In this paper, we report on the pilot stage of development of CALL courseware, entitled "Kagoshima Academic Writing Space" (KAWS) for introductory academic writing courses. The paper reports on the following three stages of development: 1) theoretical background; 2) technical and organizational design; and 3) results of pilot studies in 2004, 2007 and 2008. The courseware may be used as self-study material, in-class material, or in combination with other materials. It is also packaged in two versions: a Web version and an offline USB version, both of which include DokuWiki as primary writing practice platform with links to tools, such as WebLEAP and ETS CriterionSM. The Web version also uses Moodle to provide interactivity lacking in the html-based materials.

1. Introduction

The use of CALL materials in Japanese universities has become increasingly common since the late 1990s. In recent years, the diversification of the "General English" curriculum has stimulated the development of CALL materials designed for use in skill-specific courses, such preparation for standardized proficiency tests. Few CALL materials have been developed for writing courses, particularly those at the more advanced level.

In this paper, we report on the pilot stage of development of CALL courseware, entitled "Kagoshima Academic Writing Space" (KAWS) for introductory academic writing courses. The paper reports on the following three stages of development: 1) theoretical background; 2) technical and organizational design; and 3) results of pilot studies in 2004, 2007 and 2008.

KWAS aims to create a learning environment that raises metacognitive awareness of the salient characteristics and cognitive processes of academic writing. The courseware follows the five design guidelines outlined in Chan and Kim (2004): 1) maximizing interactivity and increasing learner involvement; 2) catering to individual preferences and abilities; 3) facilitating the acquisition and use of strategies; 4) encouraging and enabling inductive learning; 5) aiding cognitive processing and increasing metacognitive awareness." The courseware also encourages learners to apply their knowledge of academic writing in Japanese to academic writing in English, and, depending on individual needs, to learn more about academic writing in Japanese. The courseware is also designed to fit the 90-minute-once-a-week structure of university classes in Japan.

2. Outline of Materials

"Kagoshima Academic Writing Space" is flexible for both learners and teachers. It may be used as self-study material, in-class material, or in combination with other materials, such as textbooks and websites. KWAS has its origin in "Miyako Academic Writing Space," a 10-unit set of html-based materials developed by Robert J. Fouser at Kyoto University. These materials consisted mostly of explicit descriptions of academic writing with an interactive exercises interspersed in the reading. Upon receiving a Grant-in-Aid from the JSPS in 2007, five units were adapted for use within Moodle, and new exercises designed to increase interactivity were developed. In 2008, a Japanese translation of the English text was produced to help students who wish to check their understanding of the English descriptions.

Several additional tools have been added to the materials since 2007. WebLEAP, a Java Web corpus analysis tool that was originally developed by
Yamanoue Takashi has been incorporated into the project, both in a USB and Web version. Links to other supplementary materials, such as ETS CriterionSM and online dictionaries have been incorporated into the project. Original plans called for using AbiWord as a practice writing space, but DokuWiki was chosen instead because each draft can be saved, and compared with subsequent drafts and the final product. DokuWiki can also be used on easily on a USB, without the need to login. Files in DokuWiki are saved as text files, and can be accessed without going into a database. A demo version of USB-based system was developed for the World CALL 2008 presentation and will be tested in pilot studies in 2008 and 2009.

3. Pilot Studies

The first pilot study was conducted in 2004 in a second-year writing class of 30 students at Kyoto University. Students used ten units of "Miyako Academic Writing Space" and completed a ten-page academic paper in English. Students also wrote writing journals each week to reflect on their progress in writing. A questionnaire on the materials showed that students were pleased with the content, but found the materials somewhat difficult to read on the computer screen.

The next pilot test took place in 2007 in two first-year writing classes of 12 students each at Tokyo University. Five units of "Miyako Academic Writing Space" were adapted for use in Moodle. Using Moodle created a more interactive environment than the html-based materials. Writing assignments using the "exercise" and "forum" functions of Moodle allowed teachers to provide open and private feedback on student writing. The "forum" function allowed students to share ideas with and to learn from each other. A questionnaire at the end of the semester showed that students were pleased with the contents, but that they found onscreen reading burdensome. They also found the Moodle exercises helpful. This confirms the findings of the 2004 and suggests that students have clearly defined views of what is appropriate for onscreen reading.

A pilot study at Kagoshima University was also conducted in 2007. A USB version of WebLEAP was distributed to a first-year English class of 50 students. The class required short writing assignments, and students were encouraged to use WebLEAP to check their writing. Though clear instructions were given, few students used the USB, and it was difficult to determine those who had. This suggests that clear instructions and frequent follow up is necessary to show students tangible benefits of using tools, such as WebLEAP.

The most recent pilot study took place in a small writing class for three graduate students at Kagoshima University. This class used the html-based materials linked to a class site in Moodle. The class made extensive use of ETS CriterionSM to encourage students to improve their writing as they apply what they learn in the materials and other supplementary materials. Results showed that students made considerable improvement over the semester, particularly in organization and paragraph development.

4. Conclusion and Future Directions

Conclusions from the pilot studies suggest that materials with explicit explanations about academic writing help students to become aware of the style and conventions of academic writing. In structured tasks, most students are able to apply this knowledge effectively, which suggests that materials that increase metalinguistic awareness of academic writing are effective improving student writing ability in a relatively short period of time. In the pilot studies, students generally had a positive impression of the explicit explanations and the organization of the materials, but that they were not positive toward onscreen reading. Student impressions of materials are critical in encouraging students to use the materials because, as in other areas of learning, materials must reach a certain level of user-friendliness so that students will actually use them.

Revisions after each pilot study and ongoing extensions have produced a system as described in Fig. 1 below.

DokuWiki is the main practice writing space, with explicit descriptions of and exercises related to academic writing presented in online versions (Moodle and html-based Web), and an offline stand-alone html version. The entire system may be used offline on a USB or complete online, depending on needs. A hybrid system of online materials and an offline DokuWiki writing space is another possible approach. This hybrid system will be piloted at Kagoshima University in the fall of
2008. Teachers and students are free to develop their own hybrid approaches depending on their needs and technological environment.

The combination of wiki-based writing practice and explicit explanations of academic writing and related practice tasks forms the basis of the system of courseware that will be completed in 2009. The benefits of using wikis, particularly the capability to compare versions will be explored in detail in future pilot studies. Future developments also include use of "Moodle Lite," a mobile version of Moodle developed at Kagoshima University that can be accessed on Japanese mobile phones and other mobile devices, such as PDAs and iPod Touch. Incorporating Moodle Lite into the courseware opens the door to development of various vocabulary and mechanics exercises. Another area of future development is incorporating tools into the DokuWiki editing window and interface and into the USB-based version of Firefox that is used to access DokuWiki.

Acknowledgements

The authors would like to thank the Japan Society for the Promotion of Science (JSPS) for providing funding for the research with a Grant-in-Aid (Project No. 19500810) from 2007-2009.

References


