

# Teachers' Technology Use in Vocabulary Teaching

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## Abstract

Vocabulary teaching and learning require several strategies to be put into use and supported by technology, which empowers the process. However, language instructors do not always benefit from computer resources available on CDs or the Internet. As the results of the survey among 80 language instructors show, they are not aware of the opportunities that technology provides to them. Moreover, word lists and flashcards are still the widely used materials used for teaching vocabulary, while online glossing and wikis are rarely used.

## Introduction

It cannot be denied that vocabulary learning is central to learning a language, be it a mother tongue or the second/foreign language. According to Nunan (1991), learning vocabulary in the very early stages is more fundamental than grammar, since without vocabulary one would not be able to use the structures and functions for effective communication. In other words, one can say that without grammar one can communicate little; however, without vocabulary, one can communicate nothing. This, in turn, results in the necessity of placing emphasis on vocabulary learning activities in language learning and teaching. However, as there are no clear-cut answers as to which tools or strategies to learn vocabulary are the best and most teachers have different beliefs about vocabulary learning, they generally follow the activities suggested in the course book in a slave like manner.

The responses to the questions concerning how to learn vocabulary learn best seem to include using common tools such as word lists, flashcards or monolingual dictionaries. Strangely enough, students' writing their own sentences with the newly learned words or structures five or ten times is not rare, even though the so-called "old fashioned learning model" rote learning is generally avoided (Hulstijn, 2001). However, as Gu (2003) indicates, most successful students use direct attention and memorization of words as these strategies help most.

The main aim of the present paper is to gather information regarding what computer resources are predominantly used in vocabulary teaching and learning and in what way. It is not the intent of this article to test which tool or strategy works best. Instead, we will provide some details on language teachers' use of technology in vocabulary instruction, together with the possible reasons why they use some resources more or less as compared to others. There are numerous studies showing how the Internet has been put into use in foreign language instruction and the effect of computer-assisted instruction on developing reading comprehension skills and vocabulary acquisition has been investigated (Levine, Ferenz & Reves, 2000; Horst, Cobb & Nicolae, 2005; Tozcu & Coady, 2004; Taylor 2009).

Yet, there is lack of research investigating whether teachers are aware of computer resources that might help themselves and students assist in the process of vocabulary acquisition, whether in the form of wordlists, flashcards or glossing.

### **Overview**

Out of a whole array of language learning strategies on the metacognitive, cognitive and socio-affective level (for instance, as classified by O'Malley & Chamot, 1990 or Hedge, 1993), vocabulary learning strategies facilitate the acquisition of new lexis in the second/foreign language as they aid in discovering the meaning of a new word and consolidating a word once it has been encountered. Research shows that most learners actually do, even if they might not be aware of it, use specific strategies for vocabulary learning (Schmitt, 1997). As Nassaji (2003) found, different strategies contribute differently to learners' success so it is necessary to adapt strategies to each learner's needs. Additionally, it has been found that students who apply multiple learning strategies are more successful in learning (Johnson & Heffernan, 2006). While applying these strategies, learners need to benefit from multiple resources, which have been amply addressed by researchers. To start with, Dreyer & Nel (2003) integrated the features of a printed interactive study guide, contact sessions with the lecturer and the added value of a custom-made online environment to create a computerized learning context. The findings of Dreyer & Nel (2003) suggested that students benefit from strategic reading instruction offered in a technology-enhanced learning environment, developing reading comprehension and reading strategy use. Horst, Cobb & Nicolae (2005) reported the use of concordance dictionary and online quizzes in the process of familiarizing students with a variety of research-based strategies for learning and retaining new vocabulary.

The activities of examining concordance examples, consulting an on-line dictionary, reading hypertext, using the quiz feature of the on-line Word Bank, and entering texts into the cloze-passage maker were integrated with reading passages to reinforce reading comprehension and vocabulary retention. Similarly, Web-based vocabulary activities of various types (multiple-choice, fill-in, cloze passages) were combined with reading passages, automatic scoring, e-mail feedback and randomization. This resulted in improving developing a memory connection between the form and meaning of the word (Nelson, 1998), successfully addressing placing new words in a meaningful context and using mechanical techniques to help memorize new words.

Moreover, according to Ma & Kelly (2006), the design of computer-assisted vocabulary learning should enable both explicit and implicit vocabulary learning, training learners to become good vocabulary learners, among others, by being instructed in useful learning strategies. A visual advanced organizer contextualizing the topic (Chun & Plass, 1996) and vocabulary presentation in a mini-dictionary with glosses including meanings, collocations, example sentences and usage are followed by reading to practice and rehearse selected vocabulary in context. The learner training component can include, as was the case with Ma & Kelly (2006), introduction of vocabulary learning strategies relating to verbal association, imagery, rhyming or alliteration and tips on how to memorize the word (with the option to display the L1 translation).

In general, the previous studies and opinions discussed above imply that teachers should show students how to evaluate their successful/unsuccessful use of the strategy, providing them with the traditional materials as well as the computer resources

available through technology. Training students in strategy use, both established strategies in the new, technology-based environment, as well as the strategies occurring solely in the computer medium, is essential for successful computer-assisted learning.

### **Method**

Participants were 80 language teachers teaching English to students studying for English language proficiency exam in university-affiliated language schools in Ankara, Turkey, during the fall semester of the academic year 2008-2009. Out of the participants, 60 were males and 20 were females. Their average age was 32 and average teaching experience was 6.5 years. Data collection procedures involved an 8-item survey concerning the tools described below and a post-survey interview. Interviews were carried out by one of the researchers in a quiet place of the department that the interviewees worked.

1. *Word lists*: A word list is a sheet of paper where L2 words are printed along with their L1/L2 translations and/or definitions. Some learners provide an example sentence for the words.

2. *Flashcards*: Word cards are a set of cards where the L2 word is written on one side and its L1/L2 translation and/or definition on the other. Some learners provide also an example sentence for the words.

3. *CD / DVD dictionaries* provide fast access to words in hyperlinked word entries and offer advanced searching capabilities. Compared to paper-based dictionaries, they are relatively accessible teaching tools and contain a considerable amount of knowledge that students can discover and implement anytime such as cultural information, exercises and academic word lists. Longman Dictionary of Contemporary English (LDOCE5), Cambridge Learner's Dictionary (CLD), and Macmillan English Dictionary for Advanced Learners (MED2) are just examples of the CD/DVD dictionaries.

4. *Online (Internet-based) dictionaries* provide definitions and example sentences together with sound files for pronunciation: online versions of renowned dictionaries (Cambridge Dictionaries online, <http://dictionary.cambridge.org>), metadictionaries giving access to multiple dictionaries and thesauri (YourDictionary, <http://www.yourdictionary.com>), as well specialized dictionaries (Alphadictionary, <http://www.alphadictionary.com>).

5. *Authoring programs*, such as Hot Potatoes (<http://hotpot.uvic.ca>) and Gerry's Vocabulary Teacher (<http://www.cpr4esl.com/gvtwhatigvt.htm>) allow teachers to creatively author language quizzes and adjust material to particular class or students with much freedom and flexibility. Authoring programs such as Hot Potatoes enable teachers to prepare the exercises fitting the content of a particular lesson. The main advantage of authoring programs is that they allow unsophisticated computer users design their own attractive exercises.

6. *Online glossing tools* such as Wordchamp (<http://www.wordchamp.com/>) or Ultralingua (<http://www.ultralingua.com/onlinedictionary/>) develop the ability to read foreign language websites and authentic texts with vocabulary support. They all provide the learners with an instant dictionary look-up access while browsing any web page, giving translations (L1 or L2) into various languages for unknown words by mousing over the lexical item demanded. Moreover, they may provide the option to download the words' pronunciation as an mp3 word list.

7. *Blogs such as Wordpress* (<http://www.wordpress.com>) are webpages where individuals share their opinions and writings. This gives teachers a chance to observe the development of the student's writing skills overtime. By publishing the blog on the Internet, the student has the

possibility of writing for readers beyond the classmates, not usually possible in discussion forums. Readers, in return, can comment on whatever they have read. Self-publishing encourages ownership and responsibility on the part of the students, who may be more considerate while knowing they are writing to a real audience.

8. *Wikis such as PBworks* (<http://www.pbworks.com>) are collaborative websites that many people can work on or edit. With the help of a wiki, users can create a web page, edit, share and work on it with their friends, families or students, etc. Learners, for example, can create a database of phrasal verbs with meaning and examples (students in pairs or groups can add meaning and examples to the list).

The participants were briefly informed about the aim of the study. They were asked to rate the computer resources mentioned in the survey on a scale ranging from 1= Use Never to 5= Use Always. Moreover, the participants were also interviewed as to how they used the resources in their classrooms. The questions were open-ended and the researchers took notes during the interview. When the participants stated that they had used, had not used and/or had rarely used some of the resources, the participants were asked to elaborate on the reasons. The average length of the interviews was 7.5 minutes. The responses to the survey questions were analyzed through descriptive statistics using PASW Statistics 18 and open-ended questions regarding how they used the resources were subjected to content analysis.

### **Results**

The responses to the survey items are provided in Table 1 and 2. The scale consisted of 5 items (1= Never 2=rarely 3= Sometimes 4= Often 5= Always). See issue website <http://rapidintellect.com/AEQweb/spr2010.htm> As is illustrated in the tables, the use of Wordlists (M= 4.45), Flashcards (M=4.21) and Online (Internet-based) dictionaries (M=4.15) are the most frequently used resources in the participants' vocabulary teaching activities. The other resources, Authoring software (M=1.16), Online glossing (M=1.14), Blogs (M=1.29) and Wikis (M=1.58) were rarely used. The participants preferred Online (internet-based) dictionaries to CD/DVD dictionaries. During the interviews, the participants were asked to explain how they used the resources in their classrooms. They generally used these resources as assignment, reference or review materials. Moreover, they were asked why they used them never or rarely (Table 3). See issue website <http://rapidintellect.com/AEQweb/spr2010.htm>

### **Discussion**

There are numerous studies regarding the advantage of online glossing, which "provides fast and easy access to the meanings of unknown words" (Chun, 2006, p. 70), and results show CALL-based glossing is more effective than traditional, paper-based glossing (Taylor, 2009). Even though there is a plethora of practical books on how to benefit from computer resources (Erben, Ban, & Castañeda, 2009; Richardson, 2009; Chapelle & Jamieson, 2008; Erben & Sarieva, 2008; Dudeney & Hockly, 2007;), language teachers still seem to adhere to some traditional ways of vocabulary teaching, rather than enriching teaching and learning with a variety of resources and tools available as CD/DVD, software or on the Internet.

Considering the responses given to the survey and interview questions, it is clear that Wordlists, Flashcards, and Online (Internet-based) dictionaries are the most frequently used resources in the participants' vocabulary teaching activities. These tools are mostly used as an assignment to review the vocabulary taught/learned during the

courses. Online dictionaries are used as reference and self-study material by the students to look up unknown words and to practice pronunciation mostly outside the classroom. Moreover, according to the responses on the use of dictionaries, the trend is towards the use of online dictionaries as they provide quick vocabulary reference when students need to look up the word during some vocabulary task. However, it should be noted that especially the CD-DVD dictionaries have a lot more to offer such as cultural information, writing assistance and vocabulary training. When we consider that these resources are the type of activities that both the participants and their students are used to dealing with, it seems quite natural that they are still popular. Moreover, these tools are less time-consuming to use, easier and quicker in preparation than other lexical resources.

The striking point about the use of the computer resources is that most of the participants either rarely used or never used such widely available tools as Authoring software, Online glossing, Blogs and Wikis. Although these tools provide many opportunities such as allowing students to become authors/materials writers by creating, publishing and sharing work with others, they are mostly used as assignment by the students to review and study vocabulary items similar to paper-based wordlist such as writing sentences to exemplify newly learned vocabulary. As these resources are new and more complicated than the traditional teaching materials, it is possible that the participants just avoid them. Most of the participants were not aware of these tools as they did not participate in any pre- or in-service training on the use of technology in language classrooms. Considering their average age of 32, and the curriculum that the departments followed at the time when they were students, lack of training seems to be the possible explanation.

### **Conclusion**

The findings of the study show that Wordlists, Flashcards, Online (Internet-based) dictionaries are still the most frequently used resources in vocabulary teaching activities as an assignment to review or practice taught/learned vocabulary as they are easy to prepare and require little time. Authoring software Online glossing, Blogs, and Wikis are rarely used as they are new, more complicated and require more time to master. The main reason seems that the participants lack training on the use of technology in language classrooms. Training language teachers will help them empower EFL learners with a wide range of materials and tools to foster their autonomy in vocabulary acquisition, especially out of the classroom. Further research can investigate whether language teachers will only deal with traditional activities in vocabulary teaching activities and whether there will be any change in their practices when they are provided with necessary training or the opportunity to try new activities.

### **References**

- Chapelle, C. A., & Jamieson, J. (2008). *Tips for Teaching with CALL: Practical Approaches to Computer-Assisted Language Learning*. New York: Pearson Education, Inc.
- Chun, D. M. (2006). CALL technologies for L2 reading. In L. Ducate & N. Arnold (Eds.), *Calling on CALL: From Theory and Research to New Directions in Foreign Language Teaching*. CALICO Monograph Series, 5. San Marcos, TX: CALICO Publications, 69-98.
- Chun, D. M., & Plass, J. L. (1996). Facilitating reading comprehension with multimedia. *System*, 24(4), 503-519.
- Dreyer, C., & Nel, C. (2003). Teaching reading strategies and reading comprehension within a technology enhanced learning environment. *System*, 31, 349-365.

- Dudeny, G. & Hockly, N. (2007). *How to Teach English with Technology*. Harlow: Pearson Education Limited.
- Erben, T., Ban, R., & Castañeda, M. (2009). *Teaching English Language Learners through Technology*. UK: Routledge.
- Erben, T., & Sarićva, I. (Eds.) (2008). *CALLing All Foreign Language Teachers: Computer-Assisted Language Learning in the Classroom*. Larchmont, NY: Eye on Education.
- Gu, P. Y. (2003). Fine brush and freehand: The vocabulary-learning art of two successful Chinese EFL learners. *TESOL Quarterly*, 37(1), 73-104.
- Hedge, T. (1993). Learner strategies. *ELT Journal*, 47(1), 93.
- Horst, M., Cobb, T., & Nicolae, I. (2005). Expanding academic vocabulary with an interactive on-line database. *Language Learning & Technology*, 9(2), 90-110. Retrieved October 1, 2009, from <http://llt.msu.edu/vol9num2/horst/default.html>
- Hulstijn, J. (2001) Intentional and incidental second language vocabulary learning: a reappraisal of elaboration, rehearsal, and automaticity. In P. Robinson (Ed.), *Cognition and Second Language Instruction*. Cambridge: Cambridge University Press, 258-286.
- Johnson, A., & Heffernan, N. (2006). The Short Readings Project: A CALL reading activity utilizing vocabulary recycling. *Computer-Assisted Language Learning*, 19(1), 63-77.
- Levine, A., Ferenz, O. & Reves, T. (2000). EFL academic reading and modern technology: how can we turn our students into independent critical readers? *TESL-EJ*, 4(4), 1-9. Retrieved March 29, 2009, from <http://tesl-ej.org/ej16/a1.html>.
- Ma, Q., & Kelly, P. (2006). Computer assisted vocabulary learning: design and evaluation. *Computer-Assisted Language Learning*, 19(1), 15-45.
- Nassaji, H. (2003). L2 vocabulary learning from context: strategies, knowledge sources, and their relationship with success in L2 lexical inferencing. *TESOL Quarterly*, 37(4), 645-670.
- Nelson, B. (1998). Web-based vocabulary activities: pedagogy and practice. *Computer-Assisted Language Learning*, 11(4), 427-435.
- Nunan, D. (1991). *Language Teaching Methodology*. Hemel Hempstead: Prentice Hall Europe.
- O'Malley, J. M., & Chamot, A. U. (1990). *Learning Strategies in Second Language Acquisition*. Cambridge: Cambridge University Press.
- Richardson, W. (2009). *Blogs, Wikis, Podcasts and Other Powerful Web Tools for Classrooms* (2nd ed.). Thousand Oaks, Calif.: Corwin Press.
- Schmitt, N. (1997). Vocabulary learning strategies. In R. Carter & M. McCarthy (Eds.), *Vocabulary and Language Teaching*. New York: Longman, 198-218.
- Taylor, A. M. (2009). CALL-based versus paper-based glosses: Is there a difference in reading comprehension? *CALICO Journal*, 27(1), 147-160.
- Tozcu, A., & Coady, J. (2004). Successful learning of frequent vocabulary through CALL also benefits reading comprehension and speed. *Computer-Assisted Language Learning*, 17(5), 473-495.