Title: Digital and portable edition of K2 (Kanji & Katakana) Gym

Background

The proposed project builds on the out-of-class activities of the K2 (Kanji and Katakana) Gym which was conducted over a five-week period in 2009 (funded by the Faculty of Arts Research-Teaching Nexus Grant ($2500)) and 2010 (Department of International Studies Learning & Teaching Index Grant ($3000)). I have obtained approval from the Faculty of Arts Human Research Ethics committee to conduct this research (Ref No. FOA27NOV2009-R00008). A journal article (entitled “A preliminary report on the Kanji and Katakana (K2) Gym: Out-of-class character/vocabulary learning activities for Japanese language learners”) that derived from this teaching/learning research is in press to be published in Innovation in Language Learning and Teaching (DOI: 10.1080/17501229.2011.562300).

One of the many challenges of learning non-alphabet languages such as Japanese is how to effectively acquire all three types of characters, i.e., Hiragana (basic characters), Katakana (characters used for transcribing loanwords) and Kanji (characters based on Chinese). Proficiency in all three of them is indispensable for skilled reading/writing in Japanese. Despite Kanji (its writing, in particular) being perceived by both teachers and learners to be one of the most challenging aspects of the Japanese language (e.g., Gamage, 2003; Iwashita & Sakaguchi, 2009; Mori, 1999; Mori & Shimizu, 2007, Mori et al., 2007; Toyoda, 1998), due to limited class time, students are generally left on their own to learn the characters and vocabulary.

The primary objective of this project is to equip the current K2 Gym with emerging technologies (i.e. iPad and associated software applications). This will enable us to reinforce educational support for Japanese language learners at different levels of proficiency by providing them with opportunities to be self-disciplined and monitor their own progress in character/vocabulary learning skills. The concept of the original project is analogous to that of a sports gym where members are engaged in various activities using the equipment provided, hence, K2 Gym. Funding will be used primarily to purchase 30 iPads so that the K2 Gym can be digitized and made portable to enhance its flexibility.

In 2009 and 2010, the K2 Gym participants engaged in “training”, i.e. practiced Kanji/Katakana using various worksheets under the supervision of native Japanese-speaking postgraduate students in the TRAN units (Department of Linguistics, Faculty of Human Sciences). The project was significant not only for the JPS students who received much needed individual feedback in a supportive learning environment, but also for the TRAN students who gained first-hand experience supervising the Gym in their interactions with the participants and made some very practical suggestions. In the digital/portable K2 Gym, we propose to administer pre- and post-tests so that its efficiency can be objectively assessed. This will be conducted via the online assessment tools on the Unit Web designated for this project. Data obtained from this empirical research will have implications for how the issue of limited class time and space can be overcome by strong work ethics, self-discipline and good habit formation. The project can also generate research projects for HDR students in the area of foreign language learning, e.g. the effect of different kinds of resources on vocabulary learning in foreign languages.

1. Equipment description

Thirty iPad 2 (with associated software applications including electronic dictionary, character tracing software, etc.) and 30 paper dictionaries will be purchased. The iPads will be used to digitize the existing K2 Gym materials and make the Gym itself portable. The digital K2
Gym on the iPad will be made available to students. By enhancing its flexibility, the project aims to reinforce educational support to the students in JPS (and subsequently other) units.

Increasingly, students use multi-functional devices such as mobile phones and/or laptop computers equipped with various types of dictionaries in their studies. However, the use of such devices is not desirable in exam situations unless the internet connection can be disabled in the room. This was precisely the case in JPS314 (Reading for Specific Purposes) which I convened in Semester 1, 2011. As it was not possible to locally control the internet connection, some students who ordinarily depend on digital technology needed to borrow a paper dictionary when they took a reading test. Having witnessed their lack of basic skills to use a conventional dictionary and to recognize characters motivated me to acquire standard reference materials that can be loaned to students during their studies. By equipping the current K2 Gym with educational resources in both analogue and digital formats, the project can truly be transformed into out-of-class language activities.

The value of the conventional dictionary is that it can provide explicit information on the lexical frequency in sequential order (Hiragana syllabary in the case of Japanese). In other words, whether words beginning with a letter A is more or less frequent than words beginning with a letter Z is transparent in the paper (but not electronic) dictionary. Knowing this type of distributional pattern of the target language is very important. Possibly, this knowledge enhances bootstrapping capabilities in native-speaking infants and adult foreign language learners and enables them to “crack the language code”.

2. Alignment with University-wide objectives

Broadly, this project aims to address the following goals of the Academic Plan:
1) To provide an inspiring educational experience by i) delivering relevant, future-focused and high quality programs, ii) supporting student and lifelong learning and iii) preparing students for the future.
2) To build a diverse and inclusive culture by i) attracting and retaining culturally and socially diverse students and staff, ii) producing ethically engaged graduates in local and global communities and iii) building on the diversity of our students to promote cross-cultural understanding.

More specifically, this project addresses the issue of character/vocabulary learning in foreign languages in general and Japanese in particular. There is the accepted wisdom among language and education researchers that strong vocabulary learning skills are crucial for developing reading/writing skills and these skills are presumably related to academic success.

As mentioned above in the Equipment description section, students frequently use multi-functional devices such as dictionaries on the mobile/laptop in their learning. While this is not a problem in itself in classroom, it is not desirable in more controlled situations such as the exams. This is related to the issue of ethical academic conducts. Excessive dependency on digital technology also has the negative effect of eroding basic skills needed for consulting reference materials which is indispensable not only in foreign language studies but throughout one’s life span. Thus, students need to understand that pursuing one’s convenience is not the ultimate objective of responsible learning, as it may interfere with genuine long-term learning.

With respect to promoting cross-cultural understanding and getting students/staff engaged in local/global communities, language plays a crucial role as a basic, efficient and powerful tool. Any form of learning takes time, especially a complicated system such as language. Communicating in language other than one’s own is a significant contribution an individual could make in human communication processes in a globalized world. In the process of
gaining proficiency in foreign languages, students learn to be open-minded, tolerant and considerate to others.

3. **Student learning enhancement**

The equipment will enhance student learning by providing flexible and reinforced educational support for foreign language learning in general and Japanese in particular. The JPS students will continue to be supported in the physical K2 Gym that will be open on Friday afternoons. They will be able to develop basic skills to use reference materials such as dictionaries in the physical as well as virtual space. The basic concept and approach could be generalized to other languages which do not require the acquisition of new characters, as vocabulary learning is an integral part of any foreign language learning. Students frequently express an interest in translation studies and we can incorporate translation practices as one of the activities. The equipment can be shared with the existing units (e.g. JPS314 Reading for Specific Purposes with 28 enrolments) which I convened in Semester 1, 2011. Assessments for this unit included 2 reading tests where students were allowed to use a dictionary provided it is not multi-functional.

Expected outcomes of this project include a higher level of engagement and satisfaction with the learning experience by JPS students in the Department of International Studies. By involving postgraduate/senior undergraduate students with adequate language skills and willingness/enthusiasm to help junior students, we aim to achieve sustainability without taxing the academic staff excessively. This project will also generate tangible outputs as in papers in top-class journals such as *Japanese Studies, Language Learning, Studies in Second Language Acquisition* among others.

Upon successfully completing this project, we will apply for additional funding to ensure continued support to the students. It is envisaged that, in the future, K2 Gym can incorporate other activities such as “reading marathon” where participants are engaged in an increasing amount of rapid reading which enhances contextualized vocabulary learning. This can be followed up by more sophisticated linguistic activities such as text summarizing, oral presentation, debate, translation/interpreting, etc. Thus, the digital/portable K2 Gym can function as a virtual Japanese library. If this can be achieved, the participants are expected to become independent, strategic and persistent learners and experience a greater sense of satisfaction and achievement in their language learning.

4. **Project Management and Budget**

The project will be managed via regular K2 Gym sessions. TRAN822 students who need to satisfy their practicum requirements will be invited to participate in the project as before. They supervise the K2 Gym on Friday afternoons, monitor/record the level of activity (e.g. the participants’ ‘check-in’/‘check-out’ times, which tasks they completed, etc.) and report to the chief investigator who will oversee the project. The chief investigator will be on OSP in Semester 2, 2011, so the actual K2 Gym will operate in 2012. Arrangements for equipment purchase will be made prior to her departure.

**Budget with brief justification**

(1) Equipment: **$21870 (to be funded under the Teaching Equipment Scheme and expended in 2011)**

(i) iPad2 (16 GB) ($579 x 30): $17370
(ii) Expenses for purchasing other relevant applications for iPad such as English-Japanese dictionary published by commercial publishers, character tracing materials, etc: $3000
(iii) Paper dictionary ($50 x 30): $1500
The core cost of this project is the purchase of 30 iPads where K2 Gym training/testing materials will be made available and associated software applications. Although the digital wave will not be reversed, we will also encourage reinforcement of basic skills crucial for foreign language learning. For this purpose, 30 paper dictionaries will be purchased. Upon the completion of the project, they will either remain in the Japanese Studies Section or transferred to the main library as appropriate.

(2) Personnel: $15207.28 (to be funded under the Priority Grant Scheme and expended in 2012)

(i) Teaching/marketing relief for JPS language units (Semester 1 & 2, 2012): $8831.72
$115.74 x 52 hours + $1023.14 (17% on-costs) = $7041.62
$38.58 x 40 hours + $262.37 (17% on-costs) = $1805.54

Classroom teaching relief of 2 hours (original tutorial) per week and 40 hours of marking relief for the whole of 2012 are requested to allow the chief investigator sufficient time to oversee the project. The chief investigator will be responsible for designing pre- and post-tests, ensuring that their availability, data collection/processing analysis and presenting/publishing the results. This requires a substantial amount of uninterrupted time and attention. It is, therefore, essential that as much teaching/marketing relief as possible be secured to ensure continued high-quality outputs.

(ii) A research assistant (RA) at Level 6 Step 1 ($45.13 x 120 hours + $920.65 (17% on-costs) = $6360.12)

RA will be recruited from postgraduate/senior undergraduate students in Departments of International Studies and/or Linguistics. RA’s primary role is to transfer the existing K2 Gym materials to 30 iPads, manage the equipment loans and support TRAN822 students who supervise the physical K2 Gym activities on Friday afternoons. RA will form the vital part of the project. As resource personnel, RA will informally interact with and provide assistance to the participants under the guidance of the staff.

Total funding sought: $37077.28 ($21870 in 2011 and $15207.28 in 2012)

References: