Students’ perceptions of studying English in a computer assisted language classroom

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Reference data:

What do students think of learning with computers in an Oral English class? What are the advantages and disadvantages of using a blended learning method in a CALL environment? These are some of the questions the author is attempting to answer in this paper. Dynamic English (DynEd International, 1997) and Longman English Interactive (Pearson Education, 2004, 2004a) were used for Oral English classes at a private Japanese high school and university, respectively. The classes were held in a computer classroom, with one computer per student, and the students' performance and their attitudes towards this kind of learning are discussed.

Using CALL in Japan

The Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) has outlined that every secondary school in Japan must have at least one computer classroom for students to use, in order to implement its curriculum for the future of Japanese society. According to MEXT (2003) statistics, there is an average of ninety-five computers per high school, or two computer classrooms for educational purposes. Although there is adequate computer hardware available in Japanese schools, the
students do not get enough practical use on the computers because of the traditional teaching focus on how to pass entrance exams, thus contributing to the neglect in the use of computers for learning (Pattimore, 1999). This paper will focus on two research projects conducted at a private high school and university, respectively. The high school research project focused on whether students had better results in a computer classroom or in a traditional classroom, as well as student attitudes towards studying with a computer. The university research project focused on blended learning and student perceptions on studying with a computer. A general comparison of the two software programs used in these projects is also discussed.

**English education and computers**

English as a foreign language is taught in Japanese public schools for six years beginning in the first grade of junior high school. About six English lessons per week are taught in public high schools and each lesson lasts for about 50 minutes. The English courses offered to high school students include: Oral Communication I (OC I), Oral Communication II (OC II), English I (mostly grammar translation), English II, Reading, and Writing.

The objectives of OC I, as stated by MEXT (2003), are as follows: “To develop students’ basic abilities to understand and convey information, ideas, etc. by listening to or speaking English, and to foster a positive attitude toward communication through dealing with everyday topics.”

Also according to MEXT (2003a), English courses should follow these guidelines: “In the instruction of each subject, teachers should innovate in terms of teaching methods and styles, incorporating team-teaching, pair work, group work, etc. as appropriate and utilizing audio visual teaching materials, LL, computers, communication networks, etc.”

As can be seen in the MEXT guidelines, using computers for teaching English is encouraged. In a recent review of OC I textbooks approved by the Ministry, even though 61% of the textbooks had vocabulary content related to computers, only a small number of them required the students to use computers for studying some aspect of English. None of the textbooks surveyed, for example, had tasks supporting the use of email, using the Internet, or making a homepage. The textbooks did, however, have stories written about email (42%), the Internet (26%) and computers in general (26%) (Irie, 2004). This illustrates that OC I textbooks do not require learners to use computer tasks for improving their English language. Without explicit computer tasks written into the textbooks, it becomes the teacher’s responsibility to take the initiative and introduce CALL to the curriculum, which complicates matters to get a CALL course accepted by the administration.

**Starting a CALL study program**

The most challenging part of the process of starting a CALL program is convincing the administration to purchase the computer software to be used. Although most schools spend a large amount of money in building modern computer classrooms, there is little money allotted for buying software (DeLaet, 1997).
It is said that young Japanese students in general are often reticent and unresponsive language learners, but when given a chance they can also be independent learners (Poole, 2003). For example, elementary school students in Japan can be quite creative, and they are very familiar with collaborative projects. This is achieved by a delegation of responsibilities and group formation along with a low profile of the teacher (Edwards, 2004). Therefore, a computer-assisted language learning environment may encourage students to take more responsibility for their own language learning, to increase their confidence level by having them do tasks that are not overwhelmingly difficult, and to intrinsically motivate the students by providing them with interesting material.

Although having a CALL environment in a Japanese secondary school might be beneficial to the students, there are some problems related to implementing such a program. One of the difficulties remains that CALL is not an accepted educational solution among all teachers. Some educators in Japanese secondary schools believe that their prime function is to help the students enter a Japanese university, and they believe that CALL does not assist them in achieving that goal. Moreover, the virtual reality of learning a language with a computer signifies to some that it is not the same as authentic communication between human beings (Kizuka, 1998). There is a perceived threat that language learners who use computers will not be able to convert their learning to real life situations. This threat could emanate from the fact that there is a belief that children who spend long hours playing video games may develop inferior social skills (Sheff, 1994). Correspondingly, it could be argued that the individualized study of CALL learners does not foster cooperation among classmates. Another problem that must be addressed is the unclear role of the teacher in the CALL classroom. Especially in the case of using a native English speaker in a Japanese school, there are some feelings that this is a superfluous use of teacher resources. Some would say that a teacher is not needed in a CALL environment.

Furthermore, the selection of the software material is another point of contention between teachers and administrators. What is the best material to choose? How effective is it? How much does it cost? From the point of view of the administration, it is not clear that a disbursement of funds for software will lead to a corresponding benefit for the students. There is a tendency of using the Internet and email as a way to evade paying for language learning software. All of these issues are relevant when planning to start a CALL program in an educational institution. Nevertheless, it is important to understand that creative learning activities are satisfying to learners, and CALL can be a useful tool for enhancing the learning experience. For CALL to become a valuable experience, it must be tailored to suit the needs of the learner, and the potential of what CALL can offer must be understood.

Studying with CALL at a high school

A research project was conducted at a private high school in Japan by using a commercial courseware package. Courseware can be defined as instructional software published for the purpose of studying a specified subject. Dynamic English (DynEd International, 1997) Level 1, Disk 1 was used with first year high school students. The
courseware is stored on a CD-ROM and is accessed directly through the optical drive of a personal computer. Moreover, this courseware has been localized for the Japanese students to allow them to see the text in English or in Japanese and to hear the directions in both languages, as well. Level 1, Disk 1 is a beginner level course that deals with subjects such as family, work, countries, food, and so on. For an in-depth overview of the Dynamic English courseware, please consult the TESL-EJ online review (Rowland, 2001).

The study subjects were first year high school students taking Oral Communication 1 as part of the English curriculum. The students were divided into three groups: two experimental groups (90 students) and one control group (59 students). The experimental groups studied English in a computer classroom by using Dynamic English I courseware, whereas the control group was taught similar grammar and vocabulary material in a traditional classroom setting without using computers. Quantitative assessments were conducted for each group before the lessons started and once more after five lessons were completed. All the students studied the same target material to determine which group performed better. The quantitative results indicate that both groups improved slightly, however, there was no significant difference in the scores between the students who studied in a traditional classroom and those who studied in a CALL classroom (Chartrand, 2006). A discussion of the qualitative results will follow below.

Studying with CALL at a university

Another research project was conducted at a liberal arts college in Japan using a different commercial courseware package, Longman English Interactive (Pearson Education, 2004). Levels 2 and 3 were used for Oral English 1 and 2 classes, for first year and second year course levels, respectively. Classes were taught by the same instructor using a blended learning environment, that is, the classes were taught in a CALL classroom, but students used the courseware for approximately 45 minutes and classroom speaking activities were used without using computers for another 45 minutes. A total of 36 university students were given qualitative assessments after two semesters (eight months) of study to determine attitudes towards studying English conversation in a university course with computers. This study was completed in 2006.

One of the important advantages of studying with courseware is to allow students the opportunity to study at their own pace, as was evident in this case. Some students finished the tasks earlier and moved ahead of schedule, while others took more time to finish the required tasks and needed extra time outside of the classroom to complete their assignments.

The Longman English Interactive (LEI) courseware includes four levels, each progressing at a higher difficulty level from Level 1 (easy) to Level 4 (difficult). After a careful analysis with a selected number of students, the university purchased levels 2 and 3. For an in-depth overview of the LEI courseware, please consult CALICO Journal’s review (Taguchi & Schneider, 2004).

Results

To understand the attitudes and feelings of the learners towards learning with a computer, a qualitative assessment was given to the students. Following are the results of the
Qualitative assessment of the high school and university students, respectively.

**High school students**

The high school students were divided into three groups: Group 1 was the control group; they had no CALL lessons, only traditional lessons with a teacher. Group 2 students were given CALL lessons, without any specific pre-teaching instructions from the teacher. Group 3 students were given CALL lessons with some pre-teaching instruction specific to the task that was targeted in the lesson for that particular day.

Table 1 shows that the students wanted to focus their learning more on the listening tasks rather than on the speaking tasks. Perhaps that was the result of the computer learning experience, which feels more natural listening to material, rather than speaking to the computer itself.

<table>
<thead>
<tr>
<th></th>
<th>a</th>
<th>b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1 - Control Group</td>
<td>36</td>
<td>21</td>
</tr>
<tr>
<td>Group 2 - CALL group 1 - No pre-teaching</td>
<td>17</td>
<td>6</td>
</tr>
<tr>
<td>Group 3 - CALL group 2 - With pre-teaching</td>
<td>35</td>
<td>22</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>88</strong></td>
<td><strong>49</strong></td>
</tr>
</tbody>
</table>

a. Work on my listening skills.
b. Work on my speaking skills.

Table 2 shows what students thought of their English lessons after 5 weeks of learning on the computer. It can be seen that a large majority of the students were either neutral or thought it was fun. Only about 11% of the students did not enjoy learning with a computer.

<table>
<thead>
<tr>
<th></th>
<th>1 Very fun</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 Not fun</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALL 1</td>
<td>3 (13%)</td>
<td>8 (33%)</td>
<td>9 (38%)</td>
<td>4 (17%)</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>CALL 2</td>
<td>12 (18%)</td>
<td>19 (29%)</td>
<td>29 (44%)</td>
<td>4 (6%)</td>
<td>2 (3%)</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>15 (17%)</td>
<td>27 (30%)</td>
<td>38 (42%)</td>
<td>8 (9%)</td>
<td>2 (2%)</td>
<td>90</td>
</tr>
</tbody>
</table>

Table 3 shows that the students had different reasons for thinking that learning with a computer was fun. The majority of the students thought it was easier to learn with a computer than a teacher and it was more fun than a traditional classroom learning environment.

<table>
<thead>
<tr>
<th></th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALL 1</td>
<td>4 (17%)</td>
<td>5 (22%)</td>
<td>2 (9%)</td>
<td>12 (52%)</td>
<td>23</td>
</tr>
<tr>
<td>CALL 2</td>
<td>9 (15%)</td>
<td>24 (39%)</td>
<td>12 (20%)</td>
<td>16 (26%)</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>13 (15%)</td>
<td>29 (35%)</td>
<td>14 (17%)</td>
<td>28 (33%)</td>
<td>84</td>
</tr>
</tbody>
</table>

a. The computer was easy to use.
b. It is easier to learn English with a computer.
c. The content of the material was interesting.
d. Using the computer was fun.
Following are some of the open-ended answers to the question: Why would you like to learn English with a computer?

- Because we have the freedom to do what we want.
- Because we can have a fun lesson, which is interesting.
- We can improve our computer skills.
- It is fun to use computers.
- It looks easy.
- I want to study English a variety of ways.
- I have an interest in computers.
- If I use computers, I can understand the subject.
- It is easy to understand.
- It is convenient.
- If I use computers to listen to English, it is interesting.
- I can type.
- I can study at my own pace.
- It is easy.
- I can concentrate on my study.
- If I don’t understand, I can easily look for the answer.
- Until now I haven’t used computers so I want to study with computers in many ways.
- It is good for me.
- I want to learn more vocabulary.
- It is the age of computers, so it is useful.
- We can learn by another way other than audiotapes and videos.

**University students**

The university students were divided into two groups: Oral 1 and Oral 2, according to the course they were taking. All students were given a blended learning lesson in a computer classroom with a mixture of computer tasks and non-computer activities such as pair work. At this university, the classes are 90 minutes long. One of the questions asked was, “Which was better, to study with computers at the beginning or at the end of the class?” Both groups slightly favored having the non-computer activities at the end of the class, as was also favored by the instructor. Due to the nature of the university classes, students tend to arrive slightly late to class, therefore, it makes more sense to start with computer activities, which do not depend on students all starting at the same time. Moreover, it is better to move on to classroom activities after the students have had some time to familiarize themselves with the target language for about forty-five minutes, and the students seem to have more confidence in speaking after studying with the courseware. Further research in this area may be conducted in the future to understand more about this topic.

Another fact seen from the data is that students who studied with Oral English 2 thought the software was slightly more difficult than students taking Oral English 1. This can also be attested to by the instructor, as the performance scores generated automatically from the courseware seemed to show that Level 3 of LEI was more difficult for the students than expected (data not shown). As for the comments from the students, it also became apparent that the students wanted to spend more time talking with their classmates in English during the lesson time. Therefore,
one result from this survey is that if computer learning is to take place during an English conversation class, it should be kept to a minimal amount of time to allow more interaction among the students, and the students can do the computer tasks outside of class time.

Table 4: Oral English 1

<table>
<thead>
<tr>
<th>Q#</th>
<th>Statement</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I liked learning with a computer</td>
<td>3.00</td>
</tr>
<tr>
<td>2</td>
<td>I liked the software</td>
<td>2.64</td>
</tr>
<tr>
<td>3</td>
<td>I prefer doing activities at the beginning</td>
<td>2.64</td>
</tr>
<tr>
<td>4</td>
<td>I prefer doing activities at the end</td>
<td>2.45</td>
</tr>
<tr>
<td>5</td>
<td>I prefer studying Oral English without a computer</td>
<td>2.45</td>
</tr>
<tr>
<td>6</td>
<td>I want to continue studying with a computer</td>
<td>3.00</td>
</tr>
<tr>
<td>7</td>
<td>The software was too difficult</td>
<td>3.00</td>
</tr>
<tr>
<td>8</td>
<td>I don’t like computers</td>
<td>3.45</td>
</tr>
<tr>
<td>9</td>
<td>I learned a lot in this class</td>
<td>2.27</td>
</tr>
<tr>
<td>10</td>
<td>I wanted to spend more time on the activities</td>
<td>2.64</td>
</tr>
<tr>
<td>11</td>
<td>I wanted to spend more time on the computer</td>
<td>3.09</td>
</tr>
</tbody>
</table>

Note: n=25

Some of the open-ended answers from the university students included:

- This class was fun.
- I think that Oral English is better to speak with classmates.
- I prefer to talk with friends.

Table 5: Oral English 2

<table>
<thead>
<tr>
<th>Q#</th>
<th>Statement</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I liked learning with a computer</td>
<td>2.36</td>
</tr>
<tr>
<td>2</td>
<td>I liked the software</td>
<td>2.52</td>
</tr>
<tr>
<td>3</td>
<td>I prefer doing activities at the beginning</td>
<td>2.64</td>
</tr>
<tr>
<td>4</td>
<td>I prefer doing activities at the end</td>
<td>2.56</td>
</tr>
<tr>
<td>5</td>
<td>I prefer studying Oral English without a computer</td>
<td>2.92</td>
</tr>
<tr>
<td>6</td>
<td>I want to continue studying with a computer</td>
<td>2.64</td>
</tr>
<tr>
<td>7</td>
<td>The software was too difficult</td>
<td>3.84</td>
</tr>
<tr>
<td>8</td>
<td>I don’t like computers</td>
<td>3.72</td>
</tr>
<tr>
<td>9</td>
<td>I learned a lot in this class</td>
<td>2.20</td>
</tr>
<tr>
<td>10</td>
<td>I wanted to spend more time on the activities</td>
<td>2.64</td>
</tr>
<tr>
<td>11</td>
<td>I wanted to spend more time on the computer</td>
<td>3.16</td>
</tr>
</tbody>
</table>

Note: n=11

Answers on a scale of 1 (strongly agree) to 5 (strongly disagree)

- The software (LEI Level 3) was too difficult for me. But the story was interesting.
- I wanted to have more time to do classroom activities.
- I wanted to learn more difficult things.
- I think this class was good but I wanted more time to speak in English.
- I enjoyed learning at my own pace.
- There was no final test in this class so I appreciated this class.
- I became a little sleepy on the computer, but I enjoyed it.
Conclusion

One weakness on the part of the LEI courseware, compared to the Dynamic English courseware, is the lack of localization for Japanese students. The high school students had an advantage by reading or hearing the instructions for using the courseware in Japanese, and this greatly facilitated the tasks for the high school students. They also had the option of using a built-in English-Japanese glossary for learning new vocabulary. The university students, who could not always comprehend the task that the courseware presented in English, were frustrated by the lack of Japanese descriptions. The instructor, however, was present in the class to answer questions. Therefore, some of the limitations of the courseware were handled in class. It can be said that there is a weakness in the courseware if the L1 directions are not available to L2 learners.

Overall, it can be seen from the data that the students enjoyed learning with a computer and that they thought it was an effective way for them to study English. Irrespective of the type of class, at the high school or university level, with blended learning or not, a majority of the students had an affinity for learning English with a computer. The students should, however, be encouraged to study with computers during their own time, to maximize classroom time with student-to-student English speaking activities.

Robert Chartrand has been living and teaching in Fukuoka for over 20 years. His main research interests include CALL and Second Language Acquisition. He is a full-time English instructor at the Institute of Foreign Language Education, Kurume University. He has an MA in TESOL from the School for International Training, U.S.A. He is currently a PhD candidate at the Kyushu Institute of Technology, Faculty of Computer Science. <robert_chartrand@kurume-u.ac.jp>

References


