

The Effectiveness of using CALL for Teaching Oral Communication at a High School

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Introduction

This paper will describe the results of a classroom research conducted at Nakamura Gakuen Sanyo Junior and Senior High School between November 2003 and January 2004.

The purpose of this study was to determine the effectiveness of computer-assisted instruction in teaching English as a foreign language at the school mentioned above. More specifically, answers to the following questions were being sought: First, "Do the students learn English better in the computer classroom than in a traditional classroom?" Second, "Do the students benefit from pre-teaching when learning in a computer classroom?" And third, "Do the students enjoy learning in a computer classroom?"

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 and one control group. The experimental groups learned English in a computer classroom by using Dynamic English I courseware, whereas the control group was taught similar material using a traditional classroom teaching method. In one of the experimental groups, a teacher clarified the material to be learned on the computer prior to the computer learning lesson, whereas in the other experimental group, a teacher did not clarify the material to be learned on the computer prior to the computer learning lesson.

Assessments were conducted for each group before the lessons started and once more after five lessons were completed. All the students learned the same target material to determine which group performed better.

Background

Computer-assisted instruction (CAI) and the technology for learning languages on computers began taking roots in the late 1950s (Chapelle 2001: 3). The principles behind technology-enhanced language learning were strongly influenced from the work of the behaviorist, B. F. Skinner. In 1954, Skinner advocated the use of teaching machines for individualized instruction which would be responsive to the preferred pace of the learner. According to the behaviorist, language learning occurs by the formation of habits based on the notions of stimulus, response and reinforcement. Especially, complex learning requires a series of small steps and reinforcements to succeed at each step (Skinner 1954: 86-97). Skinner also accounts for the acquisition of syntax. He claims that the structure of a sentence consists of a chain of associations between the words in the sentence (Skinner 1957). Skinner was an influential academic who inspired language educators to pursue technological means for learning languages. A computer was thought of being ideal for carrying out repeated drills since the machine did not get bored with presenting the material over and over again and could also provide immediate and non-judgmental feedback. The material could be presented on an individualized basis, allowing students to proceed at their own pace (Warschauer 1996: 3-20).

According to Krashen (1982), however, language acquisition and language learning are separate processes. Language acquisition refers to the subconscious process that children use in acquiring their first language. Language learning refers to the conscious process that results in

knowing about language. It can also be said that acquisition is the result of natural interaction with the language via meaningful communication and learning is the result of formal study in which the learner is made to focus on linguistic forms and rules (Mitchell 1998:35). This methodology was markedly different from behaviorist thinking because it replaced repetitive drilling exercises with interactive learning.

The use of computers for CALL, however, had been somewhat disconnected. Because second language learning is enhanced when the four skills-listening, speaking, reading and writing-are used, some critics had pointed out that contributions to the learning process had been marginal rather than substantial (Chartrand 2004).

Recent developments in computer technology have added greater speed to the processing power of PCs and this has allowed enhanced use of digital video, sound, graphics and animation in CALL courseware. As computer hardware improves, there is the potential for the software to improve also. This trend combined with more efficient use of multimedia, leads to a more authentic learning environment.

2 . Materials

The students in the experimental groups learned English in a computer classroom equipped with forty-eight Fujitsu computers (Pentium 4 CPU at 2.2 GHz), running on the Japanese version of Windows XP. The CALL courseware used was Dynamic English Level 1 Disk 1, version 2.0, released in 1997. Each student had access to one computer and used headphones to listen to the audio portion of the courseware. It was necessary to use headphones because the combined sound output from all student computers would have rendered the audio incomprehensible if they had been used at the same time in the same room. Each headphone was equipped with a microphone to record the student's voice.

3 . Method

The research population was made up of first year high school students who were taught English as part of the Oral Communication I Course. Four native English teachers were responsible for teaching the classes and the author of this paper informed the instructors who took part in the research about the details of this research before the lessons began. A total of 186 students from eleven classes were included in this study. The classes were divided into three groups—a traditional classroom group and two CALL groups. The control group, Group A, is defined as the group of students who studied in the classroom with traditional teaching methods. The experimental group is defined as the group of students who studied in the computer classroom with the CALL courseware. Furthermore, the experimental group is divided into two subgroups: Group B is defined as the group of students who studied with the CALL courseware with no pre-teaching. The teacher in a Group B class was available to answer the students' questions and to guide them in their learning, however, the teacher did not pre-teach the vocabulary or grammar structures to be learned by the CALL courseware. Group C is defined as the group of students that studied with the CALL courseware with pre-teaching. The teacher in a Group C class introduced the vocabulary and grammar structures to be learned by the CALL courseware with the aid of paper handouts that were made available in the Dynamic English Instructor's Manual (DynEd International, 1994).

Prior to the beginning of the research, all students were tested using quantitative and qualitative components to assess their English language skills. The quantitative and qualitative assessments are attached for reference in Appendix 1 and Appendix 2, respectively. After the students completed five lessons, they were tested once more with the same assessment questions, however, the questions were placed differently on the assessment paper, so the students would not automatically recognize it as

the same assessment that they had completed five weeks earlier. The questions on the assessments relate to the language learned with the CALL courseware.

The CALL group was divided into two groups to find out quantitatively if the students performed better on the assessments if they had a CALL class with pre-teaching or not, and to find out qualitatively if the students enjoyed their CALL experience more if they had a traditional teacher intervention in a CALL environment.

4 . Quantitative Results

In order to ascertain if there has been progress in learning, the same assessment was given to the students twice. The initial assessment was given before the computer lessons began and the second assessment was given after five lessons were completed. The grade difference between the two tests shows the progress. The data is divided into three groups, as described in the Method. The results are shown in Table 1. The classes are indicated as A1 to A5, B1 and B2, and C1 to C4, describing five classes in the control group, two classes in the experimental group with no pre-

Table 1: Quantitative Results

Class	Teacher	Number of Students	Type of lesson	Pre-teaching or none	Average score 1 st Assessment	Average score 2 nd Assessment
A1	I	18	Traditional	N/A	67	67
A2	II	18	Traditional	N/A	69	62
A3	II	18	Traditional	N/A	68	77
A4	III	18	Traditional	N/A	68	69
A5	IV	19	Traditional	N/A	94	97
B1	III	10	CALL	No pre-teaching	82	86
B2	II	18	CALL	No pre-teaching	65	69
C1	III	12	CALL	Pre-teaching	66	65
C2	IV	18	CALL	Pre-teaching	58	67
C3	IV	18	CALL	Pre-teaching	67	66
C4	I	19	CALL	Pre-teaching	87	90

teaching, and four classes in the experimental group with pre-teaching, respectively. The four native English teachers are indicated as Teacher I through Teacher IV, respectively. The other elements of the table indicate the type of lesson, if it was a traditional classroom lesson or a CALL lesson, and in the case of a CALL lesson, if there was pre-teaching or not before the lesson.

4.1 Assessment Results

Figure 1 shows a line graph of the first and second assessments given to the students who studied in the CALL classroom, or the experimental group. There are 63 students who were assessed twice in all classes. The students who took one of the tests, but not the other test, due to absence or some other reason, were eliminated from this data. The data shows the results of the students in the grading order according to the first assessment. Student 1, for example, received a grade of 4/25 for the first assessment, but a grade of 20/25 for the second assessment. This student received the lowest score on the first assessment, and was placed the first student from the left on the abscissa. The student with the highest score on the first assessment, Student 63, received a perfect grade of 25/25 on

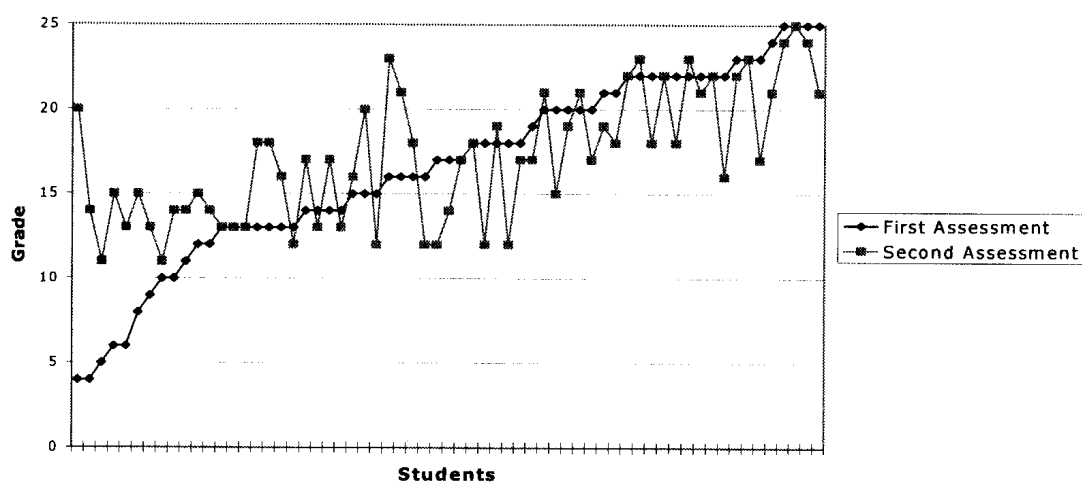


Figure 1. Results of the experimental group

the first assessment, but a grade of 21/25 on the second assessment.

Figure 2 shows a line graph of the first and second assessments given to the students who studied in the traditional classroom. There are 63 students who were assessed twice in all classes. The students who took one of the tests, but not the other test, due to absence or some other reason, were eliminated from this data.

When comparing Figures 1 and 2, it can be seen that among the lower scoring students, there appears to be a bigger improvement in the two assessments with the experimental group. That is, the lower scoring students in the CALL group performed better in the second assessment than the lower scoring students in the control group. Upon further examination, Tables 2 and 3 are tabulated with the scores of the first and second quantitative assessment, respectively. The percentage difference from the first to the second assessment is indicated next to the results of the second assessment. The results of sixty-three students are indicated for the traditional classroom in Table 2 and the CALL students in Table 3. The average difference in the scores was calculated for the lower scor-

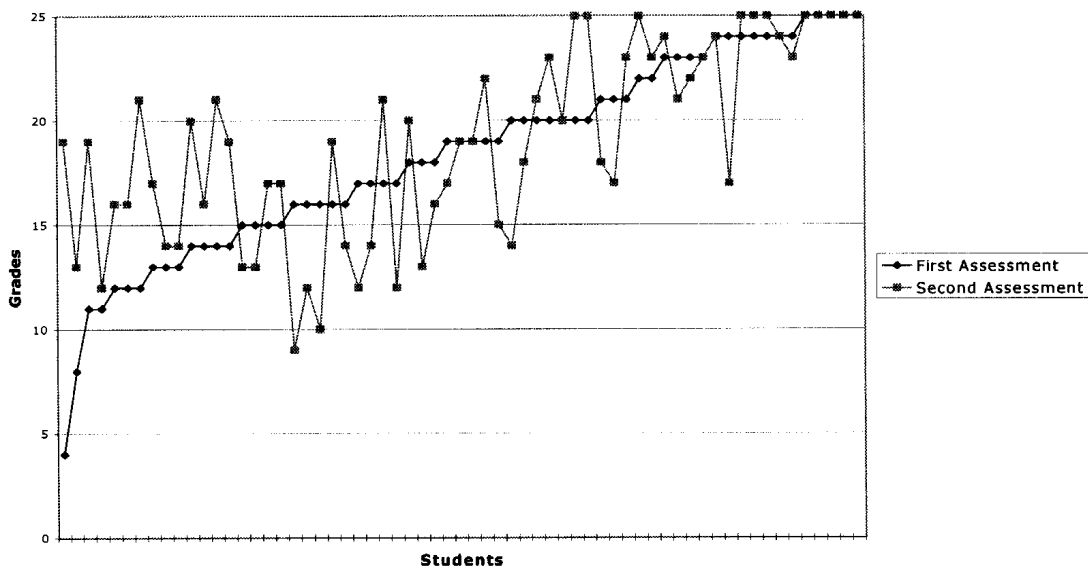


Figure 2. Results of the control group

ing and the upper scoring students at the halfway mark of thirty-one students. The average difference in scores is indicated at the bottom of each table.

Table 2a			Table 2b		
Traditional Classroom Lower Scoring Students			Traditional Classroom Higher Scoring Students		
1st	2nd	% Diff	1st	2nd	% Diff
4	19	60	19	19	0
8	13	20	19	19	0
11	19	32	19	22	12
11	12	4	19	15	-16
12	16	16	20	14	-24
12	16	16	20	18	-8
12	21	36	20	21	4
13	17	16	20	23	12
13	14	4	20	20	0
13	14	4	20	25	20
14	20	24	20	25	20
14	16	8	21	18	-12
14	21	28	21	17	-16
14	19	20	21	23	8
15	13	-8	22	25	12
15	13	-8	22	23	4
15	17	8	23	24	4
15	17	8	23	21	-8
16	9	-28	23	22	-4
16	12	-16	23	23	0
16	10	-24	24	24	0
16	19	12	24	17	-28
16	14	-8	24	25	4
17	12	-20	24	25	4
17	14	-12	24	25	4
17	21	16	24	24	0
17	12	-20	24	23	-4
18	20	8	25	25	0
18	13	-20	25	25	0
18	16	-8	25	25	0
19	17	-8	25	25	0
Average		5.2%	25	25	0
			Average		-1.8%

Table 3a
CALL Group Lower Scoring Students

1st	2nd	% Diff
4	20	64
4	14	40
5	11	24
6	15	36
6	13	28
8	15	28
9	13	16
10	11	4
10	14	16
11	14	12
12	15	12
12	14	8
13	13	0
13	13	0
13	13	0
13	18	20
13	18	20
13	16	12
13	12	-4
14	17	12
14	13	-4
14	17	12
14	13	-4
15	16	4
15	20	20
15	12	-12
16	23	28
16	21	20
16	18	8
16	12	-16
17	12	-20
Average		12.4%

Table 3b
CALL Group Higher Scoring Students

1st	2nd	% Diff
17	14	-12
17	17	0
18	18	0
18	12	-24
18	19	4
18	12	-24
18	17	-4
19	17	-8
20	21	4
20	15	-20
20	19	-4
20	21	4
20	17	-12
21	19	-8
21	18	-12
22	22	0
22	23	4
22	18	-16
22	22	0
22	18	-16
22	23	4
22	21	-4
22	22	0
22	16	-24
23	22	-4
23	23	0
23	17	-24
24	21	-12
25	24	-4
25	25	0
25	24	-4
Average		-6.8%

5 . Qualitative Results

In order to understand the attitudes and feelings of the learners, a qualitative assessment was given to the students. This assessment was

made up of two parts: Part 1 was given to the students before starting their computer lessons and Part 2 was given after completing five computer lessons (see Appendix 2). The students who did not take part in the computer lessons did not answer the second part of the qualitative assessment. The results of the qualitative assessment are tabulated as follows:

5 . 1 Assessment handed out before using CALL

Table 4

1 . Have you ever learned how to use a computer?

		Yes	No		
Group 1	Control Group	59	0		
Group 2	CALL group 1 - No pre-teaching	24	0		
Group 3	CALL group 2 - With pre-teaching	59	1		
Total		142	1	143	

Table 5

2 . Would you like to learn English by using a computer?

a . Yes - please explain your reason.

b . No - please explain your reason.

		Yes	No		
Group 1	Control Group	58	1		
Group 2	CALL group 1 - No pre-teaching	19	5		
Group 3	CALL group 2 - With pre-teaching	44	10		
Total		122	15	137	

Sample reasons for "Yes" answer for above question:

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.

Sample reasons for "No" answer for above question:

It doesn't look fun.

It looks difficult.

We have to do the same thing many times.

It takes time.

I am not good at computers.

We can learn more during a regular lesson.

I want to speak to the teacher.

It is boring.

Table 6

3. What would you like to do during your OC I class?
- Work on my listening skills.
 - Work on my speaking skills.

		Listening	Speaking		
Group 1	Control Group	36	21		
Group 2	CALL group 1 - No pre-teaching	17	6		
Group 3	CALL group 2 - With pre-teaching	35	22		
Total		88	49	137	

5 . 2 Assessment handed out after using CALL.

CALL 1 refers to the group of students with no pre-teaching.
CALL 2 refers to the group with pre-teaching.

Table 7

4. What did you think of learning English with computers?
- It was a lot of fun. 1 2 3 4 5 It was not fun at all.

	1	2	3	4	5	Total
CALL 1	3 (13%)	8 (33%)	9 (38%)	4 (17%)	0	24
CALL 2	12 (18%)	19 (29%)	29 (44%)	4 (6%)	2 (3%)	66
	15 (17%)	27 (30%)	38 (42%)	8 (9%)	2 (2%)	90

Table 8

5. What did you enjoy about learning with a computer?
- The computer was easy to use.
 - It is easier to learn English with a computer.
 - The content of the material was interesting.
 - Using the computer was fun.

	a	b	c	d	Total
CALL 1	4 (17%)	5 (22%)	2 (9%)	12 (52%)	23
CALL 2	9 (15%)	24 (39%)	12 (20%)	16 (26%)	61
	13 (15%)	29 (35%)	14 (17%)	28 (33%)	84

Table 9

6. What did you not like about learning with a computer?
- a. The computer was not easy to use.
 - b. It is more difficult to learn English with a computer.
 - c. The content of the material was not interesting.
 - d. I hate computers.

	a	b	c	d	Total
CALL 1	3 (15%)	1 (5%)	16 (80%)	0	20
CALL 2	9 (19%)	5 (11%)	32 (68%)	1 (2%)	47
	12 (18%)	6 (9%)	48 (72%)	1 (1%)	67

Table 10

7. If you had a chance to use a computer again to learn English, would you like to try again?

I would really like to try again. 1 2 3 4 5 I don't want to try again at all.

	1	2	3	4	5	Total
CALL 1	7 (28%)	3 (12%)	11 (44%)	1 (4%)	3 (12%)	25
CALL 2	19 (30%)	12 (19%)	26 (41%)	2 (3%)	4 (6%)	63
	26 (30%)	15 (17%)	37 (42%)	3 (3%)	7 (8%)	88

8. If you would like to add any further comments, please write them here.

The following are the comments that the students wrote on the assessment.

- I would like to use the Internet.
- I would like to have more interesting content.
- I would like to have more computer lessons.
- I would like to use a computer system that will enable me to speak more easily with native English speakers.
- This is too easy.
- Make it more fun.

- If the conversations to be learned were more useful, it would be more interesting.
- I would like more free time please.
- I would like to see more familiar cartoon characters, please.
- I prefer regular classes.
- I would like to use more interesting software.

6 . Discussion

The purpose of this research was to answer the following questions:

- 1) Do the students learn English better in the computer classroom than in a traditional classroom?
- 2) Do the students benefit from pre-teaching when learning in a computer classroom?
- 3) Do the students enjoy learning in a computer classroom?

In order to better understand the results of the data, each question will be addressed individually to support the reasoning with the findings from the results. The first question deals with an important issue, one that is difficult to substantiate. A quantitative assessment was conducted and the results at first glance did not seem to conclusively determine any outcome. Looking at the quantitative results from Table 1, some classes did a little better (traditional classes A3, A4, A5 and CALL classes B1, B2, C2 and C4), some classes did a little worse (traditional class A2, and CALL classes C1 and C3) and another showed no change (traditional class A1) from the first to the second assessments. These results were disappointing because I had expected all of the classes to do a little better after studying the target material. One possible reason for these results is the lack of motivation on the part of the students to do well on the assessments. The students were told that these results would not be a part of their school grade and it is conceivable to think that they did not

answer the questions to the best of their ability. Another possible reason for the inconclusiveness of the results is the short amount of time between assessments. Due to scheduling and other constraints, the students only had five lessons to improve their ability and they may have needed more time to show more decisive results. Yet another possible reason is the reliability of the test. Most of the questions were multiple-choice questions and the test did not assess all aspects of their learning. Also, some students did not understand how to answer some parts of the assessment, making the test somewhat unreliable.

Despite the shortcomings of the research, a closer look at the data showed some interesting results. When the line graphs were plotted as shown in Figures 1 and 2, it appeared as if the lower scoring students improved more on their second assessments than the higher scoring students. Looking at the results of the individual students' performance in Tables 2 and 3, one can see the scores of the first and second quantitative tests and the percentage difference between these tests. A negative percentage difference means that the student scored lower on the second test than on the first test.

There were sixty-three students in the CALL group and the traditional classroom group, respectively. Looking at the results of the lower scoring students-the first thirty-one students-the data shows that the traditional classroom students increased their score by an average difference of 5.2% (Table 2a), whereas the CALL students increased their score by an average difference of 12.4% (Table 3a). Thus, the lower scoring students who studied in a computer classroom had better results than the lower scoring students who studied in a traditional classroom. The higher achieving students, on the other hand, showed different results; they had lower scores on their second assessment by an average of 1.8% in the traditional classroom group (Table 2b), and lower scores by an average of 6.8% in the CALL group (Table 3b). The results were surprising

because the lower scoring students tended to improve their assessment results whereas the higher scoring students tended to get lower results. This may be explained by the fact that the level of the courseware may have been too easy for the higher scoring students and were less motivated to learn, as can be seen in the qualitative assessment responses to Question 5. The lower achieving students, though, may have had better results due to the process of learning with a computer since they could learn at their own pace and could retain more of the material because of the repeated practice opportunities and easily accessible explanations. I believe that these results show a tendency for the lower scoring students to be more motivated to learn with the use of a computer. Overall, the traditional classroom and the CALL group students improved their scores by an average of 1.7% and 2.8%, respectively. This shows that the CALL group students had slightly higher results in their assessment and thus, learning with a computer was an efficient way to learn.

The second question deals with pre-teaching in the computer classroom. That is to say, does the role of the teacher in a computer classroom contribute to better results for the students? In the quantitative data, Table 1 shows the "No pre-teaching" group averaged a 4% increase in the results, whereas the "Pre-teaching" group averaged a 2.5% increase in results, which is inconclusive due to the low levels of increase. The qualitative analysis, though, can offer some insights into the attitudes of the learners. From Table 7, for example, it can be seen that 91% of the learners from the "Pre-teaching" group thought that learning with a computer was fun compared with 84% for the "No pre-teaching" group. Also, from Table 8, it can be seen that 39% of the learners from the "Pre-teaching" group thought that it was easier to learn English with a computer compared with 22% for the "No pre-teaching" group. Moreover, 20% of the learners from the "Pre-teaching" group thought that the content of the courseware was interesting, compared with 9% for the "No

pre-teaching” group. Therefore, in conclusion, the results indicate it is unclear from this study if the learners’ performance increases with pre-teaching, however, it is probable that the learners’ attitudes towards learning with a computer are more favorable if there is some pre-teaching of the target language involved.

The third question to be determined asks if the students enjoy learning in a computer classroom. The answer is in the qualitative results. From Table 7, 89% of the learners who studied with a computer thought it was fun. From Table 8, 68% of the learners responded that English was easier to learn with a computer and that it was fun. When asked if they would like to learn English with a computer again in the future, Table 10 shows an overwhelming 89% of the respondents replied favorably. In conclusion, it is seen from the students’ responses that a large majority of the learners enjoyed learning English with a computer.

7 . Conclusion

Computers can be applied to learning a language from early childhood to adult education. There are software programs available in the marketplace to help pre-school children develop a curiosity in a language or detailed courseware programs that teach a learner the four skills. The technology of computers and software engineering skills of programmers have evolved more quickly than teachers and school administrators can grasp. Consequently, it has become important for educators to understand the usefulness of CALL and how it can be used most effectively in the classroom.

7 . 1 Multimedia Applications

It makes sense for a language learner to use a computer because the method of delivering instruction is effective. Multimedia applications enable the learner to experience rich linguistic and non-linguistic input

through text, video, audio and interactive tasks. CALL has a unique pedagogical value because the media of instruction complements traditional classroom teaching and allows teachers to better deal with students' needs for individualization (Bush 1997: 301). One of the most important benefits of using a computer is the ability of the student to do the same task repeatedly without tiring out the "instructor." Learning a language on a computer allows for infinite practice and becomes an important part of the learning process.

Learning with computers by way of multimedia tools is a valuable replacement for what can be accomplished in a traditional classroom.

7 . 2 Using the Computer as a Tool

Learners don't learn from technology; they learn from thinking about what they are doing (Preiss 2003). The computer is a tool, used to enhance the learning process of a language learner. In order to effectively use the computer technology in a learning environment, there are three key issues that need to be addressed (Bush 1997: 264).

- 1) Establishing a comfort level with the technology.
- 2) Integrating technology into the curriculum.
- 3) Developing the critical skills to use technology effectively.

The establishment of a comfort level with the technology refers to students being comfortable with using a computer for learning a foreign language and also refers to educators being comfortable with using computer technology in education. In order for the students to feel comfortable, they need to be reassured that this will be a non-threatening environment for them, in the sense that even if they do not know how to use a computer, they will be taught the essentials in such a way as not to be disadvantaged compared to computer savvy learners. In order for educators to feel comfortable with computer technology, they need enough time to train and practice with the technology and share ideas with others.

The wide variety of software titles available for language learning is a demanding task for an educator who wishes to select some materials that are pedagogically sound. Moreover, not all software titles work with all computer hardware configurations. Yet, there are still some educators in Japan who do not trust computer-aided instruction to help students acquire the necessary language skills for passing difficult entrance exams. Thus, teachers need to develop the critical skills to evaluate for themselves the usefulness and effectiveness of different software programs and to reassure their colleagues that CALL is an effective way of learning.

In the qualitative assessment, some students commented that they would like to use the Internet for English class, or to have different courseware which is more interesting and more fun. This is one of the most difficult choices to make. What is best for the students? Should they follow some courseware material that will guide them in their learning process or should they use the Internet or e-mail to produce more creative output? The answer probably lies in what the students' needs are and what the educator can offer to the students. The cost of the courseware can be high and if that is a problem in the educator's context, then the Internet and e-mail option would provide some useful tools. On the other hand, if the educational institution can afford the courseware, and the students' needs are more in line with a tutorial type of learning, then that might be a better solution.

7.3 Teacher's Role

The role of the teacher in a CALL classroom is not evident. On a practical level, the teacher is responsible for choosing the appropriate software for the students, learning how to use the software itself, in order to demonstrate the software to the students and anticipate any problems the students may have in using the software, training the students on how to use the computer, monitoring progress, keeping the

students on task and providing guidance throughout the course of study.

In a CALL environment, the computer does not replace the teacher, however, the teacher is “re-placed.” That is, the teacher has a newly defined role. Prior to the beginning of the CALL lesson, the teacher can activate the students’ prior knowledge, set-up goals and objectives and give some direction to the students. During the CALL lesson, the teacher can keep the students on task by circulating among them, solving any problems that may come up and listen to the students. After the CALL lesson, the teacher can communicate with the students directly by providing the necessary human contact, provide correction and feedback and finally to reflect on the process of learning with a computer. Discussing what worked and what did not work for them during the lesson time might provide some useful information for future learning (Preiss 2003).

In my own experience, when I started introducing students to the computer classroom, I thought my role was that of a problem solver rather than a facilitator. I was present in the classroom if a student needed me for a specific problem, either with the computer itself, or with one aspect of learning with the courseware. I was there to assist the students with their learning. Gradually, though, I have come to see my role as a facilitator for the learner. I continue to be a problem solver, but I try to maintain an active teaching role in the classroom by introducing some vocabulary forms or monitoring the students’ progress by speaking to them individually during the lesson to see how much they understand. I am now much more involved in the students’ learning. I will continue to strive to involve myself more in the CALL lesson and maintain an active presence for the learners.

7 . 4 Further Study

In the research that was conducted for this paper, it was shown that the students with a lower ability in English had a higher learning

potential in a CALL setting. This signifies that those students who had difficulty in a lesson initiated by a teacher in a traditional classroom environment performed better in a computer classroom environment. The effective parameters for this study, however, are specific to the courseware used and may reflect on the appropriateness of the level of difficulty to the student. In a more practical situation, students would be able to choose more freely the level and pace of the lesson, thereby allowing more challenging material for the higher scoring students and this could produce more encouraging results. This research would have benefited by further study with different courseware material, a greater number of lessons and additional assessments conducted several months after completing the lessons to better determine the effective courseware and the long-term value of using CALL in the classroom.

APPENDIX 1
Quantitative Assessment
Oral Communication 1

Name: _____ Student # _____

Part 1: Write a sentence with these words.

Example: Max name / my / is = My name is Max.

1. is / Kathy / name / my / . _____
2. come / New York / from / I / . _____
3. Max / is / this / . _____
4. from / comes / San Francisco / he / . _____
5. come / where / does / from / Max / ? _____

Part 2: Change each sentence to begin with "she" or "her".

Example: I come from New York. = She comes from New York.

6. My name is Kathy. _____
7. I'm from the U.S. _____
8. I speak two languages. _____
9. My house is small. _____
10. I'm a young woman. _____

Part 3: Write "isn't" or "doesn't" in the spaces below.

Example: Max comes from the U.S. He (doesn't) come from France.

11. His name () Bob, his name is Max.
12. Pierre is from Paris. He () come from the U.S.
13. Kathy speaks English. She () speak Japanese.
14. Zork comes from far away. He () from our world.
15. Kathy is from New York. She () from Paris.

Part 4: Choose the correct word.

Example: Max (come, comes) from the U.S.

16. Max and Kathy (come, comes) from the U.S.
17. Max and Pierre (is, are) good friends.
18. Kathy and Max (speak, speaks) English.
19. Pierre (come, comes) from France.
20. He doesn't (come, comes) from the U.S.

Part 5: Match each part of a sentence on the left with the other part on the right.

Example: They don't (f) from the U.S. f. come

21. She () a. you come from?
22. Where do () b. are you from?
23. Where () c. from Japan.
24. My name () d. doesn't speak French.
25. I'm not () e. is Kathy.

APPENDIX 2
Qualitative Assessment

Part 1: Before using CALL.

- 1 . Have you ever learned how to use a computer?
- 2 . Would you like to learn English by using a computer?
 - a . Yes - please explain your reason.
 - b . No - please explain your reason
- 3 . What would you like to do during your OC I class?
 - a . Work on my listening skills.
 - b . Work on my speaking skills.

Part 2: After using CALL.

- 4 . What did you think of learning English with computers?
(Circle the appropriate number).
It was a lot of fun. 1 2 3 4 5 It was not fun at all.
- 5 . What did you enjoy about learning with a computer?
 - 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.
- 6 . What did you not like about learning with a computer?
 - a . The computer was not easy to use.
 - b . It is more difficult to learn English with a computer.
 - c . The content of the material was not interesting.
 - d . I hate computers.
- 7 . If you had a chance to use a computer again to learn English, would you like to try again?
I would really like to try again. 1 2 3 4 5 I don't want to try again at all.

8. If you would like to add any further comments, please write them here.

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