

Research and Process Writing on the Internet

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Abstract

Asao (1997) lauds use of the Internet in teaching English as “a new paradigm of language learning”. The Internet can be used in two ways. It can be used as a research tool to help students locate and synthesize knowledge and also as a means to communicate their findings and ideas to a world-wide audience (see Rule, 1997). This paper will briefly describe a research seminar that makes use of the Internet in these two ways and discuss some of the basic issues in (a) teaching Internet research and writing as a process, (b) designing attractive but simple homepages, and (c) managing a website that will effectively display student research papers.

For several years now I have been introducing Japanese college students to the histories and cultures of several foreign countries. In 2002 the course was expanded to allow students direct access to the Internet as an integral part of the class. I would like to describe the development of this course and share some insights about (a) teaching Internet research and process writing, (b) designing homepages, and (c) managing a website to display student research papers. Let me begin with the institutional and general background of the class.

Aichi Gakuin has a 126-year history. The junior college, located at the old campus, was created in 1950, but the Department of English Communication began only eleven years ago. The two-year program accepts about 130 students each year for a total of about 260 students. There are thirteen full-time faculty members in the Junior College Division of Aichi Gakuin University, of which two are native English speakers.

Class work in all of my classes is based around discussion groups of three to four students. To prepare for group discussion each student is required to write one page of homework each week. Each group also writes a group report, a page summary of what they talk about in class, including any questions they may have for the teacher.

The Course Without Computers

The present research seminar class began in 1996 as an elective class for first year students. The class met for one 40-minute period a week. Two activities were carried out: (a) Most weeks involved a discussion of several countries, a different country each week. A short history of each country was distributed to students one week before the discussion. (b) There was also a research project for which each student wrote a research paper about a topic involving a foreign country. In the first semester simple research concepts and techniques were introduced. Then the paper was written in five drafts. Draft One was due at the end of the first semester. The next four drafts were spaced out at 2-3 week intervals during the second semester. Each successive draft required one new reference and usually became about 90 words longer.

The printed copies of country histories passed out to students one week before discussion were originally simply text without any photos or pictures to break up the monotony. Later, however, they were posted on the Internet (<http://www.aichi-gakuin.ac.jp/~jeffreyb/#sem>) with photos and images embedded. Links to related websites were also inserted. Dunkley (1997) argues for the use of materials derived from the Internet. In full agreement with him I would add the suggestion that it is valuable for teachers to put their own materials on the World Wide Web as homepages — in Hypertext Markup Language (html) text format, because of the added benefits of *on-screen presentation* and *increased access* to the teacher's own students, other teachers, and students around the world.

Writing papers in five drafts accomplished three important purposes. First it broke the research writing requirement down into smaller bite-sized pieces so that students would not feel overwhelmed and would be less likely to copy material into their writing. Next it drew the students' attention to the process of writing and introduced the concept of rewriting: integrating new information into the text (not simply attaching it to the end of their previous writing) and eliminating material that does not add to the overall quality of the paper. Students learned the difference between *part 2* and *draft 2*. Finally it allowed for comments and self-evaluation that could be acted upon and make a difference in the final product. Starting with Draft Two students had to submit the previous draft along with each new draft, except the Final Draft. In this way the teacher could monitor the progress of each research paper.

The fact that the papers were research papers helped introduce several important concepts: (a) the concept of audience. Students learned that the audience for a research paper is not about to go on an overseas tour. (b) the idea and format of references. They practiced writing references that help their readers go back and find the source material used in their papers. They found where to look for the author's or editor's name, the publisher's name, and the year of publication. (c) the organization of libraries. They learned how to use a library catalog and what the Japanese library decimal system is.

Revived and Expanded Course

This class was discontinued for two years and then revived in 2002 as a required seminar class for 22 second year students. Two important changes have been made in the course: (a) the class meets for two consecutive 40-minute periods instead of one and (b) during the second period the class meets in the computer lab. Students still get printed materials, but they now have class time to view these materials on the Internet, explore the links, and use search engines to find related information on their own. Muehleisen (1997) suggests teachers create their own "starting page" tailored to their own students' specific needs. I have expanded on that idea by creating such a page as the index within a folder that contains my own materials explaining the Internet and how to put student research papers into html text format. The students' research report, which used to all be handwritten, must now be submitted in two formats: a handwritten and a homepage version. Students can submit wordprocessed papers in place of handwritten ones. The advantage of this is two-fold: (a) being able to copy and paste the revised text into the homepage version and (b) not having to rewrite each draft from scratch.

Computers have become a vital tool for producing professional quality papers and for accessing information (Freirermuth, 1997). With this in mind the Junior College maintains a modern computer lab that is available for class and individual student use. In the research seminar students use a 4 by 6 block of i-Macs and are kept in the same groups (which are mixed up several times over the year) they have in the regular classroom. Though the students were already familiar with the basic wordprocessing skills needed to use Microsoft Word, many still needed to learn formatting commands and shortcuts (pressing a letter while holding down the apple key). With a little practice they mastered double-spacing, justifying the right margin, centering headings, changing font face (including bold face and italic) and size, underlining text, undoing mistakes, and saving changes to a document. Using the wordprocessing capabilities of their computers allows students to edit their writing easily. In addition to deleting, inserting, and moving text they can search the text to locate specific words or phrases. A wordprocessed document can also be extremely useful for keeping track of and organizing

lists of useful web addresses.

By viewing the web version of the printed class handouts students learn how to use a browser and to navigate the World Wide Web (WWW) with hyperlinks. The World Wide Web is a huge collection of documents stored on computers called servers located throughout the world maintained by universities (.edu or .ac), government agencies (.gov or .go), businesses (.com or .co), internet service providers (.net or .ne), and other organizations (.org or .or). The most common types of documents include html text format and two photo formats (jpg and gif). Computer addresses called URLs typically start with `http://www.` followed by (a) a server designation, (b) one or more folders, and finally (c) the document. Here is an example:

`http://www.aichi-gakuin.ac.jp/~jeffreyb/draft2/index.html`

The web (www) server at Aichi Gakuin University, an academic institution in Japan is ... **aichi-gakuin.ac.jp**. My folder on the server is ... **~jeffreyb**. Within that folder is a folder for my seminar class' second drafts ... **draft2** ... which contains a document listing students and the titles of their papers ... **index.html**. The title of each paper is linked to the paper itself. By clicking on the title in the index any student, indeed anyone anywhere in the world connected to the Internet, may read any student's paper.

Most of my documents, including the country histories, reside in my main folder ... **~jeffreyb**. Country histories such as

`http://www.aichi-gakuin.ac.jp/~jeffreyb/canada.html`

have external links to documents on other servers around the world — a map of Canada and information on population and area which is posted on the U.S. Central Intelligence Agency's server, for example. My document also contains a beautiful photo in gif format of Niagara Falls that moves, a still photo of Celine Dion, and links to information and photos on *her* website. The photos embedded in the country history are NOT actually on my website, but are imported from these various sites, remotely loaded into the viewer's computer, and embedded into the country history on the viewer's

computer.

After viewing the weekly country handout as a homepage, students are encouraged to conduct their own search for information on the Internet. To do this they use a search engine, such as Webcrawler, Yahoo, or Altavista (see Ryan, 1997). A search engine provides them with a list of links to URLs that contain the word or phrase they type into the search box. The documents at those URLs may also provide further useful links. It is this *linking of documents* from one server to another that gives the Web its name. Without them the Web would not be a web. These links are what give the Web its tremendous power.

Homepage Structure

Once students are comfortable with their browser programs and viewing materials on the Web, it is time for them to learn how to write papers in html text format. Although Davies (1997) claims it can be learned in one week, I advise introducing html text very early in the course to give students with little confidence in the use of computers a greater chance to become comfortable with the technology. In my class they practice making a homepage using one of their homework assignments. First they type the homework text into a wordprocessing program using Microsoft Word 5.1 (English version) or the newer Japanese version already on their computer.

The next step is to introduce the structure of homepages. Here it is important to make a sharp distinction between (a) the computer instructions — the *source document* and (b) the image that those instructions create — the *browser image*. The browser image is what everyone *sees* when they look at a homepage. To *write* a homepage, however, students need to create a source document. The most efficient way to do this is to copy the source document of a browser image that the teacher provides, a template (Davies, 1997). In this way students can concentrate on the *content* of the homepage without worrying about the *design*. Later on various aspects of the design — paragraphing, photos, links, font, and tables — can be dealt with as the need arises. Students learn to study source documents of homepages they like, copy those parts of the html code that look useful and interesting, and insert

them into their own homepages. This compromise incorporates the advantages of two techniques (see Newfields and McGuire, 1997): (1) captured code and (2) writing from scratch.

Students learn to view the entire source document (apple + e) and paste it into a simple wordprocessing document (Simple Text) on their own computer. They learn to identify various parts of the text — the heading, body, and reference section — and distinguish them from the formatting commands. Then they can type or copy their own heading, body, and references into the appropriate locations, save, and view the newly created source document as a browser image. Here the distinction between documents *on the Internet* (accessed by typing the URL into the browser to view a web page) and documents *on the student's own computer* (accessed by typing apple + o to open the appropriate file) becomes important. Students must be viewing the newly created document on their own computer to see the changes. The original document on the Internet will not change. Afterwards inserting simple format commands adds variety and proper spacing to the homepage text.

First Drafts

Towards the end of the first semester students are ready to begin their research project. If sample papers from previous years are available, students are given a printed copy and encouraged to view the web version as well. They are told to choose a country (or smaller location) and a topic. At this point a list of topics arranged by country may be helpful. Such a list could also be posted on the Internet and linked with previous year's papers, which students can browse through.

Two weeks later, the last class before the final exam, students' First Drafts are due. They can be handwritten or typed on a wordprocessor. This counts as a single homework assignment. They bring their drafts to class and discuss them in the classroom. Then in the computer lab (class time or on their own time) students (a) type the handwritten report into a wordprocessor document and (b) transfer the text into a homepage source document. They print those two documents up for the teacher or, if they have trouble with the

printing, submit a note to the teacher telling him that the documents have been saved on their computer in the lab. The teacher can then collect the documents onto his own floppy disc for printing and for posting on the class homepage. The computer documents are then again counted as part of the final exam.

When students come back from summer vacation they begin where they left off, with their First Drafts. In the classroom they can see the printed homepage version of the three or four papers in their own group and the teacher's comments. In the computer lab they can view each and every paper submitted. All the papers and the teacher's comments are indexed at

<http://www.aichi-gakuin.ac.jp/~jeffreyb/draft1/index.html> .

The teacher's comments can be linked to the specific papers to which each comment refers and thus provide clear concrete examples. Hyperlinks are also inserted to allow instant access to the other four drafts of each paper as they come online. Thus at any point in the writing process students can read each classmate's work and see how it has progressed.

Some students have asked me how to post their drafts on the class website. In my class all posting of students' work is done by the teacher, whose website is where the class folders are located. Students keep their work in a folder on their assigned computers, and are encouraged to keep backup copies on a memory card. When I receive a printed copy of their finished draft or a note that they tried to print it up and failed, I collect the source document on my own floppy disc and transfer it to my office computer. Before actually posting it on my website I usually check the reference section to make sure that (a) the references are correctly written, (b) there are corresponding in-text citations, and (c) the URLs will actually connect the reader with the appropriate information. I make appropriate minor adjustments to the paper, including insertion of hyperlinks and changes in photo layout. Only then do I post the work on the website. It is important that students understand this process, so that they use the posted version of their drafts, with the adjustments, as the starting point for their next draft.

Subsequent Drafts

In the First Draft students master the basic format for a simple research paper: heading, body, and reference section. Starting with Draft Two they can learn about and integrate some of the finer points into their paper. They need to have information from two different references. The paper should no longer be simply a summary of what they have read. First, students need to decide where the new information goes in their text. Closely related information will almost invariably be grouped together in the text for a smooth flow of ideas and easy comprehension. Secondly, they have to make it clear which of their two references information comes from. This is a suitable point at which to introduce in-text citations — (author, year) — which can be connected with hyperlinks to the full citations in the reference section. If the reference itself is posted on the Internet, the title in the full citation is linked to the website containing the information.

Students learn how to properly write print references

Author or editor (year). Title. [English translation, if original document is in Japanese.] City: Publisher, pages.

and electronic references.

Author or editor (year). Title. [English translation, if original document is in Japanese.] URL address.

They learn how and where to search for the necessary information — author, year, and titles — in books, magazines, and on websites. Websites are particularly tricky in this respect. The necessary information may be located in a separate document. Students need to know how to (a) navigate the hyperlinks, (b) truncate the URL address — in case suitable links are not provided, and (c) search the source document for information that may not appear on the browser image. Even finding the URL address may present some difficulties. Many websites use a frames format, which allows multiple

documents to appear simultaneously but fails to show their URL locations. Students can escape the frames format by manually typing in hyperlinked locations or examining the frame source document for no-frame locations.

After students become comfortable with text insertion and a few format commands, they are ready for the embedding of .jpg and .gif photos and hyperlinks into their research reports. Attractive photos make their work much more pleasing, grabs the reader's attention, and provides visual support that may be essential for readers who are non-native English speakers. Hyperlinks can connect the reader with other sources of related information, including the original reference material. That material does not have to be in English. Many of my students find their material in Japanese. Thus other Japanese students reading their papers can get information in both student-level English and in their native language, a splendid and natural way to provide bilingual input. Unlike Davies (1997) I recommend the liberal use of hyperlinks integrated into the texts of homepages, especially research papers. In addition to giving the Web its tremendous power, this linking of texts and ideas is at the very core of the research paradigm.

Once the students understand the process and are actively engaged in producing their research, the teacher will be busy and must try to keep all these incoming documents straight. To do this I have created five folders: draft1, draft2, ... draft5. Each folder has an index page linking it with each student's draft and the teacher's comments on the drafts at that point. To keep things manageable it is important to get the students to turn in each draft *on time*. There should be two or three weeks between each draft, and the students must realize that each draft requires (a) rethinking and rewriting of the entire work, (b) the integration of new information throughout the paper, and (c) review and comments from other students and the teacher. They must not turn in two or more drafts simultaneously.

Prior to the first draft of the research papers, students practice making homepages of their homework about the countries we study. This work and teacher-prepared materials explaining the Internet and how to make homepages are kept in a sixth folder — draft0. The index page provides links to these important materials.

When the course is finished the teacher is left with a formidable collection

of student-generated research. Then the question arises as to what to do with it all. With this in mind I passed out questionnaires to all students attending the final class ($n = 19$) in which they were asked about the final disposition of their work. First, did they want me to continue the posting of their papers? There were three choices: post all drafts (10), post only the Final Draft (5), or remove all drafts (4). Those who gave permission to continue the posting of their work had more choices to make about names/contact and editing. Did they want their full names (2), given name only (13), or a fictitious pen name (0) to appear on the papers? Finally could the teacher continue to edit the papers? Almost all (14) welcomed the idea of the teacher's being able to revise their work.

Next year's students will have an abundance of sample materials to look at and discuss prior to and during the writing of their own research papers. They will have access to all five drafts of several papers and will be able to see for themselves (a) how references are written and linked to the papers and (b) where the new information was integrated into the papers. They will also have an opportunity to evaluate and comment upon the papers. In cases where the teacher has permission to edit, those revisions can be discussed with the new class and then made in the posted paper thus demonstrating the process of rethinking and rewriting a text. The Final Drafts that remain posted can all be linked to an index that is organized by country and topic. Such a document posted on the Internet could be a valuable research tool for students around the world trying to decide on a research topic or looking for research materials.

Conclusions

In conclusion I would encourage teachers, especially language teachers, to make greater use of the World Wide Web. The Web offers several distinct advantages to teachers who post their educational materials in html text format: (a) photos can easily be embedded in an otherwise forbidding text, (b) photos can be linked to a larger version of the photo with or without explanatory captions, (c) text can be linked to related materials, (d) hyperlinks can be used in an index for quick accessibility to the materials,

(e) materials are accessible throughout the world, and (f) they can easily be updated each academic year.

For language students in Japan the Web is an ideal vehicle for research papers and other writing projects. It allows them to produce professional quality papers with visual support and easy accessibility to teachers and their fellow students in class and around the world. Research papers can be linked to the original sources and other related materials. Hyperlinks can also be used for indexing papers and linking the several drafts. As Rule (1997) pointed out, the Internet can help students to “construct, manage, and synthesize knowledge”. I would add that this applies to teachers as well as their students.

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References

- Asao, K. (1997). *Nettowa-ku wo Riyo Shita Gengo Kyoiku ni Okeru Hyoka no Arikata* [Optimal Evaluation of Language Students, using a Network]. CALL: Basics and Beyond: The Proceedings of the Second Annual JALT CAL N-SIG Conference, Chubu University, Aichi, Japan, May 31-June 1, 1997.
- Davies, L. (1997). *Making Websites: A Teacher's Guide*. CALL: Basics and Beyond: The Proceedings of the Second Annual JALT CAL N-SIG Conference, Chubu University, Aichi, Japan, May 31-June 1, 1997.

- Dunkley, D. (1997). Internet-derived Material in the Classroom. CALL: Basics and Beyond: The Proceedings of the Second Annual JALT CAL N-SIG Conference, Chubu University, Aichi, Japan, May 31-June 1, 1997.
- Freirermuth, M. (1997). Using the Internet to Promote Writing in an International English Composition Class. CALL: Basics and Beyond: The Proceedings of the Second Annual JALT CAL N-SIG Conference, Chubu University, Aichi, Japan, May 31-June 1, 1997.
- Muehleisen, V. (1997). English via the Internet: Using the Internet in University Classes. CALL: Basics and Beyond: The Proceedings of the Second Annual JALT CAL N-SIG Conference, Chubu University, Aichi, Japan, May 31-June 1, 1997.
- Newfields, T. and S. McGuire (1997). Language Teaching and the Internet: An Introduction to the World Wide Web. *The Language Teacher*, 21(1), pp. 32-34.
- Rule, S. (1997). Hypermedia Authoring: A Constructionist Approach to Language Learning. CALL: Basics and Beyond: The Proceedings of the Second Annual JALT CAL N-SIG Conference, Chubu University, Aichi, Japan, May 31-June 1, 1997.
- Ryan, K. (1997). Using Search Engines for Academic Research. CALL: Basics and Beyond: The Proceedings of the Second Annual JALT CAL N-SIG Conference, Chubu University, Aichi, Japan, May 31-June 1, 1997.