Computer-Assisted Language Instruction: Needs and Means

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ABSTRACT: Foreign language teachers are sometimes hesitant about using computers to aid their instruction either because the technology may not seem readily applicable to their courses, or it may seem overly time consuming to prepare the materials. In reality, computer software can be easily learned and used by instructors to support any type of teaching situation. In this paper, the author will discuss the various ways in which computers can be used to assist the instruction of English as a foreign language (EFL). Various practical uses for computer-assisted language instruction (CALI) will be explained, along with a detailed description of a project in which student-created vocabulary quizzes were uploaded to a teacher-made homepage accessible via the campus intranet.

1. Introduction

Computer technology is no longer a stranger to most people. The personal computer and the Internet combined, have changed the way we gather information and carry out tasks. By in large, most educational institutions, which have typically been slow to change due to over cautiousness and under budgeting, have caught up with the rest of society. Courses and whole departments specialize in and make use of the most recent computer technology. Language labs have been outfitted with the latest software programs which not only aid the instructor, but also allow students to effectively study on their own. Furthermore, while not all subjects require the use of computers and software applications, the possibility exists at any educational institution which has invested in computer equipment, for any instructor to make use of this technology in his or her classroom. Yet, instructors who do not teach subjects directly related to computers or information technology may feel unsure of either the need or the means in which to put this equipment to use in their classes. In order to show the advantages that computer-assisted language instruction (CALI) holds for all teachers and students, this paper aims to rationalize the use of and explain methods for implementing CALI in their classrooms. Specifically, I wish to show how teachers of courses which are not directly related to computers or information technology can make use of computers to support their instruction and make classes more interesting for students.

2. Applying computer technology in the classroom

In today's English as a foreign language (EFL) classrooms, fewer teachers are asking the question of *whether* computers should be used, and more are asking *how* computers can be used to assist their teaching. This is not too different from when slide projectors, overhead projectors, and video decks started to become commonplace in the classroom as standard instructional equipment. Teachers have always been quick to adapt the latest technology to create useful and interesting materials for use in their classrooms. The computer is no different. It is simply a tool that can be used for helping students learn better and can be used by teachers to teach more effectively. Yet, it seems that the very word 'computer' or 'technology' can frighten people even before they attempt to experiment with the ways it could be used. Some teachers may think that the creation of materials on the computer can be very difficult and/or too time consuming. However, this is no different from someone who does not know how to type saying that it is easier to write something with pen on paper. Once someone has learned how to type and use a word processing application, it becomes second nature. Not a few of my colleagues would rather go through the process of booting up their laptop and wait for the printer to warm up so that they can write lesson plans on their computer instead of writing them out by hand on paper. In this age of desktop publishing, we have become used to seeing professional-looking materials. Furthermore, the products of computer-made materials are more easily edited and can be conveniently enhanced with pictures and variations in font style, size, and color. Just as this is true for simple word processing, it also can be said for any type of material created on the computer. With a little practice, using computer applications becomes second nature. Teachers will

find that, once they begin to use various software applications to make instructional materials for their classes, they will soon be able to use them quickly and effectively. I am fortune enough to be able to use classrooms which are well equipped with computers and over-head cameras. Images are projected onto a large central screen and can be seen by a class of sixty or more students. I often make use of these facilities to support my regular in-class instruction and add interest to the lessons.

Two types of computer applications which are both easy to learn and use, and are of particular relevance to the EFL teacher, are software for creating homepages, and desktop presentation programs (DDPs) such as PowerPoint. The use of DDPs and the creation of a homepage can be of great benefit for both students and teachers. The advantages of each will be discussed next.

3. Use of DDPs

PowerPoint was originally designed to be used in business contexts for making professional-looking presentations. It can be used to present information in an attractive and easy to understand way. These advantages also apply to presenting instructional material to students. Charts, pictures, and other types of graphics can be used to illustrate information. The printed information can be made more attention grabbing by changing the style, size, and color of the font. The animation feature included in PowerPoint enables the user to create eye-catching slides in which the letters slide in, zoom in, or whirl around before coming to a stop. While the size of each slide restricts the amount of information which can be shown at one time, this is actually an advantage because it helps prevent information overload. The very nature of the slide-based format creates the need for information to be presented in a concise and orderly fashion.

Lectures given only in English can be very difficult for the EFL learner to comprehend unless they have a fairly high listening proficiency. For this reason, native English teachers often feel the need to give extensive handouts so that learners will be able to follow the content of the lecture. By using PowerPoint to support the information that is being orally presented, teachers can create a more "natural" classroom atmosphere. Instead of having their heads buried in the desks, students will be able to focus on the front of the classroom because they will need to look at the screen on which the presentation is shown. Rather than having everything written out on a handout, students will need to combine the information gained by listening to the instructor with that taken in by looking at the computer-created presentation. As no handouts need to be created by the teacher, students will have to rely on notes that they take in class to remember the information. An added benefit to the teacher is the ability to edit information in the PowerPoint file in real time should there be a mistake or an omission in the prepared materials. This would be impossible to do with pre-made printed handouts. Finally, as the use of DDPs such as PowerPoint relies on electronic media, the teacher is able to cut back on making multiple paper copies and save on limited natural resources.

Although it has been mentioned that one advantage of using PowerPoint is to get students to keep their eyes on the teacher and take their own notes, if necessary, slides can be easily printed out with six or more slides per page. This can distributed to students if there is a need to do so. Furthermore, PowerPoint files can be uploaded to the Internet so that students can access the information at their convenience in order to fill in details which are missing from their notes or to do a thorough review. While there are still few studies investigating the effectiveness of PowerPoint as a learning aid for EFL students, it has been shown that its use can improve other types of students' ability to learn (Brigance, 2001) and increase motivation (Daniels, 1999). The author is currently conducting a study to investigate the ways in which PowerPoint assisted instruction can benefit the acquisition of English vocabulary. The results of the study will appear in an upcoming publication.

4. Creation and use of a teacher-made homepage

An almost endless amount of information is available on the Internet. With the help of a good search engine such as Google or Yahoo, and some well-chosen key words, almost anything that a person wants to know can be found in cyberspace. This information can be found not only in printed form, but also in aural and visual formats. Another advantage of the World Wide Web is that information is no longer just a one-way street: It can be shared as well as collected. This is changing the very future of education, as educators are exploring the seemingly endless possibilities of E-learning. Software for creating homepages now makes it possible for anyone to make and upload their homepage to

the Internet so that all curious web surfers can access the information that they wish to distribute. However, the sheer amount of individually created homepages that can be accessed perhaps makes teachers feel somewhat hesitant about just "turning lose" their students on the Internet to have them look for information on their own. Not only are there the obvious fears of students accessing dubious chat rooms and dating services, there is the more subtle concern about quality of information. It is easy for students who are not yet cautious or critical of the printed word to think that any and all information is in fact true and accurate. While we can warn our students to "be careful," it takes a lot of explanation and careful coaching to empower them to be critical judges of printed information. This is, of course, not only true for the Internet, but any type of popularly printed materials. The Internet particularly is so available, so widespread, that its very ease of access (combined, perhaps with a deadline for an assignment) makes students more easily gullible for accepting everything that is on line at face value.

thumb that simple is best. With a little work and regular updates, a teacher-created homepage can be of great instructional value. Next, I wish to explore some of the ways in which teachers can use tailor-made homepages.

The homepage that I created for the students and is available on my school's intranet is entitled *English Access* (Figure 1). The homepage is accessible on the campus computers via a link from the English Department's homepage[1]. The top page is divided into three sections: "For the Students," "By the Students," and "Other Stuff." The first section contains links for each class that I teach: English Conversation for first-year students, English Conversation for second-year students, Current English, and an English Communication Seminar. By clicking on the appropriate link, students can find information about the class, copies of materials distributed in class, and homework assignments. The next section (By the Students), contains links to projects that students have made to be seen by other students. One of the projects that students created was an introduction to homepages that are useful for EFL learners. After searching
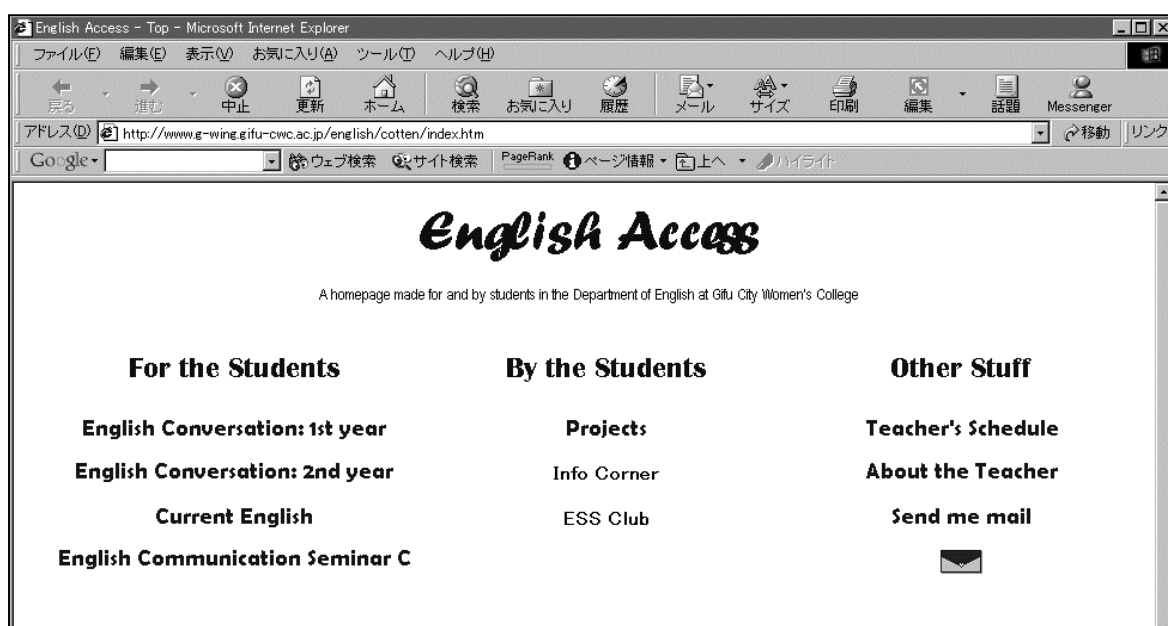

Figure 1

Both the advantages and disadvantages of information distribution over the Internet can be good reasons for teachers to consider creating and maintaining a homepage which is designed with their students in mind. Homepages do not need to be extensive or technically sophisticated to be effective. In fact, after viewing many of the difficult to navigate homepages which clutter the Internet, one begins to wish that the creators of such sites had followed the rule of

the Internet and exploring various sites, students came up with a "Top 10" list of English learning homepages. Links to these pages were uploaded to *English Access* and made available for other students to try out in their free time. Another student-created project will be described in detail below. The final section (Other Stuff) contains links to information about myself and class schedules.

In the classes that I teach, more than ninety-five percent

of the materials that I use are ones that I have created. These materials are made with either Microsoft Word or PowerPoint. These files can be easily saved as a homepage file using Microsoft FrontPage (or another software for creating homepages). There are many reasons for uploading the same materials handed out in class to a homepage. Students who are absent can find out as soon as possible what was covered in class, and know whether or not there is a homework assignment and when it is due. Also, as class time is very limited, checking of homework is often done very quickly. While every possible effort is made in class to confirm that students comprehend the answers to the exercises, there is always the chance that some students do not completely understand. For this reason, teachers can also make the answers to homework available on their homepages. The answers themselves, along with accompanying explanations allow students to check their understanding more carefully. Students can return at any time to the homepage in order to review past assignments and explanations so they can prepare for tests or do self-study. Another advantage is that, once materials are created and uploaded to the homepage, teachers can not only use the materials during class to aid instruction, but students can also access these materials at any time for further review. Rather than create a handout, distribute it in class, then upload it to the homepage, an instructor can kill two birds with one stone by directly creating the materials with the homepage software and show those parts of the homepage during class. Finally, by making class materials available for viewing by anyone who has access to the campus computers, teachers and students in other departments can know what types of things are being done in the English department EFL classes. With more development, these materials could also be used in campus network learning programs.

Homework assignments which require students to use the Internet for research can be done more easily and safely with the use of a teacher-created homepage. Using the Internet to find specific information might not be easy for someone who has not yet acquired good search skills. Finding what one is looking for on the Internet can be rewarding for someone who is able to extrude from the search results which sites seem promising, but it can quite often be frustrating if that person is not able to distinguish which sites seem unrelated to the research topic. The Internet can be a time-consuming maze for such a person. The added difficulty of doing the search in a foreign language only adds to the confusion and frustration.

To aid students in their search, teachers can upload a list of suggested homepages to explore. Five or six links will help students focus on finding facts about the topic. Students can view the assignment directly from the teacher's homepage and, with one click, go to the site that has the information they are looking for. In most cases, the main task is to gather information in English, not improve Internet search skills. Homework assignments can give detailed questions about the information to be found at a particular site (or sites) and students can better spend their time by investigating one or two homepages, and gather information in English to complete the assignment. Such teacher-directed Internet searches also relieve worries that students will access some of the more questionable homepages that flood the web these days.

5. "My Sentences"

One regular activity that I have the students do in class is to create original sentences using a group of target vocabulary words. This assignment, called "My Sentences," is given out for each unit in the textbook. Basically, the assignment requires students to write original sentences using the key vocabulary from each unit. The rational behind such an assignment is that, in addition to doing many exercises which help students recognize the meaning of the target vocabulary, they also need practice in actually using the words. Just as it is more difficult to actually speak in correct utterances than to comprehend spoken language, it is more difficult to make sentences with new words than simply identify the meaning of a word or choosing an appropriate word to insert into a missing space. One of the most difficult things about using new words is knowing which meaning of a word to use depending on the context. For example, the word *proposal* has two very distinct meanings: that used when speaking of an offer of marriage, and that which means "suggestion." The goal of having students write their own sentences with the target vocabulary is to get them to use the correct form of a word with the appropriate collocations, plus to get them to use words according to a specific meaning.

By having students make original sentences, they are better able to remember new vocabulary items. Students tend to use the words to make sentences which relate to their own

experiences and knowledge (hence the name, "My Sentences"). After having had their sentences checked for accuracy, the students need to review their sentences to prepare for a test on the words. The test is a simple one: Selected target vocabulary items from the most recent unit are listed at the top of a piece of paper. Students are then instructed to make a sentence using each word. The idea is for them to use their original sentences. If they prepare well, students will not only do well on the test, but will hopefully have learned sentences that enable them to use new words to talk about their own background and interests. Learners are moving from mere memorization to the context of using the language to express their own ideas. By using new vocabulary items in a meaningful way, it increases motivation to study the words, and helps students personalize their learning.

jumbled-sentence, crossword puzzles, matching/ordering, and cloze exercises. Once the test items are entered into the Hot Potatoes application and converted to a homepage file, they can be uploaded to the Internet. Hot Potatoes is available free of charge for use by individuals or non-profit educational institutions on the condition that the material made using the program is freely available to anyone on the WWW. Other users must pay for a license. Even though *English Access* is only accessible via the campus intranet, and can only be viewed from computers at the school, it meets the stipulations of the Hot Potatoes licensing agreement. It has been uploaded to the school's server, so it is available to a wide variety of users.

The advantage of using a quiz software such as Hot Potatoes is that students get instant feedback about the answers they input. The software also can provide hints,

Figure 2

6. Student-created computer quizzes

As a variation to the regular "My Sentences" activity, I decided to put the original sentences created by students on my homepage and make them available to all students. However, rather than simply showing the sentences as written experiences, I decided to use the students' sentences to create interactive quizzes using a shareware program called Hot Potatoes (Ver. 5.0, 2002). Hot Potatoes includes a package of different applications which allows the user to make six types of quizzes: multiple-choice, short-answer,

show correct answers, keep an on-going record of the number of correct responses, and show the percentage of the total number of correct responses at the end of a quiz. I chose to use the short answer quiz (named "JQuiz" in the Hot Potatoes software package) for this activity because is requires students to type in a one- or two-word answer (Figure 2). Students created original sentences with one or two missing words, and listed the answer choices at the top of the page. As the choices only show the basic form of the words, when doing the quizzes, one has to decide whether it

is necessary to change the number or tense of the words. In addition to the spelling practice required by typing a short answer, students also have to read the quiz items and think carefully about number and tense before inputting the answer.

The settings in Hot Potatoes allow the quiz maker to create original prompts and instructions, shuffle the order of the questions each time the page loads, and include various buttons to allow students to check their progress or receive help. By clicking on the "Hint" button, students can see how much of their answer is correct and find out what the next letter is. If a student has completely no idea what the answer for a problem is, he or she can click on the "Show answer" button. Since the purpose of the quizzes is to be more of a learning aid than an actual test, I chose to include these buttons. If students made mistakes or did not know the answers, they could learn the correct words the first time, then return to the quiz later to check how well they remembered the vocabulary items.

To introduce the project, I first created some sample quizzes, uploaded them to the *English Access* homepage, and showed them to the students during class. Instead of merely explaining how to use the quizzes, I asked a few students to come up and give the quizzes a trial run. Then I explained to them (with the class listening) how to work through the quizzes. Because the computer screen is projected onto a large screen in the classroom, all of the students were able to watch the progress of these 'test pilots' and learn from their successes and mistakes. When I told the students that they would be creating similar quizzes and other students would be able to see their quizzes on my homepage, they instantly became excited about doing the project. While the work required of the students varied little from the "My Sentences" vocabulary exercise, because their sentences would be converted into computer quizzes and be uploaded to the Internet, I chose the name "High-Tech Quizzes" for this activity.

Students are normally placed into groups in the class, so I gave each group a list of about ten words. Because there are about sixty students in the class (divided into ten groups), and only thirty target words for the unit that they were studying, duplicate lists of words were given to the groups. List "A" was given to three groups, list "B" was given to three groups, and list "C" was given to four groups. The groups worked independently of each other, so there was no duplication of sentences for the same word. The activity was designed so that when the students did the computer quizzes, they would be exposed to each target word in at least three different exercises. This greatly reduced the chance that they would be able to memorize the sentences after repeated exposure to the quizzes, and increased the need for them to identify the correct meaning and usage of the words.

After the quizzes were introduced and groups received their list of words, the remainder of the class time was used for students to write original sentences using the target vocabulary. In addition to helping students with grammatical and lexical problems, I found it necessary to make them aware of the need to create sentences which could have only one possible answer. All teachers know the difficulty of making test items which eliminate any possibility of more than one correct answer. Making students aware of difficulties with answering some of their questions was as simple as asking them whether or not someone could answer their problem if that person were required to choose the correct answer from a list of ten words. (A sentence such as "He was _____ yesterday," could have a multitude of possible correct answers.) When shown these difficulties in answering overly simple questions, students were usually able to make test items which included more context to help elicit only one possible answer choice.

One comment should be made about the words listed in the quiz example in Figure 2. Taken out of context and viewed as an independent group of test items, there does appear to be an unrelated mixture of nouns, verbs, and adjectives. There is, however, an overall connection. The words were taken from a reading unit that had already been read and the words in it had been studied before the quiz project was started. The words making up the lists that each group received were compiled at random, but it would be possible to create lists of only nouns, verbs and adjectives which come from a reading passage. However, as the passage was not designed to have an equal amount of various word forms, this was not a practical way to create lists. For this reason, the word lists were compiled at random.

Final instructions for the students were to type their sentences and send them to me by e-mail or save them as a Word file on a floppy disc and give it to me before the next class meeting. Once I received their sentences, I copied and pasted them into a Hot Potatoes JQuiz file. Each file was

then saved as a FrontPage file and a link from a quiz index was created. No technical assistance was asked of students, so it may seem to some readers that creating the quizzes was overly time consuming. I could have downloaded the Hot Potatoes software to the school computers and taught students how to use it. However, it seemed that the project could be done more quickly and with fewer errors if I were the only one doing the data processing. Furthermore, I would have had to intervene at some point just to upload the quizzes to my homepage. However, once I had received all of the groups' sentences either by e-mail or on disc, I was able to create all of the quizzes in less than two hours. After some trial runs and last minute corrections, the total time was less than three hours. The relatively small amount of preparation time is well worth the completed outcome. The quizzes can be seen a repeated number of times by a great number of students. A little bit of effort goes a very long way for this type of project.

7. Assessing student interest

In order to assess the students' attitudes towards making and using the computer quizzes, a survey (Appendix A) was given to the sixty students enrolled in the class. The results of the survey are shown in Table 1. Students were asked to write the score they received after completing each quiz. The number they recorded cannot be confirmed because there was no way to have the scores independently tallied or officially recorded. Students were in fact encouraged to take the quizzes more than once and write down their best score. This item was included on the survey in order to create an incentive for taking the quizzes and to attempt to measure the level of difficulty of the quizzes. While less than half of the students reported doing the quizzes more than once, when comparing the scores of those who reported taking them only once with those who took them more than once, there is an obvious improvement. Taking the same quiz more than once should automatically enable a student to improve his or her score, but it should be remembered that the order of the questions was shuffled each time a quiz was loaded, so there was a relatively small chance that students were able to memorize the order of the answers. As already stated, the real purpose of the quizzes was not to assess proficiency per se, but to simply help students learn and remember the target words. Results such as these can be used to encourage students to repeat the quizzes as an aid to remembering the meanings and the correct usage of target vocabulary items.

Students were also asked to identify which quizzes were the easiest and which were the most difficult. When comparing these results with the students' scores, it is interesting to note that the quiz reported to be the second most difficult (Quiz 1) also turns out to have had the second highest number of reportedly correct answers. This

Table 1. Results of Student Survey

	Quiz 1:	80.8
	Quiz 2:	84.9
	Quiz 3:	67.4
	Quiz 4:	66.2
	Quiz 5:	66.6
Reported average score	Quiz 6:	68.2
	Quiz 7:	71.7
	Quiz 8:	69.1
	Quiz 9:	72.0
	Quiz 10:	68.8
	Total:	71.5
Number of times to take the quizzes	Only once:	57.7
	More than once:	42.3
Score according to times to take the quizzes	Only once:	82.5
	More than once:	91.0
Top three most difficult quizzes	Quiz 4	30.7
	Quiz 1	19.2
	Quiz 5	13.4
Top three easiest quizzes	Quiz 9	26.9
	Quiz 7	19.2
	Quiz 8	15.3
Quizzes helped you learn the words	Yes:	98.0
	No:	1.2
Quizzes helped you remember the words	Yes:	96.1
	No:	3.8
Will use the quizzes again to study before a test	Yes:	94.2
	No:	5.7
Would like to make the quizzes again	Yes:	65.3
	No:	34.6

Note: Results are given in percentages.

discrepancy can probably be accounted for by the fact that 43% of the students took the quizzes more than once. The more difficult the quiz, the more attempts they made. In the

end, this resulted in an overall higher score. While no empirical data were collected to prove that the computer quizzes were a direct cause of the improvement in scores, the incidental results of the survey go a long way to suggest that the students were motivated to try harder each time they took a quiz. 98% of the students reported that the quizzes helped them learn the target words, 96% reported that the quizzes helped them remember the words, and 94% reported that they would use the quizzes again when studying for a test. These high results are strong proof that students both enjoy the quizzes and find them personally useful for studying and remembering a set of target vocabulary words. These results are even more encouraging when reflecting upon the fact that students were studying sentences which their classmates had written. Student-generated materials can not only be used successfully to motivate them to learn, but also can be used as valid instructional materials.

The responses to a query about whether or not students would like to make the computer quizzes again were somewhat surprising. Compared to the positive responses that the quizzes could help them learn and remember the words, and help them study for tests, only 65% percent of the students responded that they would like to make the quizzes again. Upon reflection, this relatively low response might be due to the responsibilities of the group members. Each group has a leader who acts as a liaison between me and the other group members. The group leaders were responsible for typing and handing in the sentences created by the other members of the group. This could have put undo pressure upon one single person in a group and might have affected their desire to attempt such a project again. Personality clashes among group members may have also negatively affected their attitudes toward creating the quizzes. In response to this, new groups are now created often and/or new leaders are chosen, so if the burden is too great on one single person, they will know that they will not have such responsibilities for long. There are also the issues of some students either being sensitive about showing their sentences to other students, or feeling that using student-created materials is not a valid way to study a foreign language. While the former issue might be dealt with by letting students know that no one will be able to identify who created what part of a quiz, the latter issue can be dealt with by showing the results of this survey. Even this limited survey suggests that positive effects can be attained by using student-generated materials. When surveys are given in the future, it will be instructive to ask students why or why not they would like to do this type of project again in order to develop a better method for carrying out this kind of group-oriented project.

The last question on the survey asked students for suggestions about future projects involving computer quizzes. Two of the most frequent responses concerned the quiz features and access to computers. Several students mentioned that they would prefer not to have the "Hint" or "Show answer" buttons. While the use of these buttons was left to the discretion of each student, perhaps they proved to be too tempting for some. One singular quality of computer learning aids is that students are able to choose what they will look at and study. Chapelle (2002: 79) cites research by Hsu (1994) which found that students who interacted frequently with programs improved more than those who did not. In light of these findings, it is perhaps best to leave these options in the quizzes, but it would be possible to put a list of answers on a separate page (accessible by a link from the quiz index) and delete these buttons from the quiz altogether. Many students also commented that they would have liked to have been able to do the quizzes from their computers at home. All students have a heavy class load which leaves them little time to use the school's computers outside of class. In addition, many of them live far from campus. Given these facts, it does make sense that they would like to be able to use and review these quizzes at a time which is convenient for them. Being able to access information like this is, of course, one of the most obvious advantages of the Internet. Hopefully, in the future, students' wishes will be met.

8. Conclusion

There are a wide variety of ways in which teachers can use computers to aid EFL instruction. The use of DDPs to present information not only creates a more interactive atmosphere between teacher and students, but also has been shown to have practical benefits for learning. A homepage made by the teacher can be used to help students better understand assignments and do further research. Teachers have control over the materials uploaded to the homepage, so they are able to guide students in a safe and efficient manner to the sites on the Internet that will be most useful for their English studies. Furthermore, by having their own homepage, teachers can create special projects which enable

students to help each other improve their English. Computer technology not only has the power to improve learning possibilities, it is also a flexible and highly motivational learning tool that all teachers should take advantage of.

Notes

1. At the time of writing, the *English Access* homepage and its link to the vocabulary quizzes discussed in this paper can only be viewed from computers located on the campus of Gifu City Women's College. A public access homepage is available (http://www.gifu-cwc.ac.jp/), but there is no link to the internal site at the campus. Teachers' homepages are located on the intranet and cannot be viewed off campus. While it seems that allowing students to access a homepage would benefit independent study outside of class, they are unable to do so at this time due to fears of a security risk. Hopefully, this situation will change in the future. If the reader is able to visit Gifu City Women's College and wishes to view *English Access*, please follow these links:

- Intranet Homepage (学内ホームーページ) http://www.g-wing.gifu-cwc.ac.jp/
- English Department（英語英文学科）http://www.g-wing.gifu-cwc.ac.jp/english/english.htm
- English Access (Cotten 先生のページ) http://www.g-wing.gifu-cwc.ac.jp/english/cotten/index.htm
- To find the quizzes, click on "Projects," then "Unit 10 Vocabulary Quizzes."

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Appendix A

Current English High-Tech Quiz Survey

Go to the *English Access* homepage [http://www.g-wing.gifu-cwc.ac.jp/english/cotten/index.htm], click on PROJECTS, and do all of the quizzes that your classmates made. After you're finished, answer the following questions.

1. Write the number of your score for each quiz:
2. How many times did you do the quizzes? _____ times

Quiz 1	Quiz 2	Quiz 3	Quiz 4	Quiz 5	Quiz 6	Quiz 7	Quiz 8	Quiz 9	Quiz 10

3. Which group's quiz was the most difficult?
4. Which group's quiz was the easiest?
5. Do you think the quizzes helped you learn the vocabulary words?
6. Do you think these quizzes helped you remember the words?
7. Do you think you will do the quizzes again when you study for a test in Current English?
8. Would you like to make your own quizzes again in the future (and put them on my homepage?)
9. Do you have any suggestions for future "high-tech" quizzes?

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