ABSTRACT

Students learning foreign language need frequent exposure to the target language. Japanese, as a character based language, requires an average of 2600 contact hours compared to an estimated 960 hours required for basic proficiency in the major Western languages. Currently there are only 400-500 contact hours over 3 years for most Japanese language programs at university level (Ingleson 1989). In order to increase exposure to the target language, some experts posit that CALL (Computer Assisted Language Learning) could provide interesting and stimulating activities for learners and increase study time. The most efficient way for learners of Japanese to master the writing system, improve vocabulary and learn kanji is to read as much as possible. Textbooks provide a paper-based means of exposure to Japanese written text but the work for the students often becomes monotonous, tedious and in some cases, frustrating, involving the use of several dictionaries. The need to provide reading passages students would find more engaging that are less cumbersome or threatening and therefore more likely to be used frequently has been a recognised problem amongst Japanese language teachers. In order to teach students how each character is pronounced, improve pronunciation and encourage students to read larger quantities of Japanese more often, reading passages were recorded, digitized and put onto the Web using an interactive multimedia authoring package. Focus groups were conducted to review student perceptions and experiences of using the Japanese reading and listening interactive passages and exercises. This paper analyses student responses from which recommendations for computer assisted language instruction and learning are made.

INTRODUCTION

Japanese language teaching began in 1970 at Swinburne University of Technology, before any commercially produced textbooks were readily available in Australia. Lecturers developed teaching materials at the same time as introducing Japanese into the curriculum. In the 1980s, a series of textbooks were completed.

In 1993, Swinburne gained university status and the type of student attracted to study there changed to mainly full-time students who enter straight from high school rather than mature-age part time students. At the present time, the majority of students studying Japanese are Double Degree students doing a Bachelor of Business/Bachelor of Arts (Japanese). The number of places for this Double Degree is limited and competitive. Consequently, students studying Japanese at present have high expectations of the course. At the same time, the university began demanding that all subjects contain some element of flexible delivery. The lecturing staff have been striving to improve subject delivery and content while inventing ways to become more flexible in learning methodology.

In 1995, the Japanese staff used WinCALIS (Computer Assisted Language Instructional System for Windows), an authoring package, to produce grammar drill and reading
comprehension exercises. The finished product is functional and enables students to get feedback on grammar practice and reading comprehension. The WinCALIS programs however, lack sound files, graphics or other engaging multimedia because of the demand of memory storage required in the student computer labs which would otherwise provide a more engaging interface.

One of our academics also programmed a kanji learning tool tailored for our course, dubbed "Lenshoe". A commercially available kanji learning tool was also purchased and customised to go with the requirements of our reading passages. As technology develops, multimedia authoring packages have improved and offer a greater range of functions to create more engaging CALL courseware.

Shrinking numbers of students have become a concern as a result of demographic changes in the population in Melbourne. Consequently, a slight restructuring of the Japanese subjects, combining advanced classes with beginner levels was necessary in order to prevent a decrease of contact hours. As a result of the students in our classes becoming more diverse in ability levels, increased student demands for a more engaging delivery style combined with university guidelines to deliver subjects in a more flexible mode, ways to change our course were further investigated. Furthermore, increased class sizes with high student-teacher ratio (e.g. 30-1) for the written components of the course, necessitated a different methodology in Japanese to support more diversified learner needs and styles without increasing teaching load or sacrificing learning outcomes.

After many months of unsuccessful searching for a better series of commercially produced textbooks complete with CALL and audio tapes or CDs, an idea for an interactive pilot project was born after a chance discussion with LTS (Learning and Teaching Support). As a result of the initial discussion that explored what might be able to be developed, a project was initiated and seed funding provided by the School to develop a Web-based interactive reading and listening passage using a multimedia Web-authoring package Macromedia Flash. The initial pilot was successful and became the basis for developing 4 interactive lessons to be piloted in Semester 1, 2002 which are providing a more engaging learning environment for students.

This Web-based authoring program provides a rich and dynamic environment allowing illustrative text and graphics to be superimposed on screen. This allows for access to a glossary or explanatory note to be displayed on demand when the learner needs it by providing interactivity of pedagogy (Sims 1999) by enabling learner control in pace and depth of mastery of learning material. The learner controls access to depth of learning supported by being able to click on the highlighted "hotwords" or phrases as the need arises. This method of embedding information into a reading passage is similar to the natural and communicative approach to language learning (Krashen 1981, Young 1983). The language learner has control over whether to use the annotations or not while not distracting them with unnecessary information. According to Sims (1999:3), this provides true learner-centred interactivity during the learning process by providing "exemplars to support knowledge acquisition". This function is available upon request, but remains invisible and seamless to the learner until called upon. This Web-based interactive learning environment has made it possible to provide a rich learner-centred experience that allows for individual learner needs and styles. The following literature review provides the background to the first stage of an evaluation of the pilot implementation of this innovative program.

LITERATURE REVIEW

Highly interactive Computer Enhanced Learning (CEL) environments do not necessarily guarantee better learning outcomes for students. According to Sims (1999), learning should
be viewed as an interaction between the circumstances, conditions, environment, motivation and culture. He suggests using a framework and foundation for considering and evaluating the value of "interactivity" to enhance learning experiences in CEL environments. He suggests that the four dimensions of the learning process that must be considered when focussing on the value of interactivity are: the learner, the content, the pedagogy and the context (where and when). Looking at these four dimensions in terms of the relevant theories of learning provide a much greater chance of guaranteeing some level of learning effectiveness in CEL environments (Sims 1999:3).

CALL courseware enables the incorporation of all media in one place at the same time together with their unique properties. CALL materials can be delivered via the internet, placed on a common server and accessed in labs or loaded on individual computers. The benefit of Web-based CALL materials is that the Web provides unbroken access to learning materials as well as discussion group or email discussion in the target language with the teacher or fellow students (Felix 1998:216). Web-based applications have more potential to include a larger variety of multimedia as they are not hindered by size of computer memory to the same extent as authoring packages that operate from Windows. Recent research on CALL indicates that when used together with supporting materials such as textbooks and classroom teaching, computerised lessons help students to maintain enjoyment, motivation and interest in language learning (Van Aacken 1996). This is because CALL materials provide a non-threatening learning environment as well as continual exposure to the second/foreign language. Besides providing noticeable improvements in student motivation and attitude towards language learning (Atkinson 1998), CALL can provide significant self-management of learning with very little disruption when introduced to the existing language programs (McMeniman & Evans 1998: 7). A study by Brown & Kinnealy (1997) reported that students not only enjoyed their learning experience, but "also believed their language skills had improved too." Although it is too early to tell if CALL directly produces significant gains in language proficiency, it is certain that there are very strong prospects that this is the case (McMeniman & Evans 1998).

The guiding principles for the development of CALL courseware in ways uniquely suited to language learning are that courseware should be:

1. intrinsically motivating
2. truly interactive
3. eclectically selected (Stevens 1989:31-43).

However, these guidelines are not specific enough to make language learning via CALL meaningful or useful. There has been a trend to move away from using CALL exclusively for drill-and-practice to developing humanistic courseware since the 1980s. Research has been carried out to identify attributes necessary for CALL courseware to be more in line with real communication and language use by learners and therefore compatible with the communicative approach to foreign language teaching (Sanders & Kenner, 1984 and Seedhouse, 1996). Seedhouse concluded that it is not the software that makes a CALL package compatible with the communicative approach to language teaching, but how the teacher uses it as a tool to "produce a particular type of interaction" (Seedhouse 1996:16). Further research indicates that developing and integrating CALL materials into existing courses instead of buying materials produced elsewhere is more effective for course management, improved learning outcomes and general perceptions of the educational potential of multimedia (Gunn 1997: 1-6).

In second language acquisition research, experts are advocating that with technology-supported project-driven language learning a paradigm shift is necessary (Debski 1997). This shift changes the emphasis of teaching and learning, requiring the learner to become
more active in controlling outcomes. The teacher is seen as a coordinator, facilitating student access to resources and enabling social contacts, thus maintaining productive levels of motivation. The language learners become more creative, responsible and reflective in that they are charged with the way in which a project is conceptualised and carried out. They become more independent learners in that they are expected to maintain a proper level of involvement and join in peer-critiquing and evaluation. Creativity is a driving force in this type of project-driven class as it provides the impetus for student activity. Linguistic creativity and social activity are central to assessment of student performance. The aim is to develop language learning communities or groups within the classroom. The classroom, therefore, should be designed to be open and flexible with electronic facilities available for ready use to support multiple activities. This environment is believed to be most conducive to facilitate the creativity and socialisation of students. The role of the textbook also changes in such a learning environment. It loses its centrality and becomes another vehicle of learning, just like electronic materials (e.g. the Internet, multimedia tools, courseware applications, etc.) (Debski 1997:27-28). Debski points out that in order for the implementation of these principles to take place, teaching and learning methodology must change as well as making the best technological support available. Traditional assessment methods will also have to be redeveloped in order to assess the performance objectives posited in the new learning environment.

The learning environments in most universities are not yet ready to implement the above revolutionary learning environment but it is possible to use CALL specifically for improving reading and listening skills. CALL allows written text to be juxtaposed with the sound files of a native speaker reading it. Courseware such as this therefore encourages the learner to "translate concepts from one system to the other" (Dickson, 1985). As a result, CALL courseware has the potential to alter learning behaviour by helping students to develop new perspectives and approaches to organising and comprehending information (Pennington 1989:99). As students differ in level of ability, age, cognitive style, expectations based on prior learning experiences and attitude, individualized learning can also be provided by CALL courseware. There is limitless potential for such applications to improve acquisition of reading and listening skills.

In order to focus on the development of reading skills, there are three types of computer applications:

1. those which are similar or identical to non-computer media such as textbooks;
2. those that add to or extend existing educational paradigms in an 'evolutionary' way, and;
3. those that are truly 'revolutionary' in that they actualise the potential of the new medium (Wyatt 1989: 63-78)

As the focus of the reading and listening interactive passages in this study incorporate the second and third types of computer applications, more information on what is considered to be 'evolutionary' and 'revolutionary' in the development of reading packages in CALL is detailed here. 'Evolutionary' computer applications represent interesting extensions of familiar activities. The reading materials should be designed to be slightly above the students' current reading proficiency in order to provide the students with a challenge to get them to move ahead. These passages can now be combined with high fidelity digitized voice tracks of a native speaker reading the passage. Web-based multimedia authoring packages also allow illustrative text and graphics to be superimposed on screen as computer memory is not an issue, therefore enabling annotation, modeling and higher level reading skills to be added to a passage. The closest capabilities available in print media are fixed glossaries, marginalia, notes, text illustrations or diagrams. Notes on vocabulary, syntax, cultural values, discourse structure, plot, characterisation, stylistics, etc. can be included to a reading
passage but as the computer function is invisible to the reader, they are not intrusive or distracting. The learner has complete control over whether to use the annotations that include paraphrasing or translation by pointing the cursor and clicking the mouse or pressing a key (Wyatt 1989: 65-73).

Instructions can be included on effective reading strategies to develop higher level reading skills such as surveying and modeling. Learning research supports the view that language learning strategies "should be addressed directly and explicitly" (Vance 1999:14). Therefore, instead of reading the passage from start to finish, students can be advised to do a quick preliminary survey in which they go rapidly through the passage in order to construct an informal outline of the contents by looking for keywords or phrases (Wyatt 1984). By adding a tracking bar under the text as it is read, students are enabled to improve their reading habits. This approach groups meaningful constituents, or groups of words, together and presents them in carefully timed succession in order to encourage students to read them with a single eye fixation (Wyatt 1989: 69). By explicitly teaching language learners useful and appropriate strategies, students are more apt to become autonomous learners (Vance 1999:1-15). As technology develops and improves and students are provided with appropriate learning strategies, the full benefit of the interactive learning resources are more apt to be realised.

Whilst pronunciation was not the focus of the development of interactive reading packages, we note with interest that some of our respondents used the sound files for pronunciation practice. Such an angle could be further developed and improved since CALL courseware is capable of providing a vast improvement over the traditional methods of classroom listening and pronunciation activities involving choral or individual repetition of a sentence or longer passage. Computer-based tutorials permit individualised and continuous feedback for both pronunciation and listening skill development. Pronunciation teaching theory is limited but studies reveal that it is feasible with the aid of visual training of intonation using computer-generated visual displays to illustrate the range, speed, direction and place of pitch change in a foreign language to improve pronunciation (de Bot, 1983; de Bot and Mailfert, 1982). Consequently, an oscilloscope or bar graph could be included to model changes of pitch within a word in Japanese as well as teach learners the correct preliminary patterns for intonation of entire sentences. Pronunciation lessons might be better placed as a separate tutorial function away from the interactive reading tutorials in order not to overwhelm the learners with too much information at the one time.

Reviewing the literature on the use of CALL courseware suggests that there are many avenues that can be taken to improve the learning opportunities for students. What appears to be critical is that students need to be motivated to use the CALL courseware - so that it should be accessible, relevant to current learning needs of students and provide them with choices in how they use the rich learning media provided. This project is a first step at providing students with a more learner-centred approach to using language materials in a more interactive and adaptive way. It allows:

- students to choose the depth of mastery that they wish to gain in reading comprehension, listening and pronunciation;
- for a variety of learning styles;
- and contextual feedback;
- learners to work at a place and time that suits them; and
- them to work at their own pace.

What is apparent in the literature and has also shown up in the focus groups is the importance of the language teacher in facilitating the best use of the resource for students to get the most out of it.
Following the introduction of this innovative method using new technology to improve delivery of the reading and listening parts of the course, an evaluation was designed to investigate students' perceptions of their learning experience with this new approach.

**METHODOLOGY**

To gain a better understanding of how students experienced using the online interactive exercises the focus group approach was selected as an appropriate methodology. The small group situation ensures that high quality data representative of the context of the study, is gained through the interaction, sharing of ideas and confirmation of experience (Madriz, 1995). The focus group enables the researcher to listen to participants discuss their experiences and attitudes in a relaxed environment, without them feeling intimidated (Morgan, 1998). As the aim of the study was to conduct research on a contemporary situation (learning through using technology) within some real-life context (students' personal experience) the focus group was selected as the appropriate methodological approach (Yin, 1989: 13). The focus group consisted of 5 individuals from the combined class of first year advanced Japanese and second year beginner's stream who volunteered to participate. The moderator of the focus group ensured that the room was comfortable and an appropriate size (Edmunds, 1999). The participants were given a short briefing, which outlined the purpose of the focus group discussion and were asked to sign a consent form acknowledging that the discussion would be tape-recorded.

The focus group instrument was designed to explore the following themes:

- the students views on the online exercises in comparison with doing those exercises in class;
- their views on learning effectiveness of this mode;
- their views on their experience of independent learning;
- how much value they place on having the flexibility to learn at their own pace/own timeframe etc.

Learners were questioned on how they used the interactive learning resource in terms of:

- navigating the screens;
- using the embedded learning reinforcers (help function/ revising incorrect answers/ following audio out aloud for pronunciation; 
- making vocabulary lists;
- practising written characters during the exercise.

The tapes were transcribed and then systematically analysed. The process of generating meaning from the data was characterised by action at different levels of detail, beginning with broad groupings then identifying finer aspects of the data and sorting them into more specific categories. The first level of data processing by the researchers involved clustering or coding comments into broad themes (Miles and Huberman, 1994). Following the identification of themes within the discussion examples of comments relevant to each major theme were collated (Miles and Huberman, 1994; Yin, 1994). There is a wide recognition of the complexity of qualitative data analysis (Patton 1990; Stake 2000; Yin 1994) and the need for inter-rater reliability to increase the stability of findings. All three researchers were therefore involved in this interpretive process. Working from the transcript and guided by the themes allocated early in the process, the categories strengthened and formed the basis for interpretation of the phenomena presented by the focus group (Glaser and Strauss, 1967; Miles and Huberman, 1994). The findings are discussed in the next section.
PRESENTATION/DISCUSSION OF FINDINGS

Students were asked a range of questions about their experience using the online interactive exercises in relation to three main elements of their study of Japanese - their learning process, their use of the technology and their ideas on how the program could be improved.

**Student views on the online exercises in comparison with doing those exercises in class**

The students were generally very positive about using the online exercises as an enhancement to their more traditional study method using exercises from the textbook. What was interesting was that a number of students were attempting the textbook exercises first and using the online exercises afterwards to consolidate their learning. In this way they were using the interactive exercises to double check their learning, correct errors through "hotwords" and through immediate feedback, improve the quality of their revision. The non-interactives were not considered particularly valuable as a learning format. Overall, the students felt that using the online interactive exercises improved their understanding. Some of the comments made by students gave an indication of a sense of 'empowerment' that was not possible in the class situation. For example they found using the exercises "inspiring" and "felt like I had a personal tutor" and that the immediate feedback on errors made enabled them to "see why I had made a mistake". Rather than the usual response to language learning that it is very difficult and problematic, students felt more in control and "inspired to study harder and learn more". Overall, the interactive exercises have appeared to infuse the learning situation with the positive attributes "real life" language learning by providing immediate feedback, immediate correction and useful explanations, and as a result, increased positive motivation leading to an increase in the level of work undertaken.

**Use of sound files**

The discussion concerning the students experience with the use of the sound files was extremely useful. They provided excellent feedback on the usefulness and ease of access of the learning resource on the web. They brought to our attention issues such as providing adequate orientation to the effective use of the sound files which will need to be addressed next semester. From a learning perspective the students found that being able to listen to one sentence at a time was a real confidence booster. They felt that being able to repeat the sentence until they had perfected it was "really good" and that rather than being in any doubt about whether or not their pronunciation was correct, this checking capability enabled them to feel confident and "you know it's right, so you can move on to the next item". In addition they mentioned that the sound files were "a good learning tool in themselves" in that "you could just listen with your eyes closed to the passage being read". Learners also commented that the "timing bar (tachistoscope) at the bottom assisted me in being able to read and follow the reading of the sentence". Practical issues such as lack of headphones in the labs meant that students had to supply their own or not use this aspect of the resource. This issue should be resolved in improved student orientation. Instructions to students in how to get the most out of the new learning resource will also need to be provided in the initial orientation class, and tips could be provided in the online subject where they access the resource to avoid the level of confusion some students experienced this semester.

**Learning effectiveness in this model**

The discussion provided excellent indicators that once students were using the resource, they were very aware of the usefulness of the interactives as an effective learning tool. Students mentioned that they thought having a variety of interesting ways of using the learning resource was very beneficial. They were using them for revision, "If I saw words that
I thought I knew, I would go on. If I didn't know I would check the hotword". Confidence was gained by being able to "move on without wondering 'Do I understand this or not". Learners received positive reinforcement for things they mastered and were able to correct errors and know with confidence that they now had it right. Some students used the vocabulary lists relating to each passage, more than others. The examples of stroke formation were very well regarded and students requested more of these exercises to help them get the stroke order correct.

**Experience of independent learning**

Having the exercises online was preferred to having them on CD as students found they could "be in Blackboard (online delivery platform for support material) and sometimes I would just go there (to Japanese exercises) because it was there". Students found "It was a help to be able to access it from home" and that once online for other reasons it was "easy to move from the interactive to other subjects to surfing the net and back". They really liked the opportunity to check their pronunciation in a private study situation. The benefit of being able to check over any material covered in class that was not fully understood was highly valued, as they could "use the interactive learning resource at home until they got it right". They particularly liked the way the exercises provided them with an indication "of what you do know and what you don't like having your own personal tutor there with you". As Sims (1999:5) suggests, an effective learning interactive should enable learners "access to people (real or simulated) to provide assistance", where learning becomes contextual and situated. An added sense of "control" over their learning was valued too, which is again referred to by Sims (1999) who suggests that if an interactive is providing for the pedagogical dimension, then the focus of self-pacing must allow for learner control, and learner self-testing to mastery. This is also reflected in the comments where learners mentioned the importance of having this facility to work "on your own" to practice pronunciation and this provided considerable learning benefit.

**How much value students place on the flexibility to learn at their own pace/own timeframe**

Students valued the freedom to access the interactive learning material from anywhere. They reported using them in a range of locations, including "while on holidays in Queensland", which supported their claims. The flexibility to do the work when and where they chose was seen as a particularly motivating aspect of the interactive learning resource. The ability to effectively study the interactive passages and exercises and achieve a level of competency more efficiently was noticed and commented on in comparing the slower more frustrating learning process of working through the non-interactive exercises and traditional methods. The interactive learning resources were unanimously preferred. The combination of seeing and hearing the Japanese language as a whole, sentence by sentence, or by "hotword" and phrases were considered to be very advantageous. One student suggested that to have a complete translation of the passage would add further to their sense of independent learning, however this is not necessarily held up in the language learning research, and would need to be carefully considered. Learners found the flexibility and variety in the use of the interactives, i.e. building mastery, confidence, revision and consolidation of learning, and preparing for classes were considered and highly valued.

**Embedded learning reinforcers and making vocabulary lists**

No students reported using the help function, when questioned on this, the response was that they found the interface intuitive and self-explanatory. The linked "hotwords" were very popular and the 'self diagnostic' nature of the program design was enjoyed. The contextualised feedback/correction process was valued as would be expected according to
Sims (1999) as it provides for individual needs of the learner. The tracking device was reportedly used quite frequently as a check on timing and intonation of spoken Japanese sentences, which some students used to practice their own pronunciation. These embedded functions were seen as having a positive and motivating effect on the learners. The embedded "hotwords" seemed to have superseded the need for vocabulary lists, which most students said were neither necessary nor used, in the interactive learning resource. Some learners still prepared lists of difficult words in separate booklets, however others suggested that they may have made vocabulary lists when using the text based study method, but they had not done so nor seen any need to with the interactive exercises. This change in behaviour of some learners may be detrimental and may require further investigation.

How they approached using the interactive exercises

The students discussed the sequencing of how they went about working through the exercises. The approaches varied from "Firstly, I would print out the vocab list, then listen to the passage, and while listening I would click on unfamiliar "hotwords" to check for meaning". Some learners listened to the passage and tried to follow the entire passage first, then on the second go, click on the "hotwords" to check meaning. Some learners listened to the passage line by line, practising their pronunciation by listening first then saying the sentence. All of these ways of using the interactive learning resource were regarded by learners as far superior to working through the textbook and having to use three dictionaries. They all commented on the fact that the faster feedback was building confidence more effectively. They didn't lose continuity of understanding as they checked for difficult words and phrases "on the fly", and they were able to learn the words and phrases within the context of the passage.

Navigating the screens

The students found the screens "easy to get round". The tracking function was considered a critically important feature that ensured they knew where they were in the sentence/paragraph at all times. The 'help' function wasn't considered necessary and wasn't used. The 'print' button was found easily, but in most cases was not used, however, one student who did use it would have liked to have clear 'page numbers' so that they actually printed the correct page, instead of printing some unwanted pages. While the navigation tools were seen as quite intuitive, one student suggested that the three main navigation 'tabs' could have been identified better by dynamic "mouse over" highlighting.

Practicing written characters

The program was not designed for the purpose of practising writing the Japanese characters. However, a few examples of showing the Kanji stroke order were put in and learners feedback on these were that they were helpful and learners wanted more Kanji drawing and stroke order exercises.

Suggestions

The students provided a wide range of suggestions that they were eager to share with the investigators. Some of these ideas emerged on closer questioning of learners in the focus group during the discussion. The learner 'suggestions' will be incorporated in the final discussion of review of the pilot program.
REVIEW OF THE PILOT PROGRAM (INCORPORATING STUDENTS' SUGGESTIONS)

Many of the comments made by students were extremely valuable in providing feedback to the academic and technical development staff who had planned, designed and implemented the program. The feedback concerned issues relating to student learning strategies, the usability of the technological interface, the web delivery format and the students' reflection of their own learning experience.

Student orientation training

There were a number of students' comments that indicated that an introductory orientation session would be beneficial. Whilst 'trial and error' is sometimes a reasonable strategy, on reflection of the students' experience, time was wasted using this style. An orientation briefing would help to ensure that students were given every opportunity to get the best value out of their time using the program. The elements highlighted during the discussion that could be included in an orientation are:

- Pronunciation practice - this was seen by some learners a very valuable way of using the interactive learning resource, however some students were completely unaware of this possible use of the resource and were disappointed at the lost opportunity.

- Exploring various Learning Sequence Options - students could be encouraged to use the resource in a number of ways, for example, listening to the passage with eyes closed, using the questions as a way of getting the gist of the passage prior to reading it, printing out the passage first and highlighting difficult words, preparing by learning the vocabulary first, and many other ways of using the resource.

- Preparing for Class and Revision - learners could be encouraged to see the learning resource as more than a weekly homework tool, and more of a pre-class preparation and pre-test preparation tool.

- Mastery of language skills - orientation to what it means to achieve mastery level language proficiency could be explored with suggestions for students to use the tool more effectively.

- Navigating the program - the orientation could include a quick tour of the interactive learning resource. It should include information on the expected time required to download the program on a telephone connection off-campus. Reference should be made on the need for obtaining a set of headphones and where they can be purchased or borrowed. A tour of the various features/functions/help facilities available would be helpful, and finally suggestions of how to best print the resource. A basic orientation on the navigation of the program would suggest that students would be quickly competent and confident in using the resource.

- Other program enhancements - many students referred to the need for guidance to learn vocabulary. Instead of having a static vocabulary section which was not used by many learners, more interactive exercises to practice vocabulary would be preferred. More difficult exercises that would enhance learner grammar skills development was suggested and also Kanji skills. Particularly they wanted more stroke order formation exercises and suggested that these would have been very beneficial.

Other suggestions related to extending the "embedded" help in the form of providing students with screen cues that might prove beneficial. Some of the suggestions offered were that the provision of grammar notes could be inserted as 'reminders' to reinforce the specific
grammatical application being used - "notice the grammar here", or "try to trace the formation of this character on the screen", or "say the word and write it yourself".

Suggestions as to the level of difficulty in some exercises were offered. Learners felt that these were not difficult enough to get the full advantage of the exercise. Some learners suggested that in exercises where they had to 'choose the right kanji words' to complete a sentence, the exact number of kanji were provided and it was simply a trial and error exercise rather than truly testing understanding. It is refreshing to see learners actually asking for more challenging exercises.

Another recommendation was that being able to easily isolate and print out sections of the interactive learning resource, for example the vocabulary lists, the suggestion was raised that having access to a full or partial translation would be helpful using a split screen approach. This second option would need careful consideration in the light of current language learning research.

Learners liked the passages as they were. However, a suggestion was made that having a variety of voices would aid listening skills. The present learning resource is using a native male Japanese voice, so adding a native female voice would add to the depth of learning experience. This suggestion fits well with Sims (1999:5) paper referring to the dimension of interactivity and pedagogy, where students need to be able to "integrate contextual and socio-cultural elements". It was also suggested that it would be beneficial to have additional spoken dialogue.

Use of the Japanese character set in using online conferencing facilities such as synchronous online chat, asynchronous discussion boards and email was discussed and thought to add depth to student learning, and could be explored during the next semester.

CONCLUSION

The focus groups used for the first stage of the evaluation of this interactive learning resource have provided a wide range of excellent feedback. In the areas of reading, listening and pronunciation, student feedback indicates that CALL has a great deal to offer in meeting the needs of individual students. There were clear indicators that students were engaging with the learning resource technology and having a very positive learning experience. Their 'suggestions' have provided the team with a number of excellent ideas to improve not only the interactive learning resource, but also how to add more flexible learning experience in the Japanese language program. Some of these ideas that have been raised will need further investigation and further allocation of limited staff time. Better initial student orientation to the learning resource to establish the best value from the learning resource, adequate provision of earphones, further expansion of certain kanji and grammar exercises and provision of a variety of Japanese types of dialogue and voices is expected to improve the quality of the value to students. We found that the students were very aware of their learning through the use of the interactive learning resource and valued the immediacy of feedback and corrections of their work. There were some learning opportunities that a few learners missed and this could be resolved through coaching in the orientation to the resource in the first lesson of the semester, and the provision of accessible documentation on hints and tips for getting the best value from the resource. The first stage of the evaluation of the pilot program has provided a sound basis on which to modify and extend the approach during the next phase of development.
REFERENCES


