

Introducing Computer Technologies to Asian Languages Programs¹

By Ryuko Kubota and Jan Bardsley

Computer technology has become integral to all aspects of college life today, offering an important tool for coordinating, publicizing, and teaching in every kind of campus program. Far from being an exception to this rule, foreign language programs are often in the forefront of employing innovative methods to integrate computer technologies into the classroom. While Asian language instructors, too, are developing effective means for using computer technologies, our efforts are often hampered by insufficient funding, by the lack of technical support staff knowledgeable in Asian languages, and by a most basic lack of space and hardware. Yet, as this article will show, careful planning, flexibility, and the cooperation of campus personnel can enable instructors to meet these challenges and launch successful Asian language computer technology projects.

We learned about such problems firsthand and arrived at various solutions in spring 1998 when we conducted a project to expand the instructional use of computer technology in a pilot project in an Asian lan-

guages program at a major state university. While this pilot project included such activities as computer training workshops for faculty and the construction of a program homepage, we primarily focused on using computer technology in an advanced (sixth semester) Japanese language class of fifteen students. Throughout the semester, we found that this project constantly required us to think specifically about the needs of the target course and the directions of our University's computer technology policies. We also saw the value of learning from other language instructors' work in this field and from all those working in computer technology at our own University.

In order to generalize from our experience, we have organized our article as an explanation of a series of key steps that any instructor must consider when planning a computer technology project for an Asian language program. Though we have listed these in numerical order, we must emphasize the *recursive* nature of our movement through these steps. In other words, the choices made at one step must often be revised because of limitations or opportunities encountered at a later step. To clarify this, we have described our decision-making process and the revisions to those decisions that occurred throughout the project. We intend that these general suggestions, grounded in the particularities of our own experiences this in spring 1998, will stimulate strategies for more effectively and efficiently conducting future Asian language technology projects.

1 DEFINE PEDAGOGICAL GOALS

Computer technology must work to help students reach certain learning goals. Thus, it is an instructor's teaching goals, and not the availability of new technologies per se, that must determine how and when computers are incorporated into the classroom. This makes identifying one's pedagogical goals an important first step in planning a technology project. Though these goals may need refining because of limited access to computer labs or the lack of technical support, for example, they provide an important blueprint for defining what you ultimately hope to accomplish, and will facilitate your gaining the administrative assistance and the funding you need.

In formulating these goals, instructors first need to think broadly about the objectives for each successive semester of a given language program and various goal areas. If students were to complete a four-year Chinese language program, for example, what skills would you ideally expect them to have attained? How would each year of the program build upon these skills? In thinking about program goals, teachers may find it helpful to consider the recent *National Standards in Foreign Language Education* which address five goal areas: namely, communication, cultures, connections, comparisons, and communities.²

After you have determined these overall objectives and the target goals for the courses in the program, choose one course as a basis to create a pilot

computer technology program. While instructors may eventually include computer technology in each year of a language program, it is useful to identify just one course to serve as the basis for a pilot project. Conducting this localized project will provide the information and experience needed to expand the use of technology more easily throughout the program.

In our case, for example, we decided to integrate the computer in a sixth-semester content-based Japanese language class on culture and society. The overall goal for this course was to develop listening, speaking, reading and writing skills in Japanese through learning about various aspects of Japanese culture and society. Since computer technologies offer rich cultural information and enhance cross-cultural communication, we decided to conduct a pilot project in this course. (For more detail, see Kubota, forthcoming.)

2 OBTAIN GENERAL INFORMATION ON COMPUTER-ASSISTED LANGUAGE LEARNING (CALL)

Before developing specific class projects based on the pedagogical goals, you need to know what you can do with computers in Asian languages classrooms. Research has shown that using computer technologies can and does reinforce learning foreign languages, and thus, in itself, prompts new ways of conceptualizing language learning. But how can already busy instructors learn the research of yet another field? Here, we suggest a few easy ways to acquaint yourself quickly with this field and to plug into a network of useful resources.

First of all, visit the Web

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sites of institutions that are already using computer technology. These give you a good idea of an expanded use of technology, the kinds of techniques being used, and some of the computer problems—and their solutions—as experienced by other Asian-language instructors. They describe, for example, how to use Asian characters on the Internet, provide information about software and software test models, and suggest teaching tools.

3

PLAN A PILOT PROJECT

After identifying learning goals and choosing one course in which to introduce technology, instructors need to plan specific class projects and activities. At this point, one needs to decide where computer technology will prove most effective, and define what resources are required.

For instance, in our own case, we decided that the learning goals of the sixth-semester

Chinese at University of California at Davis:

<http://philo.ucdavis.edu/CHINESE/chinanet.htm>

Japanese at Purdue University:

<http://www.sla.purdue.edu/fll/JapanProj/>

and at MIT: <http://www-japan.mit.edu>

For a useful Web site devoted to language teaching using technology in general, visit “Kathy Schrock’s Guide for Educators” at:

<http://discoveryschool.com/schrockguide/world/worldrw.html>

Secondly, you can join the listserv for instructors working in your target language. The listserv is an on-line discussion group, and a good place to post your own questions, to try out new ideas, and to get advice from other Asian-language instructors. Here’s how to join three listservs:

Japanese class³ could be furthered by several projects, two of which can serve as good examples here. In one of the projects, students in pairs were going to choose a topic in Japanese culture, conduct research on the topic, write a short paper in Japanese, publish the paper on the World Wide Web (WWW)

Foreign Language Teaching Forum (FLTEACH):

Send the message “sub FLTEACH <your name>” to:

listserv@listserv.acsu.buffalo.edu

CHINESE Listserv:

Send a message “subscribe CHINESE <your name> to:

chinese-request@kenyon.edu

Japanese Teachers and Instructional Technology (JTIT):

Send the message “SUBSCRIBE JTIT-L <your name> to:

listserv@psuvm.psu.edu

Thirdly, for a broad overview of the literature in this field, we recommend the following edited books: Mui-skens (1997) and Warschauer (1996) for theory and research on the incorporation of computer technology in language learning, and Warschauer (1995) for practical applications, including classroom techniques and activities using computers.

with images and links to relevant Web sites, and give an oral presentation in class. In the other project, students were going to communicate every week with Japanese students in Japan using e-mail on cultural topics and receive feedback on their culture project from the Japanese students.

The objectives of the first project on culture were to de-

velop reading skills using Japanese Web sites, to develop writing skills, to develop oral skills for presentation, and to learn about various aspects of Japanese culture by listening to presentations given by classmates. The objectives of the second e-mail project were to develop reading, writing, sociolinguistic skills, and cultural awareness through contrasting and comparing views on a cultural topic. Research has shown that Computer-Mediated-Communication (CMC), which enables human-to-human contact rather than simply human-to-computer work, is very effective. Also persuasive was the fact that e-mail activities had been successfully employed in other Japanese language programs in the U.S.

Having chosen this activity, we determined that we needed access to computers that could navigate the WWW, create a Web page, and provide e-mail with Japanese language capabilities. We also needed students in Japan who had access to e-mail and were willing to participate in the project. As we will discuss in the section on locating resources, the technical constraints of our campus e-mail server forced a change in our plans. We mention this to re-emphasize the recursive nature of this process, and the need for instructors to modify plans and decisions throughout the project.

Another consideration in planning the specific activities of the pilot project is the computer literacy of the students and instructors. When planning this kind of project, the instructor naturally considers the range of language skills of the students, but it is also important to think about the students’ familiarity with computers and their “comfort level” in using them. Contrary to the common image

of college students’ computer use, the fact is that not all students are expert in computers. Probably most will never have used one for working in an Asian language.

Consequently, it is a good idea to incorporate some basic training sessions into the whole project. If students in a Japanese class, for instance, have never used computers with Japanese functions, a logical step is to begin training with word processing. The instructor can assign journal writing using word processing in the beginning of the semester to get students accustomed to writing on the computer. If the project involves advanced skills in technology such as creating a Web page, and if the technical services unit on campus offers workshops, the instructor can require that students take such workshops.

The need to help students acquire computer skills points to the prior need for instructors to become thoroughly familiar with the technology they wish to employ. Even if you have the aid of technical assistants, you can expect that students will come to you with questions involving both the target language and the new technology. This suggests that it is best to start small, with technology that you have mastered.

4

FIND RESOURCES ON CAMPUS

Once you have defined pedagogical goals and made specific plans for introducing technology in your classroom, you need to find out what resources are available on your campus. The first step is to locate a liaison person or people in the technology services unit, which most institutions have. It is crucial to find someone knowledgeable, helpful, and interested in your efforts to

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incorporate technology in the campus Asian language program. You will need their advice in resolving technical issues, their help in winning a share of the computer resources on campus, and their guidance if you purchase equipment or software. In short, at least one member of the technical staff must be willing to be on your team. We were fortunate to find staff members of our university technology services unit who provided us with technical and logistic guidance.

Working with your liaison person, you need to determine how your students will gain access to computers with Asian languages capabilities. If you have, or are planning to procure, funds to purchase computer equipment, you need to locate space for these computers. In thinking about whether or not a certain space will work, you need to consider the hours it can remain open, who will supervise its use, and how students using the space will gain the technical assistance they need. If you do purchase your own equipment, you also need to plan how (and how expensively) the hardware and software will be maintained. When these plans have been made, you are ready to begin thinking about what kind of computers and software you need to buy.

If your only option is to use existing computer labs, you need to ask somewhat different questions. You need to obtain information on where computer labs are located on campus, which platforms (PC and/or Macintosh) are used, how many terminals there are, and what the hours of operation are. Based on this information, you can decide which lab is the most convenient. (This investigation also tells you whether or not you should push for other equipment to be purchased.) You may also want to consider finding a class-

room equipped with hardware and software for class demonstration and hands-on practice for students. When resources are limited, students may have to share terminals. To ensure the quality of hands-on practice, one terminal should be shared by no more than two students.

One of the most fundamental, difficult, and increasingly political decisions you will have to make is whether to use a PC or Macintosh platform. In our case, after several meetings with campus technical personnel and the manager of the foreign language lab, we tentatively planned to use the foreign language lab that had PC terminals with Windows 95. We decided to use the PC platform because our campus had so many more PC terminals and, in fact, is moving toward an all-inclusive PC environment. We believed that using the PC would give our students the widest access to computers on campus. In testing software, however, as the next section explains, we found that Macintosh-compatible software worked better for our particular needs, and thus, had to rethink our choice of computer platforms.

You also need to know about your campus e-mail server, and if it has the capability to support applications in Asian languages scripts. As it turned out, our campus e-mail server did not allow us to find an immediate solution for using Japanese e-mail applications in a lab environment. Consequently, the idea of working with Japanese e-mail had to be abandoned, which demonstrates again the recursive nature of decision making.

5

IDENTIFY SOFTWARE

In order to accomplish the projects presented here as examples, you will need an

application that allows browsing and composing on the WWW. You will also need a word processing application, if your students have never tried word processing in Japanese. New instructional and word-processing software for Asian languages, both for PC and Macintosh platforms, is appearing all the time. How do teachers find out about this software? How do we get copies and what should we look for in testing them?

For Chinese and Japanese software, we suggest visiting the UC Davis, Purdue, and MIT Web sites listed in step two. These include links to the Web sites of software companies that have instructions on how you can download demo versions for testing. You may find it useful to try both PC and Macintosh software if you have both kinds of hardware available to you. When testing the software, consider how easy it is to learn, how quickly it operates once you have learned it, and how effective it will be in working towards the learning goals you have already identified. Consider, too, in looking at instructional software for learning Chinese characters, for example, if students could use the application on their own without much assistance from the instructor, and if the program is sufficiently interesting in itself to motivate them to use it rather than a more traditional method.

If you have access to both PC and Macintosh platforms or are trying to decide between them, you will find that making software decisions is a key step in selecting which platform to use. In our case, after testing PC and Macintosh-compatible software, we found the Mac-compatible software easier to use for Web-based activities that involve input in Japanese characters. Given that our campus technical assistance desk would

be capable of providing only minimum technical support to Japanese language students, and that the instructor was more familiar with Macintosh, we decided that using Mac-compatible software would be best.

This meant that we had to discard our plans for using PC and Windows, and once again, consider the issue of which space on campus could meet the project's needs. Having gone back to the previous step, we found three campus labs in which a total of eight Macintosh terminals were available for Japanese and Chinese word processing, Web browsing, and Web composing.⁴

Our experience demonstrates how difficult it can be for any relatively small Asian languages program to locate appropriate space. This underscores the need to work closely with staff in related units on campus, and points to the complexity of making hardware and software decisions before the actual teaching ever begins.

6

SECURE FUNDING

The push to integrate computer technology into all kinds of student learning activities has clearly become a priority on most campuses. There may be initiatives on your campus, and money to support them, that you can use to initiate an Asian languages technology project. The Development Office, the Contracts and Grants Office, and the various offices involved in computing on campus can suggest further ways to procure funding from your institution and from off-campus sources as well. Not only will establishing a good relationship with these offices be key to the success of your project, but it also offers another opportunity for you to create an active presence for the Asian language program on campus.