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**THE IMPACT OF COMPUTER-ASSISTED LANGUAGE LEARNING ON VOCABULARY  
TEACHING: JING™ AND INSTANT MESSAGING**

**ABSTRACT**

Jing™ is a free computer program that allows users to take a picture of what they see on their computer monitor. It also allows adding texts and highlighting the picture. This study focused on the use of the program in language classes to teach new vocabulary in an enjoyable and innovative way. The instruments included a vocabulary test used to measure the students' knowledge of the target vocabulary before and after a teaching period. In addition, an interview was conducted to learn the students' opinions about their learning experience. The results indicated a substantial increase in the students' post-test scores. It was also found that the students had a positive attitude towards the use of computers in vocabulary learning.

**Keywords:** Computer Assisted Language Learning,  
Teaching Vocabulary, Visuals in Vocabulary Learning,  
Technology and Language Learning

**BİLGİSAYAR DESTEKLİ DİL ÖĞRENİMİNİN KELİME ÖĞRETİMİNE ETKİSİ:  
JING™ VE ANLIK İLETİLER**

**ÖZET**

Jing™, kullanıcılarının bilgisayar ekranında gördüklerinin resmini çekmesini mümkün hale getiren ücretsiz bir bilgisayar programıdır. Ayrıca resimlere metin eklenmesine ve önemli kısımların vurgulanmasına da olanak sağlar. Bu çalışmanın amacı Jing™ programının dil sınıflarında eğlenceli ve yenilikçi bir şekilde kelime öğretiminin amacıyla kullanımını incelemektedir. Veri toplama araçlarından biri öğretim sürecinden önce ve sonra öğrencilerin öğretilmesi hedeflenen kelimelerle ilgili bilgi düzeylerini ölçmek için kullanılan bir kelime testidir. Ayrıca öğrencilerin öğrenme süreci hakkındaki tecrübelerini öğrenmek için bir görüşme düzenlenmiştir. Sonuçlar öğrencilerin ön-test ve son-test sonuçları arasında belirgin bir farklılık olduğunu göstermiştir. Ayrıca öğrencilerin kelime öğrenmede bilgisayar kullanımını hakkında olumlu bir tutumlarının olduğu belirlenmiştir.

**Anahtar Kelimeler:** Bilgisayar Destekli Dil Öğretimi,  
Kelime Öğretimi, Kelime Öğreniminde Görseller,  
Teknoloji ve Dil Öğretimi

## 1. INTRODUCTION (GİRİŞ)

The technological improvements have an immense capacity of changing every field of study. Needless to say, language teaching is among the fields that are affected by these new technological developments. Since the opportunities that are provided with computers and especially the internet attract the interests of the researchers, Computer Assisted Language Learning (CALL) has long been studied by many researchers.

The internet can provide rich sources for language learners (Martins, Steil & Todesco, 2004). An internet connection makes it possible for the learner to find different levels of authentic materials without spending much time and effort. In addition, it is now possible to find new and more interesting techniques for improving language skills and abilities such as vocabulary acquisition. It is estimated that a language learner needs to learn at least 7000 words for an adequate understanding of academic texts (Groot, 2000). Since developing vocabulary is an important part of language learning, some researchers have tried to create computer programs that can facilitate vocabulary learning (Goodfellow, 1994; Groot, 2000; Boers, Eyckmans, & Stengers, 2004). These programs generally included a single language learning activity, such as text reconstruction, gap-filling, speed-reading, simulation, or vocabulary games (Levy, 1997).

The present study focuses on teaching vocabulary with the help of Jing™ program. Jing™ is a free, downloadable computer program that allows the users to take a picture of what they see on their computer monitor. It is possible to share these recordings through social networking sites or send the links of recordings via an e-mail. The purpose of the study is to examine the use of Jing™ in the teaching of vocabulary and to find out the students' opinions about this program. Jing™ has not been developed to teach vocabulary. However, the researchers hypothesize that, the usage of the program for teaching vocabulary may provide visual images for the students and eventually they may remember the words more easily. In addition, it may promote cooperation among students.

## 2. RESEARCH SIGNIFICANCE (ÇALIŞMANIN ÖNEMİ)

The present study aims at investigating and providing an insight about the impact of the Computer-Assisted Language Learning (CALL) on vocabulary learning. In recent years, a great number of studies have been carried out in order to cast light on the role of computer technologies. A majority of these studies primarily focus on a single L2 vocabulary learning program rather than integrating various computer/internet-based programs and assessing the effect of this integration on the L2 vocabulary learning. The present study aims to make a significant contribution to the research area by examining different computer/internet-based programs (Jing™ and Instant Messaging Programs) and their influence on L2 vocabulary learning. In addition, this study provides a clear picture of how students consider their own technique(s) of vocabulary learning and the computer/internet-based vocabulary learning.

## 3. METHOD (YÖNTEM)

### 3.1. Participants (Katılımcılar)

The study participants were freshman students of Dicle University, ELT Department. At the beginning of the study, it was announced that the participation was voluntary and 10 students accepted to participate in the study. Later, one of these students did not take part in the lessons and the study was completed with nine students.

### 3.2. Instruments (Veri Toplama Araçları)

The first instrument used in the study was a vocabulary test prepared by the researchers to measure the knowledge of the students regarding the words that were planned to teach. After the researchers prepared the test, it was checked by two native speakers of English working as English lecturers at a private Turkish university. Second, three different texts were used by the researchers to provide the context for the words. Finally, an Interview Protocol was used to obtain the students' opinions about the usage of computers and especially Jing™ program in teaching vocabulary.

### 3.3. Data Collection Procedures (Veri Toplanması)

This study was based on a teaching period that lasted for three weeks. Three courses were presented to the students by one of the researchers. First, the teacher provided a short tutorial for the students aiming to teach the Jing™ program. The tutorial focused on the following points:

- Downloading the program to the students' computers,
- Using the program to capture images,
- Adding texts, colors, arrows or highlighting to the pictures,
- Saving the pictures,
- Sharing the pictures over the World Wide Web, or placing the links of recordings in an e-mail,

Before each lesson, students were sent English texts by the teacher via e-mail. The teacher prepared the same texts for all the students, but in each text different words were underlined. Namely, each student was given one or two underlined words by the teacher, and the students' duty was to prepare pictures for these words that would make it easier for their friends to learn and remember them later.

Then, each student would, send the pictures to their friends via their e-mail accounts. The texts were sent to the students at the beginning of each week, so that they could focus on a limited number of words in each session. One of the students did not take part in the study after the tutorial session. Therefore, the words assigned to this student were given to the volunteers. Table 1 shows the texts and words assigned to each student.

Table 1. Words assigned to the students  
 (Table 1. Kelimelerin öğrencilere dağılımı)

Students	Text 1 (Seeing Clearly)	Text 2 (Dreams)	Text 3 (Wild)
1	stealthily	fawn/ pontificate	at stake /reckless
2	Eschew	recurring/ alacrity	ogre /devoid of
3	Quip	grab/ deride	drag someone down /euphemism
4	Innocuous	pellucid /pugnacious	grandeur /reverent
5	Perch	construe /fractious	transgression /unbridled
6	Perplexed	inimical /irrational	unequivocally /ship someone off
7	Fuzzy	hurl /invective	backpack /rugged
8	wipe off	infraction /dither	resolve /lug
9	Drip	deprecate /futile	rage /dislocate
10	Condescension	tumble /solemnly	reflective /impulsive

#### 4. FINDINGS (BULGULAR)

At the beginning of the study, the students were administered the vocabulary test prepared by the researchers. The scores of the students related to the target vocabulary ranged between 12 and 34 out of 100. The mean score of the group was found to be 23.3.

##### 4.1. Lessons (Dersler)

As stated earlier, before each lesson, the teacher sent a text to the students with the underlined words. In the first lesson, each student was assigned only one word. At the beginning of the lesson, the text was read by the students once again. Then the teacher asked the Comprehension Questions. Each student presented their picture about the new word they were assigned. Then, the students were asked to shut their computers down. The teacher asked the students to define the meanings of the words. This time the researchers noticed that the students tried to remember the visual images before defining the words.



Figure 1. A sample image prepared by one of the students  
(Şekil 1. Öğrencilerden birinin hazırladığı bir örnek resim)

The following two lessons were conducted in the same way. The texts used in these lessons were called "Dreams" and "Wild". It was observed in all lessons that, when asked to remember the words, the students generally tried to remember the images.

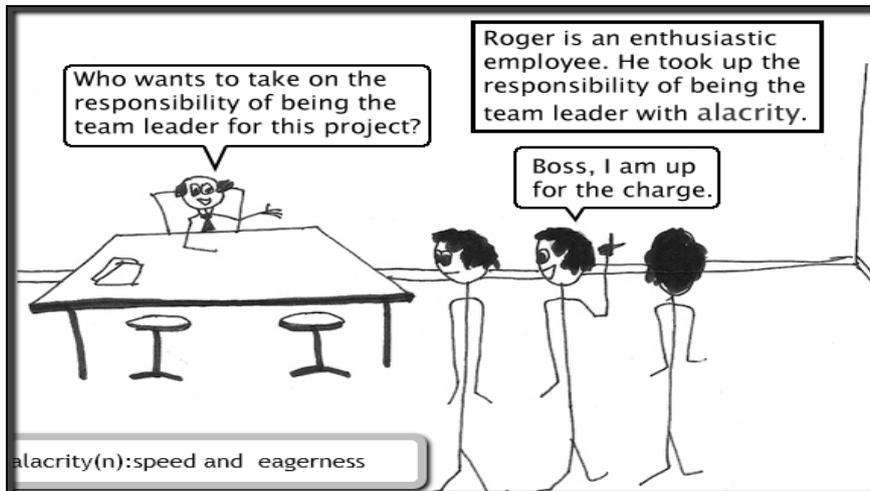


Figure 2. A sample image prepared by one of the students.  
(Şekil 2. Öğrencilerden birinin hazırladığı bir örnek resim)

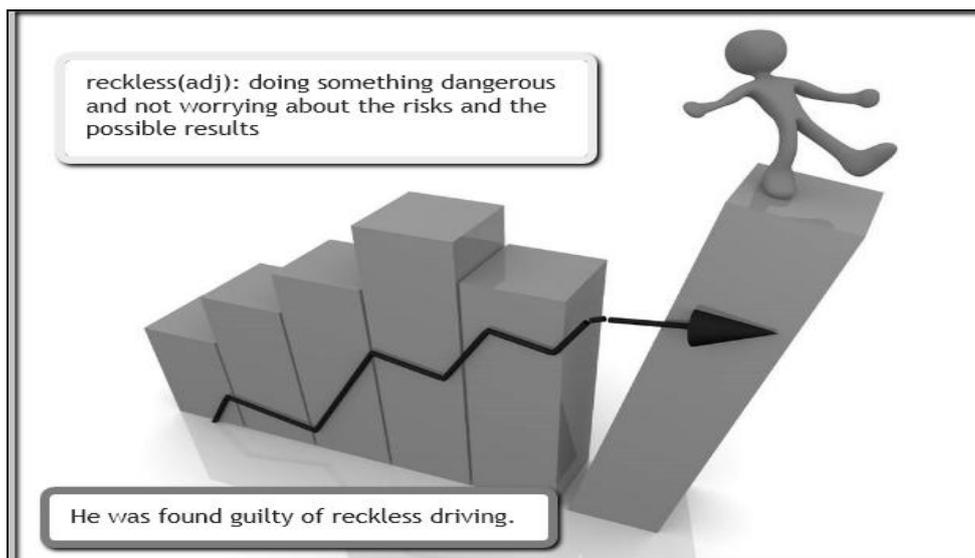


Figure 3. A sample image prepared by one of the students  
(Şekil 3. Öğrencilerden birinin hazırladığı bir örnek resim)

After the lessons were over, the vocabulary test was administered once again. This time the scores of the students changed substantially. The students had scores that changed between 40 and 80 whereas the mean score was 71.5.

During the interview, the students were asked the following questions:

- What do you think about the use of computers in language teaching?
- What is your opinion about the use of Jing™ in language lessons?
- Do you have a special technique to learn and memorize words?
- (If the answer to the previous question is yes) Can you compare your technique and using Jing™ to memorize words?

The answers of the students were transcribed by the researchers.

The findings indicated that the participants of the study had positive attitudes towards the use of computers in language teaching.

All of the students responded the first question positively. Namely, they found the use of computers in language teaching quite useful. In addition, five students mentioned on-line dictionaries and said they always used them in their own learning.

The second question in the interview asked about the opinions of the students on Jing™ program. They found the program rather enjoyable. Some of the comments of the students were as follows:

*The visual aids made it much easier to remember.*

*It is easier to remember words without repetition.*

*Instead of using papers and pens, it is more efficient to use the computer to prepare images.*

Some students mentioned the cooperative aspect of the lessons and commented on their work with the other students.

*Preparing pictures for my friends and receiving their pictures were both very interesting.*

*I liked this activity a lot. I tried to find amusing pictures for my friends, so they could remember them easily.*

The students all used special techniques to remember words. They generally wrote words many times to remember them later. When they compared their own technique with using Jing™, all of them accepted that Jing™ was more effective and interesting, because it was easier to remember the words with images. Some of their comments were as follows:

When I try to remember the meaning of the words, I remember the visuals.

It was more effective because I worked with a group of friends. I feel that we supported each other.

##### 5. CONCLUSION (SONUÇ)

It may sometimes be difficult to change traditional teaching methods. As suggested by Blake (2008) "Constant change is a frightening phenomenon for most people, but that is the inherent nature of the technology field" (p.12). However, it was surprising to find that this particular group of students demonstrated positive attitudes towards the autonomous learning approach although they came from traditional and authoritative backgrounds.

Almost all the participants mentioned the value of using images to memorize words. Indeed, the use of visual imagery aids may provide concrete images of unfamiliar words, which support the learning process of new vocabulary (Kellogg & Howe, 1971 cited in Brandl, 2002). The researchers believe that the Jing™ program may help teachers and students provide the visual images easily.

Within the context of this study, the students worked together to learn vocabulary items. This can be accepted as an example of Computer Supported Collaborative Learning (CSCl). According to Stahl, Koschmann, Suthers (2006), CSCl proposes "the development of new software and applications that bring learners together and that can offer creative activities of intellectual exploration and social interaction" (p.410). It should be kept in mind that, this was a small-scale study; therefore, the results cannot be generalized.

However, the results are quite promising since the participants all reported positive opinions about their learning experience.

##### NOT (NOTICE)

Bu çalışma, 22-24 Eylül 2011 tarihleri arasında Elazığ'da düzenlenen "(ICITS-2011) 5. Uluslararası Bilgisayar ve Öğretim Teknolojileri Sempozyumu"nda sözlü bildiri olarak sunulmuştur.

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