Creating DVD Materials for English Language Education:
A Step-by-Step Approach

Stuart Walker
Jerry Halvorsen
Norihito Kawana
halvorsen@ed.siu.ac.jp
Sapporo International University

Abstract

The authors initially chose a theme which had always concerned them: how to motivate students in their various college English classes. Building on their past experiences and experiments in the field of motivation, they decided to use an approach using the latest computer-related techniques. Then they chose a theme which they thought would appeal to young people, viz. enjoyable outdoor activities. Using a digital video camera, they filmed over 30 different outdoor activities in Hokkaido and created an interactive textbook for their students with an accompanying CD-ROM based on 15 of these activities.
Introduction

This report details the use of new computer hardware and software to motivate students to respond in an interactive environment to video clips of interesting outdoor activities. Video clips of 15 different outdoor activities formed the basis of a textbook supplemented by a CD-ROM and divided into 15 chapters. A story, a narration, and a series of English exercises accompanied each video clip. Software programs, embedded in all parts of the accompanying CD-ROM, allow students to use their mouse to manipulate the material for optimal learning. The underlying purposes of the authors in organizing the material on the CD-ROM were:

(1) to encourage students to become personally involved in the subject matter presented by the video clips, the story, the narration, and the exercises;
(2) to present a multi-skill-building environment featuring speaking, listening, pronunciation practice, reading, writing, and grammar and vocabulary exercises.

The text is still in draft form and has not been used in the classroom. Once it has been, the authors intend to present the results.

Developing the pedagogical concept

All the authors — one Japanese English teacher and two American English teachers — had had many years of classroom teaching experience prior to embarking on the current project. They began by formulating a pedagogical approach which would fit the attitudes and experiences of their own college students. Such personalization is recommended by Brown (1994), Skehan (1996), and Willis, D. (1996).

Most of the outdoor activities which the authors filmed and used in their textbook were activities which appeal to young adults. Based on research by Dornyei (2001a) in the area of motivation, the authors concluded that the familiarity and immediacy of the activities filmed and used in the textbook would have a positive motivational effect on their students. Dornyei (2001a) states “in order to make these texts motivating, we need to relate the subjects to everyday experiences and backgrounds of the students (p. 64).

In formulating their pedagogical approach, the authors also took note of the increasing importance of Computer Assisted Instruction (CAI) (Windeatt, Hardisty, & Eastment,
The authors agree with Dornyei, (2001b) who stated that the use of technology increases learner autonomy thus increasing motivation. Aiming to incorporate the most recent technological advancements in computer-based education, the authors had to choose between two formats- DVD and CD-ROM- for presenting their video materials in the textbook. DVD produces nearly studio-quality video which is better than CD-quality audio (Taylor, 2003). However, the authors concluded that for the present textbook, a CD-ROM would be more appropriate as not all schools have an adequate number of DVD-equipped computers.

Step 1: Video filming

The authors are not professional cameramen; however, they decided to do the filming themselves for their project for two reasons:

1. The expense of hiring a professional cameraman was beyond the limits of their budget, and
2. they thought that a certain amount of amateurish technique in the video clips would be more interesting for their students, because students might feel more curiosity about, and interest in, material produced by their own teachers.

Step 2: Selection and editing

The authors managed to assemble video footage of satisfactory quality for 36 summer and winter outdoor activities in Hokkaido (see Appendix B). The next step was to select the best 15 videoed activities for inclusion in the textbook’s 15 chapters.

Following this selection, the Japanese author-editor reduced the video footage of each filmed activity to an approximately 35-second video clip collage. He attempted to collect within this limited time a sequence of all the essential aspects of an activity.

Step 3: Creation of textbook materials, and their use

The two native-speaker authors divided the 15 video clips evenly between them and composed the materials for the textbook. The textbook consists of a conventional paper
workbook and a supplementary CD-ROM. The Workbook contains the following parts: a story, reading comprehension questions for the story, vocabulary and grammar exercises related to the story and a composition exercise. The Workbook contains two additional sections which the student completes while viewing and listening to material on the CD-ROM: (1) a video clip narration cloze exercise and (2) a video clip questions exercise.

The CD-ROM contains three parts. First, the story appears again, with the same text as in the Workbook. On the CD-ROM, each of the ten difficult words or phrases is preceded by an icon. Students can click on an icon to activate embedded software which displays a Japanese translation. The second part of the CD-ROM is “Story Practice,” which contains a recorded narration of the story, a vocabulary exercise, and a typing dictation exercise. The third part of the CD-ROM is “Video Clip Practice,” which contains a recorded narration of the video clip and a recording of the video clip questions. As noted above, students write their answers for these latter two recordings in the Workbook. (See Appendix A for a sample chapter of the textbook.)

(a) Story

The first step was to write a story of approximately 135 words for the Workbook and the CD-ROM. One of the authors also recorded it for the CD-ROM. Whereas the video clip narration (see Part (e) below) closely tracked the video clip itself and explained the actions and scenes contained therein, the story was only loosely related to the material on the clip (for example, the history of Telemark skiing).

While composing the stories, the authors kept in mind the relatively low level of English ability of their target audience, their first- and second-year Japanese college students. They minimized complex sentences with dependent clauses, controlled the vocabulary, and limited the length of each story. The authors considered the attitude and confidence of their reading audience. Waring (2000) found that readers who do not have to struggle to decipher complex sentences, and do not have to use their dictionaries over and over again while reading an extensive reading, are more likely to develop a more positive attitude toward reading English stories.

Although the authors controlled the level of difficulty of their materials to match the level of their students’ ability, they did insert several difficult items of vocabulary and grammar
in each story. Their aim was to present a small amount of new material in each chapter embedded in material already familiar to their students. In so doing, they were following Krashen’s (1985) argument that learners are able to acquire knowledge that is based on input that includes material that is at a level just slightly above their current level of comprehension.

(b) Reading Comprehension Exercise

The authors composed a reading comprehension exercise directly after the story in the Workbook. Such exercises usually require students to review the story to verify their answers. Researchers in the field of extensive reading report that reading comprehension exercises deepen readers’ understanding of the story and the vocabulary contained therein (Richards & Lockhart, 1994).

(c) Vocabulary

An insufficient knowledge of vocabulary is one of the most common complaints heard by teachers of foreign languages (Nation, 1994). Teachers must develop techniques to ensure that their students retain new vocabulary more effectively. One technique which has been shown to be effective is recycling vocabulary throughout the textbook. Lewis (1997) states

...each time you meet a word in context and at least partially understand it, you understand more of its meaning, and gradually integrate it into your lexicon for immediate access (p. 51).

This means that once a new item has been introduced, it must be used again (and again) later in the textbook. This gives students the opportunity to see the item in various contexts.

The vocabulary exercise in the Workbook of each chapter tests students on the ten most difficult words or phrases in the story. The authors wrote a sentence for each word or phrase in the Workbook. They substituted a blank in place of the item to be tested, and then put a list of the ten items at the end of the 10-sentence exercise. Students select the correct item from the list and write it in the blank to complete the sentence. The authors recycled these ten items in each chapter in the “Story Practice” section of the
CD-ROM. They composed and recorded ten new sentences, one for each vocabulary item. By clicking on the “typing” icon in the “Story Practice” section, students listen to these sentences and type them onto the screen. Selected material from each chapter, particularly vocabulary, also appears in the review exercise which comes at the end of each chapter, and in the quizzes which students do after every five chapters (see Step 5 below).

(d) Grammar

For this exercise, the authors composed five sentences. Each sentence contains four words or phrases in bold print. Students must find the one word which is grammatically incorrect. Later the teacher can review students’ answers and provide explanations in class.

(e) Video Clip Narration

The next step was to compose and record an approximately 35-second narration of the video clip of the same duration. The narration tracked the video clip closely and described each phase of it. On the CD-ROM an icon was inserted on the screen so that students can click on it to listen to the narration as many times as they want to complete the related cloze exercise in the Workbook (see Part (f) below).

The speaking speed adopted in the narration was slightly slower than natural native speed, with slightly clearer enunciation than normal. The authors decided not to use 100% natural English spoken at native-speaker speed because, based on their experience, their average student cannot cope easily with unmodified English conversation. By making the recordings more accessible to their students, the authors hoped to provide a confidence-enhancing element in their materials.

(f) Video Clip Narration Cloze Exercise

Next, the authors created a cloze exercise from the text of the narration. Cloze exercises have been found to be an effective means of testing both knowledge of vocabulary and listening comprehension skills (Childress, 1995). In this case, the cloze exercise was designed to test the students’ understanding of the recorded narration.

(g) Video Clip Questions
There are five questions in this exercise which test various skills. The questions do not appear on the screen. Students click on the “Video Clip Questions” icon on the CD-ROM to hear them. They are instructed to use the Workbook to write the questions and then choose the correct answer for the first four questions. The multiple-choice answers are printed in the Workbook.

The first four questions, but not the fifth, are multiple-choice. Students answer the first two questions by listening for information contained in the video clip narration. They answer the next two questions by closely watching the video clip itself. The latter two answers are not available in the audio section. The fifth question asks students to write personal opinions about a topic related to the video clip.

(h) **Composition**

The authors made the last exercise in the chapter a writing exercise. They selected five words or phrases from the story, all of which appear in the Vocabulary section (see Part (c) above). Thus, the Composition exercise not only provides writing practice, but also reinforces learning from the Vocabulary section.

In this exercise students are asked to use the five words or phrases to write five complete sentences. The Teacher’s Manual suggests that after the writing practice has been completed, students should sit in groups of 3-4 and do peer evaluations and corrections of one another’s sentences. Meanwhile the teacher can circulate among the groups and answer questions and offer advice on correct usage.

**Step 4: hardware, software and CD-ROM**

After the native-speaker authors had completed all the sections of all the chapters, the Japanese author, and technical expert, used the software described below to create the CD-ROM material. Then he transferred the material and the required software programs onto the CD-ROM.

The hardware and software were the following:
Hardware

(1) Macintosh PowerBook G-4 laptop computer (667 MHz) with 512 MB RAM and a 30 GB hard disk drive.
(2) Sharp VL-MR1 digital video camera with 680K pixels.

Software

(1) iMovie 2.0 (freeware)

iMovie was the basic software used for creating the video clips for the CD-ROM. First the editor-author connected the video camera to his computer and downloaded the original video footage. Using the software, he then edited the material to reduce it to an approximately 35-second video clip. An iMovie function allowed the editor-author to insert a title before the beginning of each clip. One native-speaker author then recorded the narration as an additional layer in the same video clip folder. The editor-author also used iMovie to compress the clip.

iMovie contains another function, called “title,” which the editor-author used for creating the materials for the “words” section on the CD-ROM. The editor typed the 10 key words into a box within iMovie. He chose from among a variety of sizes and fonts. Then he adjusted the speed that the series of words flows across the computer screen when the student clicks on the “words” icon on the CD-ROM. The final product was transferred to QuickTime format where it can be viewed.

(2) QuickTime 6.0 (freeware)

QuickTime is used to view the video clip and listen to the narration. It is also used to view and listen to the “words” section on the CD-ROM.

(3) DreamWeaver 3.0

DreamWeaver is software for creating one’s own homepage. It has several functions. One function allowed the editor to place an icon before each of the ten difficult words in the
CD-ROM version of the story. Another function provides a text box in which the editor entered a Japanese translation for each of the words. By clicking on an icon, the student can access the Japanese translation of the word.

(4) JavaScript Security Form Program

The JavaScript Security Form Program was used for the “typing” section of the CD-ROM. The editor cut and pasted this free program into DreamWeaver 3.0. The form, usually used for entering a password to allow the user to proceed to the next page, was modified. In ten password folders, the editor typed the 10 sentences for the “typing” section. Then he inserted the “recording of the 10 sentences in QuickTime format. The user listens to the sentences and types them into the “password” slot. If the sentence is typed correctly, the Security Form function allows the user to proceed to the next sentence. DreamWeaver 3.0 also permitted the editor to place a “hint” icon on the Security Form main page for each sentence. By clicking on the icon, the student can access two hints for each sentence: (1) the recorded English sentence in cloze format; and (2) a Japanese translation of the sentence.

Step 5: Teacher’s Manual

The Teacher’s Manual is aimed at a teacher with a minimum of knowledge about hardware and software, but with some teaching experience. The Manual begins with a description and explanation of the hardware and software needed to operate the CD-ROM. Then there is an explanation of the components of each chapter. The Manual explains the order in which students should complete the components of each chapter, and offers tips on how to teach each section. The Manual also contains answers to all the exercises for all the chapters in the textbook.

At the end of the Manual teachers can find photocopiable review exercises for each of the 15 chapters as well as three quizzes to be used after every fifth chapter.

Conclusion

The authors began with a desire to create a fresh approach to teaching the four basic skills of English. From the beginning they realized the importance of using a theme and
methods which would motivate their own college students. To accomplish this, they chose subject matter which they thought would appeal to young adults living in Hokkaido. They adopted a hi-tech format which they felt their students would be interested in and excited to use. In making the materials for the textbook, they followed the findings of researchers in the field of second-language acquisition. They made all these efforts with the objective of ensuring that their new textbook would be an effective tool for helping their students increase their English skills. Once the authors use their textbook in the classroom, they intend to report the results.
References


Appendix A-1

CD-ROM Activities

1) Click on the "speech" icon to hear the story and read the story at the same time.

The sea kayak was first used for transportation by Eskimos in Alaska. Nowadays, it is mainly used for recreation. The kayak is made for one or two people. Before getting in the kayak, you put on a waterproof shirt, a life jacket, and waterproof rubber shoes. The person at the back of the kayak steers with a rudder. The kayakers use paddles to move the kayak. You can paddle along rocky cliffs, and on the open sea. You can even enter caves. You can see wildlife on the shore and in the ocean. Whenever you go, paddling on the ocean surrounded by beautiful scenery is a joy. You are a little tired when you finish, but refreshed from the views and from the feeling of being with nature. (128 words)

2) Now read the story again and click on the icons in front of the highlighted words for Japanese translations.

Story Practice

Speech

Verbs

Typing

Video Clip Practice

Video Clip Narration

Video Clip Questions
Appendix A-2

Translation Activities

Word Practice
Typing Practice

Click on the picture button to listen to a sentence. Then type what you hear in the slot.

When you finish typing, click the answer button.

If your typing is correct, you can go to the next question.
If it is not correct, try again until you get the right answer.

Be careful! The first letter must be a capital letter.
The sentence must end with a period.

- Question 1 -
Click on the bird below to listen to the sentence.

- Hints -
Click on the bird below to get some hints.

Transportation will be supplied by the company

Top
Appendix B

List of activities filmed.

1. Ballooning
2. Banana Boat
3. Bird Watching
4. Buggy Riding
5. Canoeing
6. Cross Country Skiing
7. Curling
8. Dog Sled
9. Downhill Skiing
10. Drift Ice
11. Figure Skating
12. Fishing in the River
13. Fishing in the Sea
14. Fly Fishing
15. Golf
16. Hiking
17. Horseback Riding
18. Ice Carving
19. Ice Fishing
20. Ice Hockey
21. Kid’s Fun (Snow Tubing and Long Bobsled)
22. Mountain Biking
23. Running
24. Sea Kayak
25. Sky Sports
26. Ski J ump
27. Smoked Food Cooking
28. Snow Festival
29. Snowboarding
30. Snowman
31. Snowmobile
32. Snowshoeing
33. Speed Skating
34. Team Snowball Fights
35. Telemark Skiing
36. Woodcraft