ABSTRACT
Since 1992, teachers of foreign language computer assisted instruction (CAI) at the Tanabe Campus of Doshisha University (Japan) have hosted a CAI contest for freshmen and sophomores. The purpose of the contest is to make all students aware of foreign language CAI classes, to encourage them to enroll in such classes, and to encourage students of foreign language CAI to study hard. The contest is not difficult to organize or to administer, and it is not expensive to carry out if there are computers and software available. This paper explains how the contest was organized, what was done and what the results were. It also includes some suggestions for teachers interested in hosting such a contest. (Author/JL)
Organizing a CAI Contest

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Abstract

Since 1992, teachers of foreign language CAI (computer assisted instruction) at the Tanabe Campus of Doshisha University have hosted a CAI contest for freshmen and sophomores. The purpose of the contest is to make all students aware of foreign language CAI classes, to encourage them to enroll in such classes, and to encourage students of foreign language CAI to study hard. The contest is not difficult to organize or to administer, and it is not expensive to carry out if there are computers and software available. This paper explains how the contest was organized, what we did and what the results were. It also includes some suggestions for teachers interested in hosting such a contest.

Introduction

Doshisha University began offering English CAI courses in the second semester of the 1988 academic year, a German CAI class in the second semester of the 1991 academic year, and a Chinese CAI class in the 1994 academic year. By the second semester of the 1994 academic year, there were nine teachers (including one part-time teacher) teaching 17 foreign language courses using computers, and slightly fewer than 500 students studying English, German, and Chinese. Most classes are drill or tutorial oriented, and they cover grammar, vocabulary, reading, and include exercises for standardized tests such as TOEIC or TOEFL. Some classes teach reading English newspapers using computer databases and writing business letters using a word processing program. Our experiences were described in detail in Kitao (1992a, 1992b, 1993a, 1993b, 1993c, 1993d) and Kitao, Ishihara, and Yamauchi (1992).

In order to develop good programs and teaching materials, to
train new teachers, to learn more about CAI, and to exchange ideas for better CAI classes, several Doshisha University teachers formed a CAI study group. We obtained a Doshisha University Computer Research Fund grant in 1991 and 1992, and visited computer business shows, other universities, and conferences. We also bought books and software on foreign language CAI and invited speakers with that fund. We had a monthly study meeting and an annual orientation program, which was extended to a CAI conference.

This group of foreign language teachers made a plan to host a CAI contest based on Shimatani's (1993) experiences. The main difference between the plan we developed and the one Shimatani described was that we held a two-hour contest with all participants at the same time rather than allowing individual participation during the school festival, because the administration is easier, and it looked more formal and academic. It was approved and funded by the Tanabe Jigyo Linkai (Tanabe Event Committee). The first contest was held on Saturday October 24, 1992, and the second, in fall, 1993. The third one was held in the fall, 1994 by the Institute for Language and Culture, and this contest has become the annual event held on Doshisha University's Tanabe Campus.

This contest is easy to organize and administer if computers and software are available. It is a good way to encourage students to study foreign languages and to get students interested in CAI. I will explain what we did and how we did it in order to help readers start CAI contests of their own.

The First Contest

Planning

In order to get our plan approved by the Tanabe Event Committee,
we wrote a brief proposal. The budget was less than ¥50,000, including prizes and lunches for a committee. This type of event was completely new, and we had to spend a lot of time explaining it to various people. The Tanabe Event Committee raised two points. One was whether the event was for all students, not for only CAI students, and the other was that giving prizes is not educational, and no other events are doing it. The response for the first point was that there are students who use computers and word processors, and more and more students will use them. As long as the contest is open to all students, this could be one of the sponsored events. The second answer was that giving certificates and small prizes is acceptable in education, since this is a contest.

We obtained informal approval at the end of June. Then the administrative committee met and discussed the final plan for the contest. The first contest was administered by three teachers and responsibility for the contest would be rotated among the members, and it would be held twice a year. It was planned that the first contest would include only typing, and the contests would gradually be expanded to include other areas, such as grammar, vocabulary and reading. However, there were strong opposition to having only typing, because it was not considered academic enough for college students. We agreed to have some basic questions on grammar and vocabulary as well as typing. We appointed a chair to head the contest administrative committee and two more members, one English teacher and one German teacher. All the questions for the contest were made by four teachers. Among several hundred questions on vocabulary and grammar, the head of the contest administrative committee made the final files of questions.

At the end of September, we obtained the official approval from the Tanabe Event Committee, and we made an announcement of the
contest. We also announced that forty students would be accepted on a first come, first served basis. We posted the announcement on bulletin boards and distributed it through English teachers. There were some students who were interested, but many of them could not type. We extended the application deadline and had 30 applicants.

Setting up grading programs in a new account for the contest was a problem. Computer staff members insisted that they were not responsible for it, though they could technically do it. We faculty members insisted that we were not responsible for setting up facilities, equipment or any other preparations except the content of academic matters. In addition, faculty members were not familiar with setting up computer software. Therefore staff members from academic affairs did it under the instruction and supervision of the computer staff, and teachers checked whether the account worked properly.

It was time consuming work just to check whether programs would work properly, because using all 80 terminals, we had to do some exercises and then run grading programs. For some reason, the grading programs did not work properly, so we opened two accounts, one for 30 terminals and the other 50, and ran programs for both accounts.

The head of the committee made three files of typing exercises (300 questions) and 7 files of grammar and vocabulary exercises (220 questions). He chose questions from the question bank which four teachers made, but he did not have much time to adjust the difficulty level of questions.

We had one first prize (¥5,000 dictionary), two second prizes (¥3,000 dictionaries), and three third prizes (¥2,000 dictionaries) and four other prizes (¥1000 worth of floppy disks). We also made an English certificate for each prize.
Administering the Contest

We held the first CAI contest on a Saturday, with registration from 9:00, the opening ceremony at 9:10, and the contest 9:30-11:00, and the closing ceremony at noon. Since it was raining, five participants were absent and some others were late. We started the opening ceremony late. The dean of academic affairs could not attend, and one staff member was the moderator, the head of the committee greeted the participants, and one English teacher explained how to use the computer and how to compete in the contest.

We had planned to start with typing questions, then move on to vocabulary and grammar. However, we had a problem at the beginning. The head of the committee had made the typing questions with old typing software on an NEC computer at home, and the questions did not work with the new software on the Hitachi computers at school. We let students work on vocabulary and grammar, and I converted the typing questions to the new software.

This accident was fortuitous, however, because all the students finished the vocabulary and grammar questions, but some non-CAI students gave up on the typing questions in the middle.

The head of the committee and a German teacher graded the files as the students finished them. Two staff members rapidly made charts of the grades. The charts of all grades were made by 11:20.

The vocabulary and grammar questions were weighted 70%, and the typing questions 30%. The first, second and third prizes were decided based on total scores. The other four prizes were awarded for the individual categories as well as the following one on a total score.

In the closing ceremony, the head of the committee made comments on the results as a whole. Then a staff member announced the names of the winners, and the head of the committee read a certificate and gave...
it with the prize to each winner. The first prize winner was a female freshman who was not enrolled in a CAI class. After the contest, we posted the names of the winners on bulletin boards on campus. Since we had to put the winners' names on the certificates, we collected them and asked the winners to come to pick them up. However, some of them were never picked up.

**Evaluation**

Since this was the first contest, we had an evaluation meeting with a staff member and some teachers. The results were distributed to all CAI teachers and CAI study group members as well as some administrative teachers.

Some of our conclusions about problems with the contest were as follows:

1. Partly because this was the first contest, it took too much time (almost 9 months) to make the plan and carry it out. It is possible to carry out a contest for up to 80 students with two staff members and three faculty members.

2. Only 25 students attended the contest. This may have been because it was held on rainy Saturday on the campus, which is in an inconvenient location for many students. Also, the publicity was probably not sufficient. We should have put announcements near the CAI classrooms, contacted the ESS or other clubs related to English, and persuaded more teachers to make the announcement in class. We had very few non-CAI students.

3. The first come the first served registration might not be good. If there are more interested students than we can accommodate, we should hold a drawing.

4. We originally planned to accept participants for only one week, up until a week before the contest. If there is room, we should
1. Students who did not participate should be allowed to accept participants until the day before the contest.

5. Since the academic affairs office is some distance from the CAI classrooms, it might have been better to have the applications accepted at the computer office, which is very close to the CAI classrooms.

6. Five out of the thirty students who signed up were absent. One solution might be to charge students to enroll and give prizes to everyone.

7. Holding the contest on a Saturday, when students do not normally have classes does not seem to be a good idea. It might be better to hold the contest on a weekday.

8. We need to test all software on the Hitachi computers which we use for the contest. Different people make materials with different levels of difficulty. It is necessary to check the balance of materials in advance. Since it takes much time and energy to make materials, we need to consider some payment for people to make those materials.

9. We need more assistance from computer staff members. They opened the accounts for the contest, and this was not enough.

10. Students were issued numbers at reception and assigned seats based on their numbers. This was helpful.

11. The opening ceremony took about 20 minutes, which was about the right length.

12. The number of questions was appropriate. Twenty-three out of 25 students finished all questions. The students got 25-55% right on vocabulary and grammar questions, indicating that the grammar and vocabulary questions were too difficult. The average time spent was between three and fifteen minutes, and there was a lot of variation on the time required per file. We should have arranged the questions according to difficulty and time required.
files were too long, and they were too difficult for non-CAI students. The second one in particular took much time. We used new materials for the contest so we did not know the difficulty level or how long they would take. However, if we use the old questions, it may be difficult to make the contest fair for every participant, since some of the CAI students might have encountered those questions before.

Table 1: Results of the First Contest

<table>
<thead>
<tr>
<th>Vocabulary &amp; Grammar File</th>
<th>N</th>
<th>TIME</th>
<th>1ST 2ND</th>
<th>1ST 2ND</th>
</tr>
</thead>
<tbody>
<tr>
<td>VEWQ Q01</td>
<td>25</td>
<td>8:24</td>
<td>50 21.2</td>
<td>33.1 42.4</td>
</tr>
<tr>
<td>VEWQ Q02</td>
<td>25</td>
<td>6:54</td>
<td>20 6.2</td>
<td>7.4 28.3</td>
</tr>
<tr>
<td>VEWQ Q03</td>
<td>25</td>
<td>15:08</td>
<td>50 25.9</td>
<td>36.8 51.8</td>
</tr>
<tr>
<td>VEWQ Q04</td>
<td>25</td>
<td>14:19</td>
<td>50 27.6</td>
<td>38.6 55.2</td>
</tr>
<tr>
<td>VEWQ Q05</td>
<td>25</td>
<td>6:58</td>
<td>30 11.7</td>
<td>19.3 39.1</td>
</tr>
<tr>
<td>VEWQ Q06</td>
<td>24</td>
<td>3:16</td>
<td>10 2.5</td>
<td>3.3 25.4</td>
</tr>
<tr>
<td>VEWQ Q07</td>
<td>23</td>
<td>2:59</td>
<td>10 5.1</td>
<td>5.7 50.9</td>
</tr>
</tbody>
</table>

**typing**

| TYPQ Q01                  | 21| 3:55 | 100 96.8| 99.9 96.8|
| TYPQ Q02                  | 16| 15:13| 100 93.2| 99.0 93.2|
| TYPQ Q03                  | 2 | 4:37 | 100 97.0| 99.0 97.0|

13. One hour was about the right amount of time for deciding the winners. However, one teacher was busy running grading programs and was not involved in decision making. The procedure and criteria should be clearly decided before the actual decision making. It should be announced before the contest, which would allow students an opportunity to plan strategies to help them win.

14. It was useful to have a closing ceremony. The comments that were given were useful for educational purposes, and it allowed the winners to be recognized and praised.

15. Some non-CAI students had trouble with using a computer. We should make a basic manual for those students or have some people to help them when they have a problem.

Some suggestions were made for the future contests:
1. We could give many questions in advance, allowing students to study before the contest. This would better enhance their learning of English.

2. Typing answers to questions is too difficult for the non-CAI students. We could make an elementary division with only multiple-choice questions and an intermediate division with questions which require some typing and which also includes typing questions.

3. All the questions should be tested by more than one teacher on the computers to be used for the contest. There are almost always some problems in CAI materials.

4. It is not easy for teachers to test 80 terminals. We could keep the same account for the contest every year, and then we do not need to test the grading programs. In CAI classes, students could use all those terminals for the exercises we use in class, and that would act as a check on the terminals.

5. The questions we used were too difficult. It would be better if students could get at least 70% right, or they will lose interest. One possibility is to give hints if the students get the wrong answer the first time and allow them to try a second time. If they still do not get the right answer, they could be given the correct answer.

6. In this contest, we had only vocabulary, grammar and typing. We need to consider what areas to cover. It might also be a good idea to have courses such as vocabulary, grammar, reading, writing, culture, and typing.

7. It is not easy to make good questions, and it takes much time and energy to do so. Thus, we should hire people to make those questions or ask outside professionals to make them.

8. The English certificates were a good idea, but it might be better
to have prizes such as trophies or plaques. We should make clear what prizes we are offering and how we select students for each prize, so that students can make strategies.

The Second Contest

Planning

The head of the CAI administrative committee and staff members of academic affairs made the plan for the second contest and called the meeting for the CAI contest on September 27, only three weeks before the contest was scheduled. Plans were made in detail. The contest was scheduled at the third period class on Tuesday, October 19, 1993. This contest was held on a weekday, since the previous contest had been held on a Saturday, and it was difficult to recruit participants. However, since the head of the CAI administrative committee had not been involved in the previous contest and was not familiar with the results of the evaluation, there was conflict. We formed a CAI contest administrative committee and appointed a chair. The chair called a meeting and organized plans, but there was little time, and the committee was not able to change much, so some of the same problems of the previous year were repeated. We were not able to eliminate typing, which hinders students' participation, from the contest.

There were four divisions: grammar, vocabulary, reading, and typing. The first two were all multiple-choice questions. The chair made all the questions used in the contest, based on materials made by another teacher which had not been used in class. This was his first experience making questions, and it was good training for him to make the files. He was very dedicated, and he spent several days making all the arrangements himself. He chose to give book bonds for prizes,
and he created a new prize for the second student from the bottom, to encourage that student to study harder. He offered prizes for the best overall score and for each division.

Announcements were posted on bulletin boards and published in school publications, and foreign language teachers made announcements in their classes. We had to extend the time for accepting applicants this year, too. Thirty-five students participated in the contest (8 freshmen and 27 sophomores). There were many freshmen and non-CAI students. There were 20 engineering major students who were members of a computer programming club. There was much more interest in our CAI contest by ordinary students this year.

On October 19, all of the CAI teachers except the head of the CAI administrative committee and two staff members from academic affairs got together for lunch, and we did the final checks. We made it clear who would participate in the CAI contest during third period and in grading during the fourth period. We checked the prizes, changed the order of the questions, and moved typing to the last.

**Administering the Contest**

We started the opening ceremony during the lunch period and gave an orientation on how to use a computer and get questions. One teacher showed each step, which was projected on the screen. That was very easy to understand.

All of the students finished the grammar, vocabulary, and reading sections (except two who skipped the file by mistake), but 13 students could not finish the typing section. The averages were 57% correct in grammar, 53% in vocabulary, and 49% in reading. The most difficult individual file, a reading file, averaged 41% correct. The difficulty level was much improved but it was still too difficult. Results of the typing files were low. The CAI students scored more than 95%, but
the non-CAI students did not have any experience with typing, and
they did much worse.

Table 2: Results of the Second Contest

<table>
<thead>
<tr>
<th>FILE</th>
<th>N</th>
<th>TIME</th>
<th>NQ</th>
<th>1ST</th>
<th>2ND</th>
<th>1ST</th>
<th>2ND</th>
</tr>
</thead>
</table>
| grammar
| FECQ Q03 | 35 | 19:20 | 45 | 22.3 | 34.7 | 49.5 | 77.2 |
| FECQ Q04 | 35 | 14:33 | 42 | 27.4 | 36.2 | 65.2 | 86.2 |
| | | | | | | 33:53 | 87 | 57.13 |
| vocabulary
| FECQ Q05 | 35 | 10:29 | 35 | 19.7 | 28.1 | 56.2 | 80.2 |
| FECQ Q06 | 33 | 9:24  | 40 | 20.3 | 29.4 | 50.7 | 73.5 |
| | | | | | | 19:53 | 75 | 53.33 |
| reading
| VEW8 Q07 | 35 | 8:13  | 17 | 9.6  | 14.7 | 56.5 | 86.6 |
| VEW8 Q08 | 35 | 6:53  | 15 | 6.1  | 12.6 | 41.0 | 83.8 |
| | | | | | | 15:06 | 32 | 49.06 |
| typing
| TYP8 Q01 | 35 | 10:26 | 54 | 49.4 | 53.3 | 91.5 | 98.8 |
| TYP8 Q02 | 22 | 8:40  | 36 | 33.5 | 35.5 | 93.1 | 98.7 |
| | | | | | | 19:06 | 90 | 92.11 |

Note: N = number of students
Time = average time required
NQ = number of questions
1st = first try
2nd = 2nd try

In deciding the prizes, the scores counted for 70% and time
counted 30%. We chose the top three overall and the best in each
division. There were no problems with either the contest and or the
grading, and we were able to finish both within the time we planned.

The closing ceremony was also good. The comments were made on
the results, and certificates and prizes were given to all the
winners by the oldest professor. Students, particularly the freshman
female student who won the first prize, looked very, very happy when
they received their prizes. The second prize winner was the female
sophomore who won the first prize in the previous year. Both of them were unfortunately non-CAL students. On the other hand, among the 20 CAL students, one won the prize in typing and two won the second-from-the-bottom prize in two divisions. Just having experience with computers did not help much in this contest, except in the typing division. The names of the winners of prizes were posted on the bulletin boards.

Evaluation

The second contest went much better than the first one. However, problems with the second one included the fact that the head of the committee did most of the work, and some of the teachers on the committee did not work even on the day of the contest. We also needed a greater variety of divisions, such as, for example, English-speaking cultures. In order to make a variety of good questions, we need more people making materials. Since this is time consuming, the materials developers should be paid.

There was also a suggestion that teachers who were not teaching CAL should be involved in this contest, so they could learn what CAL is like. One of the reasons CAL has not expanded is that not many teachers knew what it is, and many of us agreed to include them in future contests.

The Third Contest

The third contest was held by the Institute for Language and Culture on November 16, 1994. There were many problems, and we needed to overcome them. The preparations started late. The Event Committee spent a lot of time deciding how to administer the CAL contest. One advantage of the third contest, however, was that one teacher who did
not teach CAI was included on the committee.

The head of the committee again did the most work. The announcements were only posted on bulletin boards, and the publicity was poor and did not mention anything about prizes. Forty-two students participated, and about thirty of them were recruited by one teacher from his classes.

The head of the committee spent a great deal of time and effort choosing the prizes, but he did not spend much time making the final files of questions. He chose very few questions (40 each of grammar, reading, and vocabulary, about half as many as the previous years). With so few questions, it is difficult to see differences in the English ability of the students. In addition, the head of the committee did not test the final files with the computer for the contest. Thus the typing programs did not work properly, and other files had many minor errors in the questions. He did not emphasize time, and students spent too much time doing those questions. He did not explain how the winners would be chosen. He did not test in advance whether he could grade the results, and he was not able to get grades for the vocabulary questions. Though there were grammar, vocabulary, reading, and typing divisions, some of the reading questions were on dialogues rather than reading passages. His explanations of how to use computers and obtaining materials were not clear, and many students had problems in working on the questions.

The closing ceremony was also poor, because the comments did not include any information except how the winners were chosen. The certificates were not read, and only prizes were given. The ceremony was not effective.
Suggestions for Administering CAI Contests

The most important idea behind the contest is to stimulate students to learn English, particularly with computers. Thus, we have to have an interesting contest that many students want to participate in. We have to have good publicity and use various means to get students interested.

We should have a variety of divisions, including American history, English-speaking cultures, business English, and reading newspapers, in addition to the four skills. We should continue to include some exercises requiring typing skills, which many students do not have.

There are a number of other possibilities for the various divisions in the contest which would stimulate students' interest and encourage them to develop their skills in English. For example, it is possible to have students use word processors to write an essay. We could announce a few topics, and allow students to practice in advance. At the contest, we could give the students one topic and let them write an essay within a certain period of time.

Another possibility would be to give students a large amount of reading material in advance, and one division of the contest could involve answer questions over that reading material.

Another possibility is to give students a reading assignment first, and students have write their responses to it using a word processor. This requires not only writing but also reading.

Since we have many graded readers in our library, students could read those books and write up a book report on each book. They could compete to read the most books and write the best book reports.

Since we have an access to a computer database, students can read English newspapers. They could read articles on topics of their
choice and write up reports using words from a vocabulary list of unknown words.

In addition to having students compete as individuals, we could make groups of three or four students who have to cooperate on an assigned task. We could, for example, assign each group to make a newspaper, requiring the students to write articles and edit and organize them.

We could also have competitions among classes. We can give tasks using computers for databases, dictionaries, or encyclopedias. If a contest could create situations in which many students work together to learn English, that would be beneficial.

Since many teachers have never tried CAI, it is also important that the contest get as many faculty members as possible involved and get them interested in using computers as a part of their instruction.

Computers are very powerful, and they can be used to do variety of activities for instruction. If your school already has them, it is not very expensive to organize a contest like ours, and we believe that it is very useful for education. However, it does take time and energy, and it is necessary to make good plans.
List of References


This paper is rewritten from "CAI Contest" written in Japanese and published as Kitao (1994a) Kitao, (1994b) and Kitao (1995).

1 This study was partially supported by Doshisha University Research Fund grants 1991-1992 and 1993-1994.


2 The largest conference was the fourth CAI Conference held in February, 1993, at the Tanabe Campus of Doshisha University, in which 260 people participated. Many presentations were published in Nozawa, et al. (1993).

4 We do not have a CAI study group, but we have a CAI administrative committee made up of all full-time CAI teachers. This committee administers CAI orientations, meetings to exchange new ideas or information, and carries out the administration of CAI contests.

5 This committee was organized to make plans and administer them to enhance education for all freshmen and sophomores at the Tanabe Campus. The head of the committee was the Dean of Academic Affairs, and the Office of Academic Affairs on Tanabe Campus carried out plans. The annual budget was eight million yen.
The original proposal included plans to present a President's trophy for the first prize winner for the first year and later a Chancellor's trophy for the winner of a contest open to all Doshisha college-level students, including Doshisha Women's College students, and later even opening the contest to local high school students or even holding a nationwide event for college students.

She was far above the other students in both scores and time. She obtained 98% in grammar, 90% in vocabulary, 78% in reading, and 98% in typing.