The Setting
English through Web Page Creation is a course regularly offered in the ten-week intensive English Language Program (ELP) at the University of California, Santa Barbara (UCSB) Extension. The program currently includes one general integrated skills course which meets two hours per day five days per week and two elective courses which meet one hour per day five days per week. English through Web Page Creation is one elective course among several choices, ranging from Film Talk to TOEFL Preparation. This course usually runs one section every quarter and each class has 15 students who have chosen the course as one of their electives.

The ELP usually enrolls 150-200 students per semester. Approximately 46% of the students are from Asia, 28% from Europe, 23% from Latin America, and 3% from other areas. Almost all the students are 19 to 35 years of age, with the majority in their early 20s. Some of the students are en route to study full time at UCSB or another U.S. university, some are on a temporary hiatus from jobs in their home countries, and others come as temporary exchange students. The ELP students’ English levels for the most part range from intermediate low to intermediate high on the American Council of Teachers of Foreign Languages (ACTFL) proficiency scale, with their oral proficiency somewhat higher than their writing ability.

English through Web Page Creation is held in a 15-station networked Pentium computer laboratory with a white board, a laser printer, several writing and communication programs (e.g., Microsoft Word, Microsoft PowerPoint, and Netscape Communicator), and full Internet access. The instructor’s computer station is at the front of the room and includes an LCD projector that displays the screen of the instructor’s monitor onto the wall. Access to the computer laboratory outside of class time is very limited, and therefore no homework is assigned which requires a computer. All students in the course, and in the broader English Language Program, are provided with e-mail accounts and Web server space while they are enrolled in program.

Conceptual Underpinnings for the Course
This course, like several of the other elective courses at the ELP, reflects principles of content-based language instruction (Brinton, Snow, & Wesche, 1989; Flowerdew, 1993; Mohan, 1986; Spanos, 1987). Content-based instruction involves the use of subject matter for second language teaching purposes. As Widdowson (1978) noted, integrating language and content "not only helps ensure the link with reality and the pupil's own experience, but also provides us with more certain means of teaching language as communication, as use rather than simply as usage" (p. 16). Through content-based instruction, students can be pushed toward understanding language use in complex contexts and delivering messages that are appropriate from the point of view of both content and language (Snow, 1991).

Spanos (1987, p. 229, cited in Flowerdew, 1993, p. 123) suggests five conditions which content-based language teaching should fulfill. An analysis of how these five conditions were reflected in the course illustrates how principles of content-based instruction informed English through Web Page Creation:

1. Language teaching should be related to the eventual uses to which the learner will put the language...

People in the United States and other developed countries are experiencing one of the most rapid shifts in literacy processes in human history--from the literacy of the page to the literacy of the screen (Lemke, 1998; Warschauer, 1999, Shetzer & Warschauer, in press). The World Wide Web is becoming a primary means of publishing and locating information for businesses (Gartner, 1998), and government training programs are shifting rapidly from textbooks to computer-based multimedia sources (Lanham, 1993).
Some 95% of U.S. college students are using the World Wide Web (Diederich, 1998), with an increasing number developing their own home pages to assist them in their career development (Heiberger & Vick, 1998). Knowing how to develop Web pages is not yet a mandatory skill, but it is undoubtedly a valuable asset for personal, occupational, vocational, and academic purposes. It is a skill that students will be able to put to use later through the design of Web sites for themselves, or their institutions, organizations, or employers.

2. The use of informational content tends to increase the motivation of the language learner

Our previous research (see Warschauer, 1996) has indicated that second language students find learning about computer use to be a highly motivating activity. This is magnified when students have the opportunity to publish their own work on computers for others in their class and around the world to see (Warschauer, 1999). In this course, we take advantage of students' general motivation about learning computer skills with the specific motivation that comes from such opportunities for self-publishing. The motivation helps guarantee that students pay close attention to the language content, so that they can master the necessary skills to present top-notch work.

3. Effective teaching requires attention to prior knowledge, existing knowledge, the total academic environment, and the linguistic proficiency of the learners

The course uses a flexible learner-centered syllabus which allows it to proceed based on the background knowledge, existing knowledge, and linguistic proficiency of the students as expressed in a needs analysis, formal and informal feedback sessions, and early drafts of texts. Students' flexibility in designing and carrying out their projects also helps ensure that their work corresponds to their own proficiency level. At the same time, the Web techniques covered in the course, and the background articles assigned for reading, are carefully selected based on the changing role and use of the Internet and World Wide Web in both the academic and general environment.

4. Language teaching should focus on contextualized language use rather than on sentence level usage

Students in English through Web Page Creation are immersed in contextualized language use as they read course materials, listen to the instructor's demonstrations, discuss projects with their classmates, and write the texts for their Web pages. When there is more language-specific instruction, it is directly related to students' use language in particular contexts, specifically, the written texts for their Web pages and the oral presentations they make about those pages.

5. Language learning is promoted by a focus on significant and relevant content from which learners can derive the cognitive structures that facilitate the acquisition of vocabulary and syntax as well as written and oral production

The course content of the Internet and Web Page Creation is highly relevant and provides a direct basis for students' written and oral production. Students acquire new vocabulary and syntax through their attention to course readings and lectures and through their own writing, revision, and presentation of Web pages.

Finally, it should be noted that the goal of content-based instruction is not only to use content to teach language, but also to use language to teach content. As Flowerdew (1993, citing Mohan, 1986) explained, content-based instruction "has the advantage of not only helping students to learn a language, but also teaching them how to use the language to learn" (p. 122). The Internet and the World Wide Web provide a powerful medium for autonomous, life-long learning. Yet to use the Internet to its full advantage requires accessing and publishing information in English, which is the international lingua franca of the Internet and is expected to remain so for many years (Graddol, 1997). Thus English through Web Page Creation attempts both to provide motivating content on which to base language learning activities, while also teaching language skills necessary for students to fully exploit the power of the Internet as a life-long tool for learning, communication, and self-expression.
Goals/Objectives
There are several specific objectives in the English through Web Page Creation course. First, by the end of the course students should be able to create and maintain Web sites on the Internet. The three projects in the course are designed to guide students toward achieving this objective.

Second, by the end of the course, students should understand the basic sociopolitical issues related to Internet use such as copyright, censorship, privacy, and corporate influence. This is accomplished through the reading and discussion assignments.

A third goal is that students improve their writing and develop a better understanding of effective writing processes. This is accomplished by having students plan, write, and revise multiple drafts of their writing with a focus, in order or priority, on content, organization, and mechanics.

A fourth goal is that students develop their speaking and presentation skills. This is accomplished through substantial group discussion and through planning and delivering presentations at the end of each project.

Fifth, the course aims to develop autonomous learners. The syllabus proceeds from teacher-directed to student-directed projects, with the goal of empowering students to plan and implement their own projects to help them reach their own personal and professional goals.

Syllabus Design
The syllabus for this course incorporates tasks from two subject areas: language learning and computer training. In order to guarantee that students' own background knowledge and personal learning goals are fully taken into account, a process syllabus is used which evolves throughout the course (see Candlin, 1984).

Before the course begins, the instructor prepares a rough sketch of a syllabus to plan the material she wants to cover. In the first course meeting, the instructor gives a needs analysis to determine the prior knowledge, skills and interests of the students in the class. The course has a skeletal structure that is fixed by the teacher and which is comprised of three projects. Within each of the projects, there is great flexibility to meet student needs as identified in the needs analysis or during informal and formal feedback sessions. The instructor tracks what happens in the course through creating a daily electronic schedule, which essentially becomes a retrospective syllabus. In other words, the syllabus is not based around certain linguistic items, functions, or genres, but is negotiated partially by learners and the teacher and is organized in response to the language and computer training needs which appear necessary to fulfill the content goals of the course.

As noted earlier, there are two types of specific tasks in the syllabus: language practice tasks and Web page creation tasks. The language practice tasks involve speaking and writing in the target language. Students work on individual writing in the first project, collaborative and individual writing in the second project, and individual writing in the third project. The Web page creation tasks are ordered in a progression from basic HTML instruction in the first project, Web page creation software instruction in the second project, and a combination of the two for the third project. The purpose of HTML instruction in this course is to give students a foundation in the underlying structure of Web sites, so later in the course students can learn some JavaScript programming to make their Web sites more interactive. Students learn how to use cut-and-paste JavaScript programs in their Web sites, which include digital clocks, button rollovers, and form processors. Moreover, teaching students HTML also encourages them to learn even more advanced Web page creation techniques on the Internet through sites like the W3 Consortium (http://www.w3.org). Those students wishing to be on the cutting edge of Web design are thus provided the bases for getting there by learning how to access online tools and resources. Besides HTML and JavaScript, other technical skills are integrated in the syllabus such as learning how to digitize photos using a scanner and how to create original graphics using graphic design software.

Activity Types
Five types of activities are present in the course: technology training activities, group work and negotiation activities, writing and research activities, reading activities, and speaking and presentation activities.
Technology Training Activities
To meet the course goals of learning how to construct and maintain Web sites, the course offers various training activities. In the first project, students come to class with a prepared travel essay that they then type into the computer. Once their work is entered and saved onto a diskette, the instructor teaches students basic hypertext markup language (HTML) so they are able to format their essay for a Web browser. The instructor gives students step-by-step instructions on paper. She demonstrates the procedure of creating a Web page with HTML in the front of class, and students either follow along with her or move at a quicker pace by reading ahead on the handout and working at their own pace.

This same type of interaction occurs whenever the instructor introduces new tools to the class. For example, the process is repeated when the class discusses how to create graphics and put them on Web pages, and when the class discusses how to use the File Transfer Protocol (FTP) program to move a copy of the finished Web page to the Web server so it is world-accessible.

At times, students demonstrate Web techniques they are familiar with. For instance, a student once showed his classmates how to copy and install a Web page counter.

Group work and negotiation activities
The second course project has students form teams and negotiate the research and design of a collaborative restaurant review. First, groups are formed of students from students of different native language backgrounds, in order to encourage interaction in English. Once students form their teams, they decide which restaurant to visit and when they will get together outside of class to go for a meal. Once back in the classroom, they sit with their groups in the computer lab and decide how they will organize their group Web site. Each student is required to create one Web page that connects together with the pages created by others in their group.

Writing and research activities
The writing approach taken in this course is communicative and process-based (Reid, 1993). Students are given feedback on the content, organization, and mechanics of their writing in three separate feedback sessions. During the course, students continually revise and change their Web sites along with the colors, pictures, and layout of their documents.

The research activities for the course take place in the community and on the Internet. The community research is part of the restaurant review project. One class session is devoted to developing strategies for writing restaurant reviews and interviewing people at the restaurant. The Internet research is part of the travel guide project and the final project, the student-designed Web site. In the travel guide project, for example, students use Web search engines and indices to find links to Web sites relevant to their writing.

Reading activities
The reading done for this course is from a Web page creation textbook and from newspaper articles about the Internet. The textbook used in the course is a reference book about Netscape Composer, the software available in the laboratory. Students are assigned different chapters to read before the day the teacher trains the students on how to use a particular aspect of the program.

Articles discussing current events about the Internet and World Wide Web make up the other readings in this course. Since technology changes quickly, these articles are used once and then replaced with new articles from newspapers, computer magazines, and online Internet periodicals in subsequent offerings of the course. Students read the articles for homework and discuss the articles in class the following day. This discussion is usually in the form of a whole-class oral discussion facilitated by the teacher.

Speaking and presentation activities
The last type of activity done in this class is formal presentations. At the end of each of the three projects, students come to the front of the class and formally present their completed Web sites. Students are given feedback on their site, as well as on the content and language used in their presentations. At times, the presentations have been videotaped so students can review their presentations for further self-study.
Learners’ Roles
According to the different activities taking place in the course, the students assume different roles, such as writers, computer users, planners and negotiators, discussion participants, and presenters.

Each project involves a piece of writing. In the first project the students write a travel essay, in the second project a restaurant review, and in the third project something of their own choice. The students spend a good deal of time writing independently. They may use their choice of writing software available in the computer lab, which includes Microsoft Word, Netscape Composer and Notepad. Though they collaborate with others on the second project, they also have individual writing and authoring responsibilities in that as well as in the other projects.

Learners are also computer users, and they develop extensive technical skills during the course. The students become so focused on the content of the course, the computers, that at times it is difficult to focus their attention on other aspects. When necessary, the teacher brings the class to another room to draw attention away from the computer to other matters such as listening to a presentation given by another student or discussing a reading assignment.

Students are planners and negotiators in this course as well. For the second project they need to speak with other students in the class to determine which writing topics each student will work on for the restaurant review project. The students are in most cases successful at working together to determine the content and design of their collaborative Web sites. Some students struggle with this amount of creative independence and so are helped along by the instructor who will suggest potential Web designs for them to consider, if necessary.

During the class discussions about Internet issues, students assume the roles of discussion participants or listeners. Some students participate in the discussions more actively while others listen silently. Students are not forced to speak up if they do not wish.

At the end of each project students formally present their work to the class. They then become public speakers. This gives them practice speaking in the target language, while also using their own visual aids.

Teacher’s Roles
Like the learner's roles described above, the teacher assumes different roles depending on the type of activity. The instructor is a course developer and Webmaster, trainer, technical troubleshooter, task monitor, editor/feedback giver, and discussion facilitator.

The instructor in this course is a course developer and Webmaster who updates a master schedule and resource pages on the Web site. She adapts the schedule of the course to make up for unexpected delays or problems. She learns about new tools and resources to put on the course Web site.

When students are learning how to use the computer as a tool for communication via e-mail, construction via basic Web page creation, or research via using Internet search tools, the teacher assumes the role of a trainer. She prepares materials such as step-by-step handouts and demonstrates how to use various computer tools in the classroom. She circulates around the class to help students learn how to use the tools successfully.

When teaching with technology various unpredictable problems emerge. The teacher in English through Web Page Creation has the responsibility of solving nearly all technical problems that arise during the class session.

When students are working on the tasks for each project and when they are negotiating the content and design of their sites, the teacher assumes the role of task monitor. In this role, the instructor visits each student or student group in class to see what they are working on. She listens in when students are discussing their projects with each other. She helps confused students come up with realistic plans to attempt for the course projects.

Throughout the course students are turning in drafts of their writing, usually in hard-copy form. The teacher
reads the students' work and gives them feedback on the content, organization, and mechanics of their writing. The emphasis is on assisting students to improve their own writing abilities. After students give formal presentations about their Web sites the instructor gives them feedback on their spoken English as well. She also responds to questions students pose about their language use. In some cases, some students might ask her how to write or say something "correctly". If that is the case, she responds accordingly.

Finally, the instructor is also a discussion starter and facilitator. The day following a reading assignment about Internet issues such as copyright, privacy, or censorship, the instructor starts and facilitates a class discussion on the topic.

Instructional Materials
Materials used in this course are training handouts, a Web page creation reference textbook, current articles from newspapers and computer magazines, and a Web site with links to online resources.

Training Handouts
Whenever a new tool is introduced in the course, students are given written steps explaining specific procedures to accomplish different tasks, such as how to use File Transfer Protocol (FTP) to move a Web page onto a Web server. These handouts are created and revised by the instructor. Students are told to practice the procedures outlined on the handouts. Handouts are used as instructional tools. When the instructor introduces a procedure, such as how to upload a Web site to the Web server, she uses a step-by-step handout. She demonstrates the procedure in front of class at a slow pace. Students who want to work at a faster pace are encouraged to do so. These handouts serve the needs of students who want to work at a slow pace and at a fast pace.

Web Page Creation Reference Textbook
The course uses a computer book that is written for native speakers of English (Shelly, Cashman, Repede, 1998). It is written to teach, in a visual manner, how to create Web pages using the Netscape Composer. Students are given chapters to read out of this book when a new detailed procedure is introduced. The Netscape Composer book is used as a reference textbook in which students can look up answers to their own questions that come up when they are using the Netscape Composer software. So instead of coming to the instructor whenever they have a question, they can turn to the appropriate chapter in their textbook.

Newspaper/Computer Magazine Articles
Articles from current newspapers and computer magazines are other materials used in this course. The articles change each time the course is taught. Topics discussed include copyright, privacy issues, economic issues, social issues, educational issues and other interesting texts that deal with the Internet, Web page creation, Web design, Web searching, and the promotion of Web sites. These articles provide students authentic reading material that is related to technology and current events. It shows them that the topics they are studying in class are relevant to topics discussed every day in newspapers. It also informs them of sociopolitical issues related to the work they are doing, thus helping them become more informed and thoughtful online publishers.

Web Site
To meet the needs of students with varying levels of computer proficiency and to manage teaching with online resources, the course has a Web site. It is comprised of the following sections: Course Description, Daily Schedule, Search Links, Web Page Creation Resources, the Global Travel Guide, and Santa Barbara Restaurant Reviews. The Course Description describes the course and the three projects that make up the course. The Daily Schedule, which is updated continually by the instructor, has daily information for the students, reminders about due dates, and links to online resources used on particular days. The Search Links page has links to online search tools to help students find information on the Internet. The Web Page Creation Resources page gives students access to pre-selected online tools to encourage them to learn advanced topics on their own. The Spring 1998 resource page, for example, contains information about HTML, JavaScript, online image archives, copyright, netiquette, and graphic design. The final two links are to student projects, including the Global Travel Guide Project and the Santa Barbara Restaurant Reviews Project.
Minute Particulars: A Session on HTML Training

This section describes one day in the English through Web Page Creation Course. On this day, the goal was to teach students how to convert their writing homework into a basic Web page using Hypertext Markup Language (HTML), Notepad and Netscape Navigator. Accordingly, the agenda for this class session was threefold: to add basic and intermediate HTML tags to the students’ Notepad documents to convert them into Web pages, to view the HTMLized Notepad documents in Netscape Navigator, the Web browser, and to make changes to the Notepad document to add more HTML tags and to view those changes once again using the Netscape Navigator browser.

To prepare for the class session, the instructor created and revised three handouts. First, she revised an old travel essay she had written about Chicago. Then, she added basic HTML tags to the essay including required HTML tags, an e-mail link, hyperlinks, a bulleted list, a centered title, and paragraph breaks. She printed a copy of that from Notepad to show an example of a Web page with HTML tags, and from Netscape Navigator, which shows what the Web page looks like in a browser.

Besides those two handouts, she created a handout that lists, step by step, the following procedures: How to open up a document created in Notepad and edit it, how to add basic HTML tags to a Notepad document to convert it into a basic Web page, how to view HTML documents in Netscape Navigator, and how to find more HTML tags and Web resources to enhance work done so far.

When the instructor entered class, she gave students back the first drafts of their writing that she had collected the day before. She had made comments on the ideas presented and the organization of their writing. Students then worked quietly for 15 minutes revising their work. After that, the instructor reviewed with them how to open up their writing using Notepad. She circulated around the room to help students who were having problems.

After that, she gave a brief lecture about the relationship between Web pages and their HTML source code. She opened up her sample Web page about Chicago and showed it to them in Netscape Navigator. Then she selected View--Document Source and showed the underlying HTML tags. She wrote some of the tags on the board and discussed the difference between the beginning tags < > and the end tags that have a slash </>.

Next, she gave students the handout explaining the procedures used to create a basic Web page with HTML. The students then copied the required HTML tags directly around their essays, while the instructor circulated around the room and looked at different students’ screens. If students weren’t doing the procedure correctly, she told them what changes to make. The students worked for about 20 minutes and then took a 10-minute break.

After the break the instructor walked around and showed students how to open up their Notepad essays again, so they could continue adding HTML tags. They worked quietly for about ten minutes while she circulated and checked on their work. Some students worked faster than others. One student worked quite fast and changed the color of his background before the instructor even mentioned it. He also accessed the recommended resources the instructor listed at the bottom of the handout, which were links to more HTML tags. He also managed to copy and paste an image into his Web page that he had copied without permission from another Web site on the net. That’s when the instructor decided that copyright should be on the agenda for the next day.

Finally, the instructor gave students the two remaining handouts: the Chicago Web page with the HTML tags and the Chicago Web page as shown in Netscape without the tags visible. She demonstrated some intermediate HTML tags that were on the Chicago HTML handout, and took 3-4 minutes to demonstrate how to make an e-mail link, which was at the bottom of their handouts. Students then worked to make e-mail links for 5 minutes, while the instructor circulated around the room. She then returned back to the instructor station and showed them how to make a regular hyperlink to another Web page, and again circulated around the classroom and helped students do that. Next she talked about how to make numbered and unnumbered lists on Web pages. Then she circulated around the room to help them do that if they desired. Every new tag she demonstrated was on the Chicago HTML handout.
So this class was a combination of lecture, demonstration, individual work, instructor visits to students' computers, and handouts. The time passed quickly, but all students managed to complete the assignments.

**Caveats and Final Thoughts**

Teaching a course such as this is enormously time-consuming and challenging. Designing and teaching this course requires the instructor to keep up to date on tools, resources, and techniques related to Web page creation and the Internet, while simultaneously keeping up to date on language teaching pedagogy. The instructor needs to keep learning and re-developing the course as technology changes. During the class periods, the instructor must manage numerous technical breakdowns, and also manage the disorder that emerges in a highly decentralized student-centered classroom.

English for Web Page Creation is thus not for all teachers, just as it not for all students. But teachers who are willing to put in the substantial time and effort needed will gain the satisfaction of learning about an exciting new communications medium, while empowering their students to fully use this medium for creative self-expression and publishing.

Finally, while the results of this course have been quite positive, we feel that there is room for improvement. In particular, it seems that the most worthwhile and relevant project was the final one, in which students had full reign to develop Web sites that corresponded to their own needs and interests. We are thus now considering ways to reorganize the course to allow students greater time to work on a project of their own choosing with less time and effort devoted to preliminary teacher-selected projects. A challenge will be to incorporate sufficient scaffolding into the process so that students can begin a complex project early in the course without feeling overwhelmed.

**For further reading**


**References**


