Students' Attitudes and Use of a Computer Assisted Learning System: A Preliminary Investigation

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1. Introduction

CALL software programs can be differentiated by their functions. Levy (1997) first defined the functions as tool CALL and tutorial CALL. Using Skype to talk to learners in other countries or participating in international exchanges via discussion boards, blogs, or learning management software are examples of tool CALL. Learners are engaged in and focused on communicating in the second language. The computer software or technology is a tool for communication between people. On the other hand, there is no communication with other people in tutorial CALL; the software takes the role of teacher and provides practice for learners. Although tutorial CALL programs may not be as motivating as tool CALL programs since there is no chance to communicate with another person, tutorial CALL programs are important for language learners and have five potential benefits.

- **Control:** Learners can decide when to use them and for how long. In addition, learners can control how quickly they move through a program and thus can speed up when they are practicing points that they understand well and slow down when they are practicing new or difficult material.
- **Level:** Many, but not all, tutorial CALL programs adjust to learners' levels. Some are available for different proficiency levels and so teachers or administrators can choose the appropriate level for their students.
- **Feedback:** Most programs provide immediate feedback that tells learners if their answers are correct.
- **Support:** Most programs have support features (e.g., grammar explanations, vocabulary glossaries, listening text transcripts, etc.) that learners can access in order to understand texts or correct answers.
- **Practice:** Opportunities to use or practice the target language are limited in EFL environments. This is especially true in Japanese universities where learners only have English classes once or twice a week for 1.5 hours each time. Even though tutorial CALL programs do not provide communicative opportunities to use the language, they do provide numerous opportunities to practice receptive skills such as listening and reading as well as opportunities to learn and practice vocabulary and grammar.

To maximize the benefits, Hubbard (2004) has argued that the effectiveness of CALL programs depends on training students. He advocates three kinds of training that teachers should provide.

- **Technical:** Learners must know how to use the hardware and software. This knowledge includes knowing how to log in, how to navigate, how to get feedback, and how to access the support features.
- **Strategic:** Learners have to develop learning strategies to maximize the benefits of the programs. For example, they need to be trained to create study plans and to evaluate their progress. Also, they need to be able to know how and when to get help if they start to struggle with the material.
- **Pedagogic:** Students must be able to take the role of teacher so that they know when and how to use strategies to get the most out of CALL programs. This is especially important for tutorial CALL programs because they have explanations and support features that can help learners when they make mistakes, but learners have to be trained to use them and to understand that they need to use them.

In his discussion of what training is necessary, Hubbard (2004) also emphasizes that the training must be cyclical. It needs to be repeated at regular points in the curriculum for it to be effective. Students will not internalize and adapt the habits that he advocates if the training is only done once.

This paper will investigate how students use a tutorial CALL program, ATR CALL BRIX, and what their attitudes are towards the program. It will begin with a description of the software and how it is used within the program and conclude with suggestions for improving their use.

2. Software

Students used ATR CALL BRIX Level 2 (Level 1 was used in the first semester). The material is divided into 8 weeks with material for 7 days. Week 1 starts on Day 1 with a shortened version of the TOEIC. The other days of the week consist of exercises that provide practice on various skills. Most of the exercises, especially the listening and reading exercises, are modeled after the items on the TOEIC. The main skills and types of exercises are briefly outlined below.

- **Pronunciation:** Identifying where the accent is, how many syllables, and practicing actual pronunciation of individual words and complete sentences (students record their pronunciation and the computer evaluates how accurate it is), and shadowing
- **Listening:** Dictation and listening exercises modeled after the TOEIC listening items (photographs, appropriate responses, short conversations, and talks)
- **Vocabulary:** Quizzes to test word meanings, English to Japanese and vice versa. The ATR CALL BRIX website states that the vocabulary presented in ATR CALL BRIX matches the JACET 8000 coverage.
- **Typing:** Copying and dictation

- **Grammar:** Scrambled sentences and sentence completion
- **Reading:** Reading texts and exercises modeled after the TOEIC reading items (short readings with missing words and reading comprehension)

The number of exercises varies, but most days consist of 14 to 16 kinds of items. In addition to the 8 weeks of work, the level concludes with a TOEIC test and supplementary exercises.

Support features include correct answers, English transcripts of the listening texts, Japanese translations of listening and reading texts, explanations of important vocabulary and phrases, and explanations of the correct answers. The support features are not available for the tests.

What is not in the software should also be noted. The exercises provide practice for the TOEIC test. The material in the software is not organized into a syllabus such as topics, structural (grammar), skills, or situational. Each day's material is a set of exercises that are randomly presented and the items in an exercise are also randomly presented, for example, grammar items in one exercise might be tense related, word order, word usage, question formation, etc. Also, the software is not adaptive; in other words, if students make mistakes the software will not provide more practice on similar items.

In the I-EAP classes, students have 16 weeks to complete the work for one level. Last semester, it took students an average of 30 hours to complete the level. Furthermore, they have four deadlines during the semester. At the end of each deadline, they should have completed 25% of the program. They are given bonuses for reaching those deadlines and completing a level is worth 20% of their final grade in their I-EAP class.

3. Survey

The survey was given at the end of the semester in the I-EAP 3 classes. It consisted of 19 items. The survey instructions and items were in Japanese. The survey was put on Surveymonkey.com. A pdf file of the survey is available at the link listed at the end of this article. The first three items asked for information: course, class, and gender. Two items asked how long students used the software with five possible responses that ranged from 30 minutes to more than 2 hours and how often students used the software with responses that ranged from every day to once every four weeks. The remaining 14 items were five scale Likert statements. Three items asked about usability (very difficult to very easy to use), level (very difficult to very easy), and interesting (very interesting to not interesting at all). Seven items asked about the overall effectiveness of the software program and its effectiveness for learning grammar, listening, speaking, reading, pronunciation, and vocabulary. The responses for those items ranged from very effective to not at all effective. The last four items asked about how often the students used the support features, listening text transcripts, Japanese translations of the listening and reading texts,

explanations of important words and phrases, and explanations of the answers. The responses ranged from never to usually.

4. Results

A total of 85 students out of 124 students registered in the classes completed the survey. The results are presented and explained below.

The survey results indicate that the software is not difficult to use (Fig. 1) and is at an appropriate level (Fig. 2). Only 28% found it difficult or very difficult to use.

Fig. 1: Usability

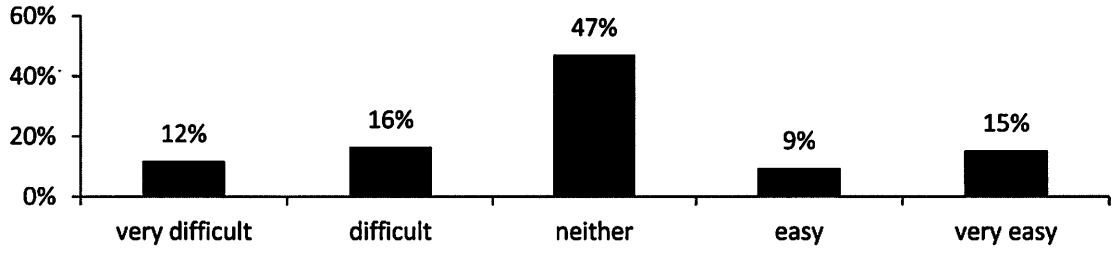
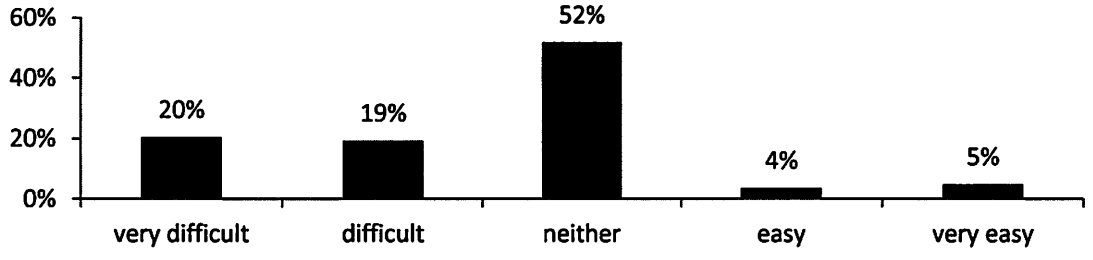


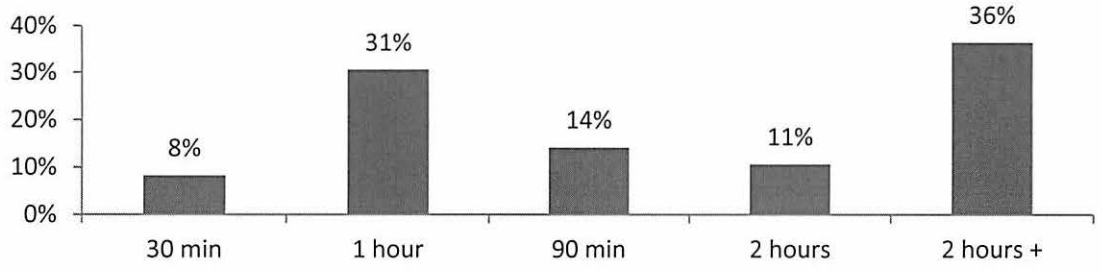
Fig. 2: Level



There is an orientation to the software at the beginning of the first semester and that seems to be enough. The difficulty that some students have experienced may have been because some of the pronunciation plugins are incompatible with Windows OS 10. They are warned repeatedly that they need to use computers that run on OS 7 or lower, but some forget and complain when they cannot access the plugins. Most feel that the level is neither difficult nor easy.

The results indicate a number of problems as can be seen from the figures below. The first is in the way that students use the software. Slightly more than 60% spend more than 90 minutes using the software and 47% spend 2 hours or more (Fig. 3). About 60% of them use the software once every two weeks or once every four weeks (Fig. 4). Both of these results demonstrate that the students are not using the software effectively. If they are spending more than an hour doing the software, they

Fig. 3: Time spent



cannot maintain their concentration in order to learn anything. Also, since most of them use it infrequently, new language is not going to be reinforced; instead it is likely that it will be forgotten and have to be relearned. Additional evidence also points to ineffective use. Of the 124 students registered in I-EAP 3, only 29 completed the level and the average of how much of the program was completed was 68%.

The students' responses to whether the software was interesting (Fig. 5) and effective (Fig. 6) also point to problems. The responses showing if students found the software interesting range from very interesting to not at all interesting and the responses showing if they found the software effective range from very effective to not at all effective. A majority of the students (66%) did not find the software interesting and only 7% thought it was interesting or very interesting.

Fig. 4: Frequency

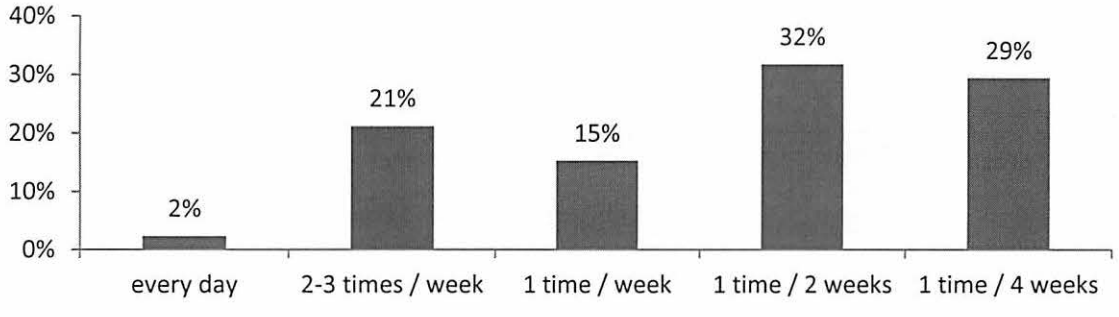
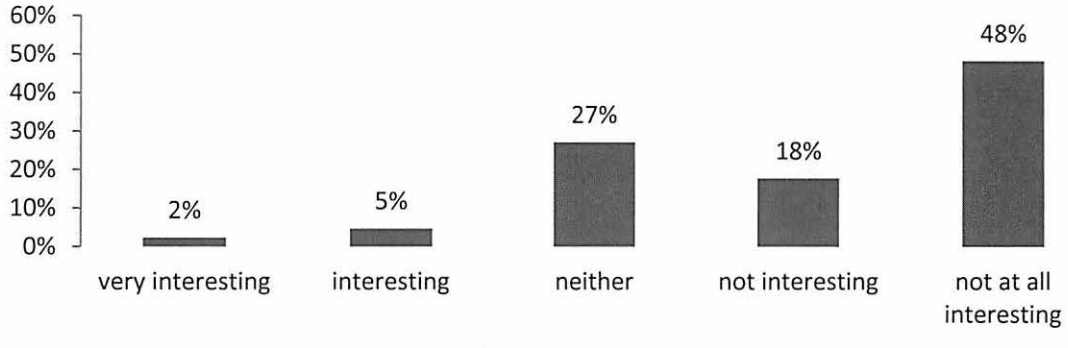
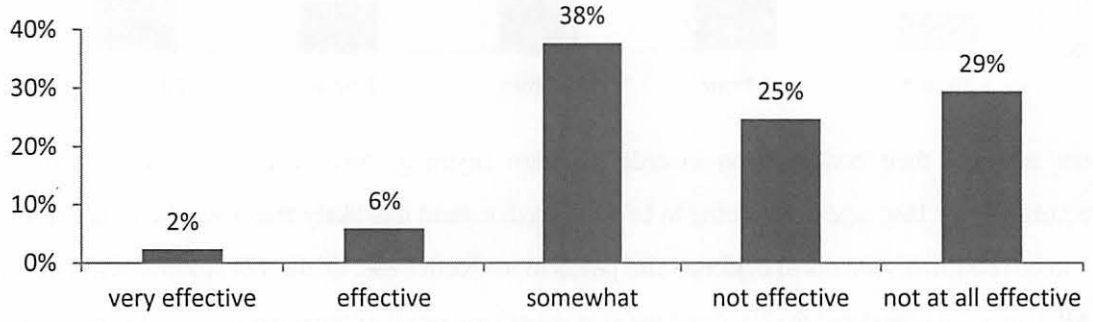


Fig. 5: Interesting



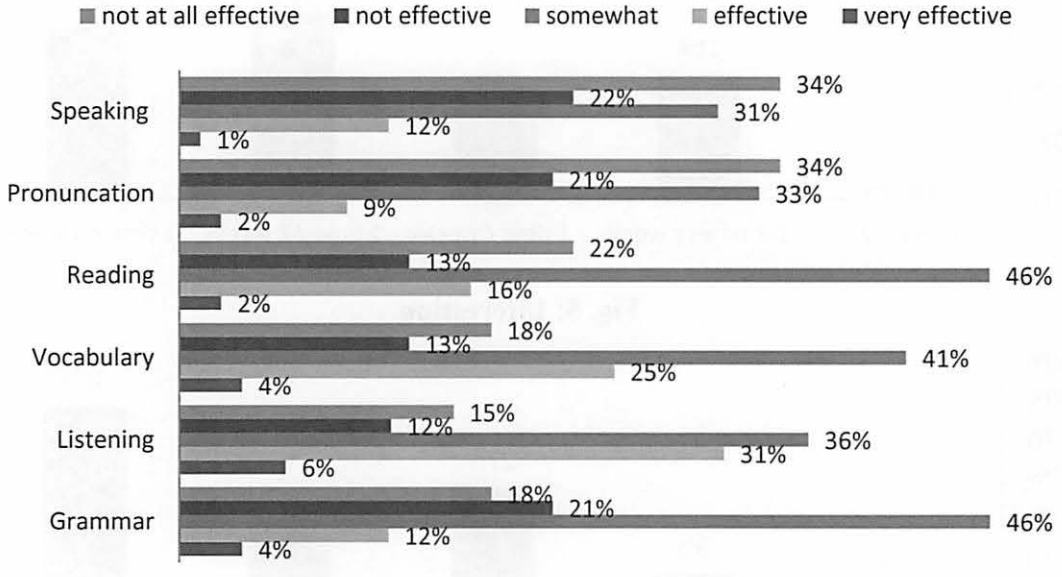
The results for the statements that asked about effectiveness were not encouraging either. The overall evaluation of the program's effectiveness was 38% somewhat effective, 25% not effective, and 29% not effective at all. This means that more than 50% thought it was an ineffective learning tool.

Fig. 6: Effectiveness



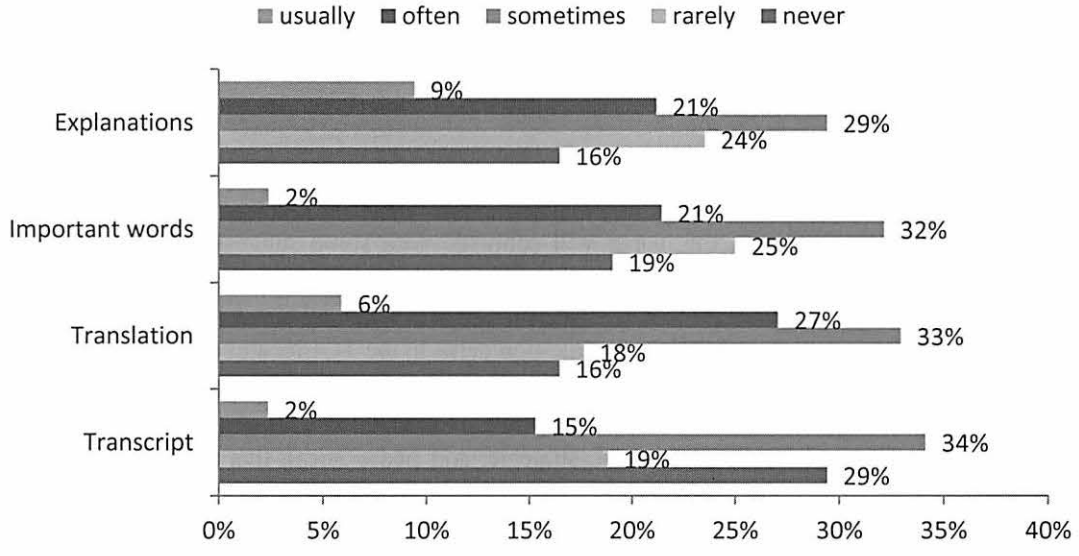
The results for individual language skills are shown in the graph below. For most of the skills, most students thought the program was only somewhat effective in helping them improve in those skills (Fig. 7). (Note that for each of the skills listed in the figure, the responses range from top, not effective at all, to bottom, very effective.) Students seem to think that the listening and vocabulary exercises helped them more as 37% and 29%, respectively, thought they were effective or very effective. Conversely, they seemed to think that the program was not effective in helping them to improve their speaking and pronunciation skills, 56% and 55%, respectively.

Fig. 7: Skills



Student use of the support features was slightly positive (Fig. 8). (Note that for each of the support features in the figure, the responses range from usually (top bar), to never (bottom bar).)

Fig. 8: Support features



For the most part, they said that they did not or rarely used the English transcripts for the listening exercises (48%), but Japanese translations (translations of the listening and reading texts) were used more frequently, sometimes or more often by 66%. Explanations of important words and phrases were used sometimes or more often by 55% and explanations of the correct answers were used sometimes or more often by 60%. These results are encouraging because they demonstrate that at least some of the students are stopping and checking to make sure that they understand why an answer was correct or incorrect and it is in this process of noticing that the language they are focusing on can become input (Schmidt, 2010).

To summarize the results, students do not seem to have many difficulties in using the software and it seems to be at an appropriate level. However, the results for how long and how often they study indicate that they are not using the software effectively; they study for too long and infrequently and thus they probably aren't getting many benefits from the software. The results for how interesting and effective students think the software are also negative. Most of the students do not consider the software interesting or effective in helping them improve their English skills. It is very likely that these three factors, how students use the software, how interesting they think the software is, and how effective they think it is, influence each other. For example, if they do not use the software regularly, they will not improve very much and conclude that the software is not effective. Another possibility is that if they do not think it is interesting, they will not want to use it regularly. The reliability of these results is somewhat limited because the survey items have not been validated, only 69% of the students responded, and only this year's first year students were surveyed. There have been three other groups of students

who have used the software. Nevertheless, the way students in this survey use the software is consistent with previous years and the attitudes are similar to comments from previous students. Thus, the conclusion that the software is not being used effectively can be viewed with some confidence.

5. Discussion

Since students invest a lot of time using the software and the school has invested a lot of money to provide students with the software, this paper will conclude with some suggestions to improve the effectiveness of the students' use of the software. One of the main problems is that the software is based on the TOEIC. The exercises are modeled on the question items in the TOEIC and only provide practice of those items. There is no pedagogic goal. As a result, it is difficult for students to see what they are learning. The three types of training, technical, strategic, and pedagogical, that Hubbard (2004) has described are one way that students could make more effective use of the software. For example:

- Students need to be trained how to create study plans so that they will use the software regularly and for shorter periods of time. Shorter periods of study will enable students to concentrate more and regular study will help reinforce what they are practicing.
- Students can be taught pre-listening and pre-reading strategies that will help them when taking standardized tests like the TOEIC and listening and reading that they do for classes or work. Thinking about what they are going to hear or read is a useful strategy for both skills because thinking about what they are going to listen to or read and what information they need to listen or read for will help improve their comprehension.
- Students can be taught to understand the need to develop both top down and bottom up listening skills. For example, inferencing where a conversation takes place or what the relationship between the speakers in a conversation is are ways to practice top down listening skills. Counting the number of words and dictation are ways to practice bottom up listening skills. Similarly, they can be taught the reading skills of skimming (read for the main ideas or main point of a reading) and scanning (read for specific details).
- Students can be encouraged to make more use of the support features, especially the explanations of important words and phrases and explanations and the correct answer explanations. As was pointed out above, these features can help students notice different aspects of language, e.g., how questions are formed, and, by noticing those aspects, the language can become input (Schmidt, 2010). Encouraging them take notes on these explanations will help reinforce what they learn and will help them notice

Teaching and training students to use these strategies will take time and effort, but it can lead to better and more effective use of the software.

Note: A pdf file of the survey is available at the link below:
https://drive.google.com/open?id=1jRmhFe3tt0_U5qlA_-6r3yEIKZGPiH95

References

ATR Learning Technology Corporation. 使用単語. http://www.atr-lt.jp/products/brix/words.html Accessed February 19, 2018.

Hubbard, P. (2004). Learner training for effective use of CALL. In S. Fotos & C. Browne (Eds.), *New perspectives on CALL for second language classrooms.* Mahwah, NJ: Lawrence Erlbaum.

Levy, M. (1997). *Computer-Assisted Language Learning Context and Conceptualization.* Oxford: Oxford University Press.

Schmidt, R. (2010). Attention, awareness, and individual differences in language learning. In W. M. Chan, S. Chi, K. N. Cin, J. Istanto, M. Nagami, J. W. Sew, T. Suthiwan, & I. Walker, *Proceedings of CLaSIC 2010*, Singapore, December 2-4 (pp. 721-737).