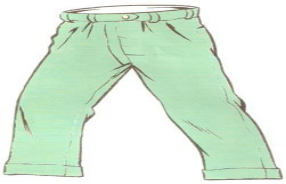
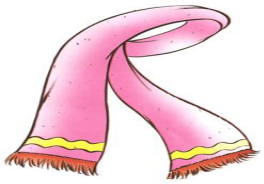
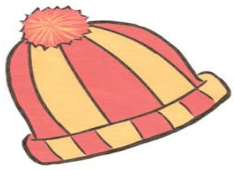
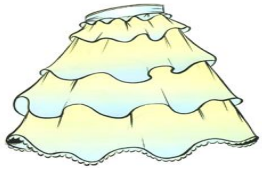
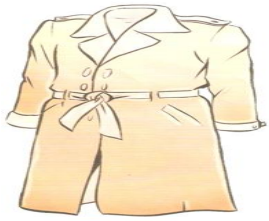
APPENDIX B

BODY PARTS FLASHCARDS

 hand	 elbow	 mouth	 teeth
 tongue	 shoulder	 head	 eyes
 chest	 arm	 ear	 feet
 nose	 hair	 neck	 toes
 fingers	 leg	 thumb	 knee

APPENDIX C

CLOTHES FLASHCARDS

 sweater	 tie	 t-shirt	 shorts
 socks	 trousers	 overall	 scarf
 shirt	 gloves	 dress	 boots
 hat	 shirt	 shoes	 trainers
 jacket	 bow-tie	 coat	 belt

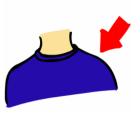
APPENDIX D

BODY PARTS MATCHING TEST

Name /Class:

Match the words with the pictures.

1)  :

2)  :

3)  :

4)  :

5)  :

6)  :

7)  :

8)  :

9)  :

10)  :

a) ear

b) stomach

c) mouth

d) teeth

e) chest

f) shoulder

g) eye

h) hair

i) finger

j) feet

k) elbow

11) 

12)  :

13)  :

14)  :

15)  :

16)  :

17)  :

18)  :

19)  :

20)  :

l) toes

m) head

n) neck

o) leg

p) hand

r) thumb

s) arm

t) knee

u) tongue

v) back

y) nose

APPENDIX E

CLOTHES MATCHING TEST

Name/Class:

Match the pictures with the words

1-  ……..

2-  ……

3-  …….

4-  …….

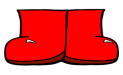
5-  ……..

6-  ……..

7-  ……

8-  ……...

9-  ……

10-  ……..

a) tie

b) skirt

c) hat

d) socks

e) boots

f) bag

g) shirt

h) t-shirt

i) overall

j) skarf

k) gloves

11-  ……

12-  ……

13-  ……

14-  ……

15-  ……

16-  ……

17-  ……

18-  ……

19-  ……

20-  ……

l) bow-tie

m) shorts

n) belt

o) coat

p) jacket

r) suit

s) dress

t) shoes

u) sweater

v) trainers

y) trousers

APPENDIX F

BODY PARTS PRODUCTION TEST

Name/Class:

Write the name of body parts.

1)  :……

2)  **:……...**

3)  **:……..**

4)  **:……...**

5)  **:……..**

6)  **:……..**

7)  **:……**

8)  **:……..**

9)  **:……**

10)  **:……**

11)  **:……...**

12)  **:……**

13)  **:……**

14)  **:……**

15)  **:……..**

16)  **:……...**

17)  **:……...**

18)  **:……**

19)  **:……**

20)  **:……..**

APPENDIX G

CLOTHES PRODUCTION TEST

Name/Class:

Write the name of clothes

1-  ……

2-  ……

3-  ……

4-  ……

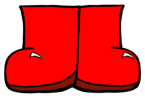
5-  ……

6-  ……

7-  ……

8-  ……

9-  ……

10-  ……

11-  ……

12-  ……

13-  ……

14-  ……

15-  ……

16-  ……

17-  ……

18-  ……

19-  ……

20-  ……

APPENDIX H

Classroom activity 1 (Body Parts)

Circle the correct words

1)  leg nose eye

2)  nose leg hair

3)  ear nose arm

4)  hand arm neck

5)  elbow knee hair

6)  toes elbow hand

7)  shoulder nose finger

8)  neck head mouth

9)  toes fingers teeth

10)  teeth eyes hair

APPENDIX I

Classroom activity 2(Body Parts)

Unscramble the words

1)  …… riha :

2)  …… tenugo:

3)  …… …… eey :

4)  …… deah:

5)  ……tefe:

6)  …… rshuolde:

7)  …… rea:

8)  …… thoum:

9)  …… shect:

10)  …… mbthu:

APPENDIX J

Classroom activity 1(Clothes)

Circle the correct words

1-  skirt sweater jacket

2-  dress trainers t-shirt

3-  shorts scarf shoes

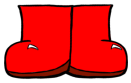
4-  socks belt tie

5-  bow-tie coat gloves

6-  boots belt trainers

7-  gloves shoes overall

8-  shirt belt hat

9-  trousers boots gloves

10-  hat belt skirt

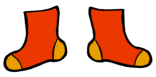
APPENDIX K

Classroom activity 2 (Clothes)

Unscramble the words

1-  …… ssdre :

2-  …… otca :

3-  …… sokcs :

4-  …… eswtera:

5-  …… osshe :

6-  …… hisrt:

7-  …… casrf :

8-  …… actjke:

9-  …… sertous:

10-  …… rallvero:

APPEDNDIX L

Lesson plan for Body Parts

LESSON PLAN 1

Subject: Body parts

Date of presentation: the 23 rd of October

Estimated time of lesson: 3 class hours /120 minutes

Level: Beginner

The textbook: by Dr. Gülsev Pekkan (2007)

Performance objectives: At the end of the lesson**,** the students will be able to

1. match the pictures with the suitable words
2. write the correct body parts next to the pictures

Materials: pictures of body parts, board, chalks handouts for the body parts and matching or production tests.

PROCEDURE

1st lesson (40 minutes):

1- Tell students what they are going to learn

2- Show the pictures of body parts

3- Pronounce the words and stick the pictures on the board

4- Ask students to repeat the words and write the words on their notebooks.

5- Bring the pictures back and check comprehension

- draw a picture on the board and ask them to say it in English

2nd lesson (40 minutes):

1-Teacher gives the handouts to the learners to practice the words.(first matching, then spelling activity)

2-Students do the activities individually and then teacher checks the answers.

3rd lesson (40 minutes):

1-Teacher gives the one of the tests (matching or production) to the students. Ask students to answer it in 15 minutes.

APPEDNDIX M

Lesson Plan for Clothes

LESSON PLAN 2

Subject: Clothes

Date of presentation: the 30th of October

Estimated time of lesson: 3 class hours /120 minutes

Level: Beginner

The textbook: by Dr. Gülsev Pekkan (2007)

Performance objectives: At the end of the lesson**,** the students will be able to

3. match the pictures with the suitable words
4. write the correct body parts next to the pictures

Materials: pictures of clothes , board, chalks handouts for the clothes and matching or production tests.

PROCEDURE

1st lesson (40 minutes):

1- Tell students what they are going to learn

6- Show the pictures of clothes

7- Pronounce the words and stick the pictures on the board

8- Ask students to repeat the words and write the words on their notebooks.

9- Bring the pictures back and check comprehension

- draw a picture on the board and ask them to say it in English

2nd lesson (40 minutes):

1-Teacher gives the handouts to the learners to practice the words.(first matching, then spelling activity)

2-Students answer the activities individually and teacher checks the answers.

3rd lesson (40 minutes):

1-Teacher gives the one of the tests (matching or production) to the students. Ask students to answer it in 15 minutes.