Developing Japanese CALL Courseware for Listening Comprehension Practice

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Abstract
CALL (Computer Assisted Language Learning) courseware was developed for advanced learners of Japanese, entitled "Listening Comprehension: Life in Japan; Dwelling in a Private Apartment." Based on the "Three-step Auditory Comprehension Approach" (Takefuta, 1997), this courseware consists of three STEPs: STEP1 helps learners grasp the outline of the content, STEP2 assists in a more detailed understanding of the conversation, and STEP3 leads learners through comprehensive practice exercises. The CD-ROM in which it is packaged requires QuickTime5 and contains movies with two Japanese students (male and female) talking in informal style to help a non-Japanese student. It offers several types of tasks and provides information about the language, culture and learning strategies. The CD-ROM has four courses on the following topics, each divided into three sublessons: 1) looking for, 2) moving into, 3) living in, and 4) moving out of an apartment. The main directions and explanations are given in Japanese, Chinese, Korean or English. 6 native speakers of Japanese and 6 advanced language learners of Japanese who used part of the CD-ROM as well as 14 Japanese language learners who used all the materials and functions of the CD-ROM in a language course specially designed for the CD-ROM reported a positive attitude toward the courseware and agreed it was effective in helping to learn the language.

1: Introduction
A general survey on Japanese CALL was conducted in 2000 in order to determine what software packages were already available and what kinds still remained to be developed. The results of this survey, links to related web sites, CALL courseware, and research papers on relevant topics can be found at http://home.hiroshima-u.ac.jp/nihongo/kaken/kakenA2/index.html

A follow-up survey was conducted to investigate what needs both Japanese language teachers and learners had in the area of CALL (Mizumachi, Tawata and Yamanaka 2002[1]).
Analysis of these surveys led to the following three conclusions:
1) Courseware based on a modern language learning theory should be created.
2) Listening comprehension practice for Japanese CALL courseware is needed.
3) "Life in Japan" is an important topic that should be addressed by Japanese CALL courseware for advanced learners of the Japanese language.

2: Purpose of the Study
Based on the findings above, Japanese courseware for listening comprehension skills related to "life in Japan" was created based on a recent language learning theory. The theory used in our courseware is "The Three-step Auditory Comprehension Approach" (TSACA) developed by Takefuta (1997[2]) at Chiba University, Japan. There are very few theories that have been developed for CALL. This particular theory, which concentrates on listening skills, has proven its effectiveness in the acquisition of English as a second language at the college level. Therefore, it was thought worthwhile to investigate if this theory would be effective for Japanese CALL courseware as well. Our purposes were,
1) to apply the theory to our Japanese CALL courseware,
2) to develop Japanese CALL materials targeted specifically for listening comprehension practice, and
3) to find whether or not the Japanese CALL courseware would be effective for learners of Japanese.

3: Courseware
3.1: Focused Skill – Listening Comprehension
As Vandergrift (1999[3]) states, "Listening comprehension is anything but a passive activity. It is a complex, active process in which the listener must discriminate between sounds, understand vocabulary and grammatical structures, interpret stress and intonation, retain what was gathered in all the above, and interpret it
within the immediate as well as the larger sociocultural context of the utterance." Hence, language learners require a variety of tasks in listening comprehension. Brown and Yule (1983[4]) state that listening skills must be targeted in language instruction. They also state that native speakers normally encounter spoken language in the context of situations associated with a set of stereotypical knowledge. Providing context visually and virtually is one of the strengths of CALL. Takefuta (1997[2]) also asserts that, more so than any other language skill, listening skill leads to a positive transfer to other language skills and has developed a theory for CALL listening practice. Therefore, listening skills were chosen as the target for this project.

In the TSACA theory, listening tasks should be divided into three steps. STEP1 focuses on helping the listener grasp an outline of the content. STEP2 concentrates on a more detailed understanding of the meaning of the conversation. Finally, STEP3 leads learners through comprehensive practice. Tasks similar to those in the English version as well as original tasks for the Japanese version are integrated into the present Japanese courseware. These include checking important expressions (STEP1), answering questions for which three HINTs are provided (STEP2), choosing words or phrases to fill in blanks (STEP2), choosing characters (HIRAGANA, KATAKANA, or KANJI) from charts to fill in blanks (STEP3), taking multiple choice quizzes (STEP3), and listening to "telephone conversations" (STEP3) as applied listening practice, along with information about the language, culture and learning strategies. A modified speed (20% slower) version of the movie soundtrack is available for users to confirm the content of the conversation. However, the speed here is no slower than that encountered in natural conversation.

3.2: Topic

"Dwelling in a Private Apartment" was chosen as the topic for this courseware based on the survey stated in the introduction. 72 university students learning the Japanese language in the U.S. and 18 Japanese language teachers in the U.S. and in Japan participated in the survey. The survey responses indicated that it would be highly desirable if CALL could provide information and practice dealing with "Life in Japan." It was also found that the respondents felt it is particularly hard to deal with situations where fluency in all four skills of the language is required, such as dwelling in an apartment in Japan. The courseware has four subtopics: 1) looking for an apartment, 2) moving into the apartment, 3) living in the apartment, and 4) moving out of the apartment. The dialogues are informal conversations between two Japanese students (male and female) who are trying to help an international student. The users of the CD-ROM are able to watch movies of the two students talking.

3.3: System

The CD-ROM for this courseware, requiring QuickTime5, contains movies and several types of controlled tasks that can be answered using a point-and-click interface. The main directions and explanations on the screen are displayed in Japanese, Chinese, Korean or English, which are all stored as graphics. Learners can choose a language by clicking one of the language buttons at any time.

4: Evaluation of the Courseware and Conclusions

In an evaluation we conducted, 6 native speakers of Japanese (NS) and 6 advanced learners of Japanese (AL) used one of the 4 courses in the CD-ROM. The courseware was also integrated in a Japanese language class and 14 Japanese language learners (JL) used all the materials and functions in the CD-ROM. All of them were asked to give their impressions of the courseware by answering 29 question items. Table 1 shows that all three groups indicated positive attitudes toward the courseware and thought it was effective (5 as the highest).

<table>
<thead>
<tr>
<th>Impressions (question items)</th>
<th>NS</th>
<th>AL</th>
<th>JL</th>
</tr>
</thead>
<tbody>
<tr>
<td>tasks for STEP1 (3)</td>
<td>4.4</td>
<td>4.4</td>
<td>4.3</td>
</tr>
<tr>
<td>tasks for STEP2 (6)</td>
<td>4.0</td>
<td>4.1</td>
<td>4.2</td>
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<tr>
<td>tasks for STEP3 (5)</td>
<td>4.4</td>
<td>4.5</td>
<td>4.4</td>
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<tr>
<td>OVERALL (15)</td>
<td>4.1</td>
<td>4.3</td>
<td>4.3</td>
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</tbody>
</table>

Table 1: Impressions of the users (5 point scale)

The respondents indicated favorable impressions toward the courseware and agreed it was effective in helping to learn the language. However, as Ellis (1997 [5]) states, students' positive ratings in a questionnaire does not necessarily mean that the task works effectively in acquiring the language. Therefore, a response-based evaluation and a learning-based evaluation are needed in future research to closely investigate the effectiveness of this courseware. Learners’ responses toward the CD-ROM will be analyzed in future research.

References