THE RELATIONSHIP BETWEEN INTERNET EXPOSURE AND EFL STUDENTS' VOCABULARY RETENTION AT TABUK UNIVERSITY

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ABSTRACT

This study examines and explores the relationship between Internet exposure and EFL students' vocabulary retention at Tabuk University. The population of the study involved 72students from the preparatory year at the University of Tabuk during the academic year of 1435\1436. A vocabulary test and a questionnaire were developed. Results revealed that all the study sample use the Internet, yet they vary in time exposure frequency. In addition, all the participants could pass the vocabulary test showing different levels. The key result assured the positive relationship between the Internet exposure frequency and vocabulary learning in EFL context.

INTRODUCTION

Vocabulary knowledge is an important element in second language (L2) acquisition. By learning new words, students can increase their listening, speaking, reading and writing vocabularies and can improve comprehension and production in L2. A student can increase vocabulary knowledge formally in the classroom and informally through communication with others and through out of class activities. Many instructional strategies were devised and utilized by L2 language teachers to develop the general and academic vocabulary of students. For example, Woodard (1998) suggested some strategies for teaching vocabulary. Those included teaching word origins and structural analysis; using semantic mapping/webbing; showing students how to attack analogies; reading aloud; dramatize; showing students how to use the dictionary; using cloze sentences; and using computer programs. Moreover, different forms of technology are being integrated into the teaching and learning of L2 vocabulary. A review of the vocabulary literature has shown that specially designed software, a Tutorial computer-assisted language learning (CALL) program, concordance, online lessons, animated texts, use of multimedia contexts, interactive multi-modal materials, online dictionaries, e-books and a hypertext/hypermedia environment were used to teach L2 vocabulary. The different learning modes, skills and activities used in vocabulary instruction in CALL environments are reported below.

Several research studies have used self-access, individualized and collaborative instructional modes in CALL learning environments. For example, Van Aacken (1996) used computer software designed to improve Kanji learning in a self-access learning mode. Findings showed that all the students in an Australian university using the computer to learn Kanji made higher gains and that those most enjoying the experience made the highest gains. In another study, Crozer (1996) used the Individualized Vocabulary Instruction (IVI) program to provide vocabulary instruction to disabled students at California's Los Angeles Pierce College. The IVI program had two modules, each containing 1,125 words. The program performed pre and post testing of students, provided instruction, presented students with abundant opportunities for practice and repetition, administered regular tests and controlled and monitored students' progress. The modules were divided into "chapters" of 15 words, each divided into 4 lessons. Upon completion of the four lessons in a chapter, the students took a chapter test and upon completion of all of the chapters, a final exam was administered. The IVI program proved to

be an effective method for teaching vocabulary and improving students' learning skills. In a third study, Bazeli and Olle (1995) used visual aids that included interactive video, student illustration of vocabulary, computer software packages designed to develop reading skills, activities that involve visual perception, and graphic organizers, including story maps, collaborative rehearsal of new vocabulary, and student-made flash cards in vocabulary instruction. The use of visuals, combined with cooperative learning groups, provided an effective environment for the development of vocabulary. In addition, Cobb & Horst (2001) tested an experimental ESL vocabulary course for academic learners at Concordia University in Montreal and how collaborative on-line databases could be used to meet the need for individualized instruction for academic vocabulary learners intending to do university work in English. They concluded that a collaborative database is a valuable tool for such learners.

Incidental learning and direct instruction were also investigated by some researchers. 24 ESL adult learners enrolled in a listening comprehension class at a major Midwestern university participated in a study by Smidt&Hegelheimer (2004). The participants completed pre, post, and delayed vocabulary posttests, a CALL activity including an academic lecture on horticulture, and a questionnaire. Results suggested that incidental vocabulary acquisition occurred and that lower-level learners were more likely to resort to the wrong aspects of the lecture in responding to comprehension questions.

While engaged in the online CALL activity, advanced learners exhibited both met cognitive and cognitive learning strategies. Intermediate and lower-level learners mostly made use of cognitive strategies. Female learners used more strategies than male learners, and female learners preferred cognitive strategies while male learners used more metacognitive strategies. Similarly, the effect of direct vocabulary learning using CALL on vocabulary knowledge, reading comprehension, and speed of word recognition was investigated by Tozcu & Coady (2004). They found that students who used Tutorial CALL to learn high frequency words did learn a significantly larger number of words than those in a control group. The students in the treatment group studied approximately 2,000 of the high frequency words in English on the computer for three hours per week for eight weeks, whereas the students in the control group spent the same amount of time reading texts and doing reading comprehension exercises. The treatment students showed significantly greater gains in vocabulary. Furthermore, the effect of using different types of vocabulary tasks and activities in CALL environments on vocabulary acquisition was the focus of some studies. The effect of three annotation types (text-only, picture-only, and a combination of the two) on second language incidental vocabulary retention in a multimedia reading setting, were examined by Yoshii & Flaitz (2002).

Results indicated that the combination group outperformed the text-only and picture-only groups on the immediate tests. There was a significant interaction between the annotation type and students' proficiency level for immediate and the delayed tests. Helping students to resolve lexical ambiguity is an important aspect of vocabulary instruction. Effects of lexical ambiguity in CALL on 181 beginning second-language college learners were examined by Grace (1998). Findings supported the need for beginning vocabulary learning software that renders meaning clearly while promoting deep processing. Also, Kang and Dennis (1995) examined the effect of computer-based, interactive multi-modal materials. This context-embedded approach was most effective in promoting spontaneous use of vocabulary, listening comprehension, and recall of vocabulary definitions by beginning L2 learners. By contrast, learning L2 vocabulary in an animation-based context without any learning support was inefficient in teaching vocabulary to 7-year-old young Chinese students, whereas sentence-level translation and target warming-up were both effective in facilitating L2 learning in a multimedia context (Sun and

Dong, 2004). Likewise, a semantic mapping activity proved to be ineffective in vocabulary development, when used in a hypertext/ hypermedia environment for the teaching L2 Spanish vocabulary to 48 high school students who had never studied Spanish (Svenconis&Kerst, 1995). No significant differences were found between semantic mapping and traditional word listing approaches to vocabulary development. Concordance activities, tailored for use with ESL students, were utilized in several studies. In a concordance, language is presented in an authentic context; learners examine a key word in the context of a string of sentences which can exemplify the use of that particular word. In the Cambridge Advanced English course in Australia, Somogyi (1996) used concordancing activities in which the students selected appropriate vocabulary to complete a gapped text. These activities benefited ESL students by providing authentic examples of language in context. Moreover, an online concordancing program was used with an online dictionary by 18 intermediate ESL undergraduates (Kaur and Hegelheimer, 2005). The results indicated a statistically significant transfer of vocabulary knowledge to the writing task.

Providing L2 students with different lexical information proved to be effective. Laufer (2000) incorporated dictionary information into a CALL program consisting of a text, highlighted low-frequency words, and access to different lexical information about these words such as explanation in English, translation into the first language, sound, root, and other information. EFL college students in Hong Kong and Israel were asked to read an on-screen text and understand it in order to take a comprehension test. They could look up unknown words in the CALL dictionary. After task completion, students were unexpectedly tested on meaning recall of target words. It was found that use of multiple dictionary information reinforced retention. Results highlighted the importance of providing different lookup options catering to varying lookup preferences in paper or CALL dictionaries when assigning tasks involving reading comprehension and understanding of unfamiliar words. In a similar study, Hill (1998) used a vocabulary learning program with tertiary Chinese students learning English at the University of Hong Kong. The students accessed a text and a range of information about individual vocabulary items, including English meaning, Chinese translation, and pronunciation and selected the information they needed to help them learn unfamiliar words in context. Upon completion of the tutorial, the students worked on three sets of exercises to assess their knowledge of the target words and feedback was provided. Findings indicated that most students considered the "Words in Your Ear" beneficial in learning new vocabulary items.

In several studies, vocabulary instruction was combined with listening, reading, and writing skill instruction using technology. For example, Davidson, Elcock& Noyes (1996) evaluated the impact of using a computer system that gave pre-recorded speech prompts on request on young children's reading attainment. They found that the intervention group made significantly higher gains on three measures of sight vocabulary. Higgins and Hess (1998) conducted a study with 22 third-grade children to determine the effectiveness of e-books for teaching vocabulary with and without specific supplemental vocabulary building activities. Children in the control group listened to a computer read a page of the e-book, and viewed the animation for two target words. A researcher asked if the child knew the meaning of the word and, if not, the child viewed the animation again. The child was given a synonym of the word if he/she did not understand the word after viewing the animation a second time. Children who received supplemental vocabulary instruction in conjunction with the e-book performed significantly better than those who used an e-book without supplementary instruction.

Fletcher and Atkinson (1972) conducted one of the earlier studies in which children of the experimental group received 8 to 10 minutes of the computer assisted instruction per day for 5

months. Results of the post test gain scores showed that most students who received CAI performed better than that those who did not. Arroyos (1992) examined the effect of using computer on reading achievement. The subjects of the study consisted of 75 seventh grade students. The result showed that the use of the computer appeared to increase student's motivation to learn. Chan (1993) sought to understand the uses of computer in ESL education and to examine how the interactions between technology, education, language and culture defined the way computers were used in the ESL classroom. The study focused on what kind of learning environment was created by ESL teachers using the computer on ESL teaching and learning. De Ridder (2000) argued that the case for the evaluation of some of the additional feature of CALL material designed to enhance second language reading comprehension was important. Her findings demonstrated that randomly highlighting words in a text on screen influenced the amount of vocabulary incidentally learned by the reader. Moreover, the results strongly indicate in highlighted setting were fundamentally different from reading a text in unmarked condition. She stated that this calls for reflection on how to present the learner with the enhancements of CALL.

Berge and Collins (1995) believed that the classroom of the past is no longer applicable to the world we live in which we are attempting to prepare our students to function in language. According to them, computerized classes and specially the on – line classroom offers opportunities to mentoring/ tutoring, project-based instruction (individual and group), retrieval of information (from on-line archives and database), course management, interactive chat, personal networking and professional growth, peer review of writing, and practice and experience using modern technology. Sivin-Kachala and Bialo (2000) reviewed 311 research studies on the effectiveness of technology on students' achievement. Their findings revealed positive and consistent patterns when students were engaged in technology-rich environments, including significant gains and achievement in all subject areas, increased achievement in preschool through high school for both regular and special needs students, and improved attitudes toward learning and increased self-esteem. O'Dwyer, Russell, Bebell, and Tucker-Seeley (2005) found that, while controlling for both prior achievement and socio-economic status, fourth-grade students who reported greater frequency of technology use at school to edit papers were likely to have higher total English/ language arts test scores and higher writing scores on fourth grade test scores on the Massachusetts Comprehensive Assessment System (MCAS) English/Language Arts test.

Michigan's Freedom to Learn (FTL) initiative, an effort to provide middle school students and teachers with access to wireless laptop computers, has been credited with improving grades, motivation and discipline in classrooms across the state, with one exemplary school. Seeing reading proficiency scores on the Michigan Education Assessment program (MEAP) test, administered in January 2005, reportedly increasing from 29 percent to 41 percent for seventh graders and from 31 to 63 percent for eighth graders. In examining large-scale state and national studies, as well as some innovative smaller studies on newer educational technologies, Schacter (1999) found that students with access to any of a number of technologies (such as computer assisted instruction, integrated learning systems, simulations and software that teaches higher order thinking, collaborative networked technologies, or design and programming technologies) showed positive gains in achievement on researcher constructed tests, standardized tests, and national tests. Cavanaugh's synthesis (2001) of 19 experimental and quasi experimental studies of the effectiveness of interactive distance education nusing video conferencing and telecommunications for K-12 academic achievement, found a small positive effect in favor of distance education and more positive effect sizes for interactive distance education programs that combine an individualized approach with traditional class room

instruction. Boster, Meyer, Roberto and Inge (2002) examined the integration standards-based video clips into lessons developed by classroom teachers increased student achievement. The study of more than 1400 elementary and middle school students in three Virginia school districts showed an average increase in learning for students exposed to the video clip application compared to students who received traditional instruction alone. Researchers are also making progress on the more complicated task of investigating the impact of technology use on higher order thinking skills as measured through means other than standardized tests. They are examining students' ability to understand complex phenomena; analyzeand synthesizes multiple sources of information, and builds representations of their own knowledge. At the same time, some researchers are calling for newer standardized assessments that emphasize the ability to access, interpret, and synthesize information.

Research indicates that computer technology can help support learning and is especially useful in developing the higher-order skills of critical thinking, analysis, and scientific inquiry "by engaging students in authentic, complex tasks within collaborative learning contexts" (Roschelle, Pea, Hoadley, Gordin& Means, 2000; Means, et. Al., 1993). While research linking technology integration, inquiry-based teaching, and emphasis on problem solving with student achievement is emergent, some research exists that suggests a connection. In a 2001 study of Enhancing Missouri's Instructional Networked Teaching Strategies (eMints) program, a state-wide technology integration initiative, eMINTS students scored consistently higher on the Missouri Assessment Program (MAP) than non-eMINTS students, including eMINTS students classified as having special needs. The higher MAP results were found to be associated with the instructional practices (Evaluation Team Policy Brief, 2002). The eMINTS program provides teachers with professional development to help integrate technology so that they can use inquiry-based teaching and emphasize critical-thinking and problem-solving skills. The program has since expanded to not only Missouri schools and districts but also other states as well. Currently, 232 Missouri districts, 10 Utah districts, 56 Maine districts, 2 Nevada districts, and 1 Illinois district, representing 1000 classrooms and 22500 students now take advantage of the eMINTS program offerings.

Test results continue to show that, on most state tests, students enrolled in eMINTS classrooms scored higher than students enrolled in non-eMINTS classrooms and that low-income and special education students in eMINTS classes generally score higher than their non-eMINTS peers (eMINTS, 2005). Results from other studies (Perez-Prado and Thirunarayanan 2002; Cooper 2001; Smith, Ferguson and Caris 2001) also suggested that students could benefit from technology-enhanced collaborative learning methods and the interactive learning process. The time of the experiment was only six weeks and it was very difficult to convince the school administration of the new changes and orientations. According to the previous studies ,it could be noticed that most of them discussed the whole skills in general but this study examined specific idea which studied the relationship between the Internet exposure and EFL students, vocabulary retention .so the findings of this study will help the decision makers in The University of Tabuk to give this technology a great importance ,and will help the students to use the internet in their language learning and to collect a huge number of vocabularies in their mind during using the internet . Finally, a mixed approach to vocabulary instruction was used by few studies such as Hill (1998), Laufer and Hill (2000) and Johnson (1997). Johnson (1997) used three methods of vocabulary instruction (contextual cues, definitions, and a mixed approach) supplemented by computer-assisted instruction (CAI) using a mixed approach. As in Hill and Laufer and Hill's studies, Johnson found that CAI was effective with all the methods used: contextual only, definition only and mixed approaches.

Statement of the Problem

A long experience of working as a foreign language teacher has shown that FL student has weakness in vocabulary. This might be due to the failure of the traditional methods of teaching in helping students and the teacher to learn/ teach this skill efficiently (Kauffmann,1996). The researcher tries to examine the relationship between the internet exposure and EFL students' vocabulary retention.

The Purpose of the Study

The researcher tries to explore the effect of the internet on improving foreign language university students' vocabulary retention.

The Hypothesis

There are statistically significant differences in students' achievement in vocabulary due to using the internet.

Significance of the Study

This study might be one of a few studies to be implemented on teaching vocabulary. The researcher hopes that this study will add to the findings of others concerning the possibilities of using internet in teaching and learning language skills.

Definition of Terms

The following definitions will be adopted for the purpose of this study:

Online: Computer is connected to the Internet. When one is online he/she is at that time hooked to the internet and actively operating the program (Atkinson, 1998).

Traditional Classroom Setting: In a traditional classroom setting, university students usually meet for an hour, listen to the lecture and get the assignment. There is eye to eye contact, direct interaction and intervention, and an established routine. In such setting the teacher decides methods, activities, and techniques that are to be learned and how the class is to be run (Freeman, 2000).

Web page: It is a Web document which can have any length from a few lines to several hundred lines, but which is accessed through one site (Atkinson, 1998).

Web site: It is a series of interlinked web pages such as the site of a school, college, company, local authority (Atkinson, 1998).

World Wide Web (WWW): It is a global system of electronic documents accessible via the internet (Atkinson, 1998).

Study Limitation:

1. The sample of the study was limited to 72 male students in preparatory year at The University of Tabuk during the second semester of the academic year 1431\1432.

PROCEDURES

Instrument of the Study

Having finished the preparation stage, the researcher gave the final version of the test and questionnaire to a jury of seven people who are well-known for their long experience in the field of teaching EFL. The jury members were asked to decide on:

a. Face and content validity of the test, and
b. The suitability of the items to test the points and skills assigned to them "in the table of specifications.

All the jury members decided that the test had face and content validity and that the test items that include (organizing a text, coherent paragraphs, grammar, vocabulary, punctuation, spelling and ideas were skilfully selected and organized.

Validity of the Instrument

Prior to the administration of a test, a pilot study is needed. Conducted on a group of subjects who are similar in background ad level to those who will take the final examination, it can provide valuable information about the ease of administering the test, the time students need for completing it, the clarity of instruction, the kind of language being elicited in the open – ended question, the usability of the marking scales, and so on. The results will reveal many unanticipated flaws in the test, and will save time and effort when the main trials are run. (Alderson et al., 1999:75). The pilot study is also useful in determining the difficulty level and discriminatory power of the test items. The initial form of the test has been administered to a sample of 15students from the same population after the establishment of the face and content validity of the test.

Reliability of the Test

A reliable test is one that gives the same or almost the same results consistently on different occasions when given under identical conditions (Hamash et al, 1982). One of the methods that can be used to find out test reliability is the test retest method. Thus to establish the reliability of the tests, the test-retest technique was used. A random sample of (15) students was selected from the same population from which the actual sample was drawn. They were given the test. Two weeks later, the pilot group was given the same test. In both administrations favourable and identical conditions were secured concerning the place, the time, the clarification of each test item, and discipline. By using Pearson's formula, the pilot administration of the test have shown that, the correlation coefficient between students' ranks on both testing occasions were computed and found to be 0.91 According to Pearson's formula, the reliability coefficient of a test would be acceptable if it is not less than (0.50). Thus the test can be described as being highly reliable.

Data Collection

A questionnaire survey was used as the main data collection instrument of this study. The questionnaire consisted of 16 Likert scale questions. The questionnaire was developed to identify students' Internet exposure frequency. The survey was administered to the subjects during the vocabulary test time. In addition, an MCQ vocabulary test was developed to measure students' vocabulary.

Data Analysis

Quantitative data obtained from the questionnaire was analysed using standard descriptive statistical routines available through Microsoft Excel. Students' classified into three ranks: over-users (always), average users (usually) and low-users (sometimes) according to their responses to the questionnaire. Similarly, according to their scores on the vocabulary test, the same students were classified into three ranks: excellent (from 85 to 100 pts), good (from 70 to 84 pts), and fair (from 50 to 69pts).

Table 1: Students' Internet Exposure Frequency

Over-Users (always)		Average Users (usually)		Low-Users (sometimes)		Total
No.	%	No.	%	No.	%	
32	44.5%	28	38.8%	12	16.7%	72

Table 1shows that 44.5% of the students use the Internet constantly. In addition, 38.8% of the participants use the Internet in frequent way. Only 16.7% of the students tend to use the Internet from time to time. Generally the entire study sample uses the Internet, yet they vary in time exposure frequency.

Table 2: Students' Scores on the Vocabulary Test

Excellent (85 to 100)		Good (70 to 84)		Fair (50 to 69)		Total
No.	%	No.	%	No.	%	
34	47.2%	26	36.1%	12	16.7%	72

Table 2 displays that 47% of the students scored excellent scores (85-100) on the vocabulary test. In addition, 36.1% of the participants scored good scores (70-84) on the vocabulary test. Only 16.7% of the students scored fair scores (50-69) on the same test. Generally all the participants could pass the vocabulary test showing different levels.

Table 3: Correlation between Students' Internet Exposure and their Scores on the Vocabulary Test

Internet Exposure	Over-Users	Average Users	Low-Users
Vocabulary Test	Excellent	Good	Fair
Correlation	r= .94	r= .93	r= 1

Table 3 demonstrates that there is a strong positive correlation between students' Internet exposure and their scores on the vocabulary test ranging from r=.93 to r=1. This finding assures the positive relationship between the Internet exposure frequency and vocabulary learning in EFL context. That is to say the more exposure to the Internet, the more vocabulary EFL students learn. Hence, such a finding supports the study hypothesis: there are statistically significant differences in students' achievement in vocabulary due to using the internet.

RECOMMENDATION

EFL teachers and students have to make good use of Internet applications in teaching and learning vocabulary as well as the rest of language areas.

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