

# What Can the World Wide Web Offer ESL Teachers?

Rong-Chang Li and Robert S. Hart

**T**he rapid growth of the Internet, which links computers all over the world into a single electronic communications network, is in the process of making widespread computer-based instruction a reality. This is due largely to the advent of the World Wide Web (WWW, or simply Web), a system for accessing and viewing information on the Internet. Web browser software such as Mosaic or Netscape permit easy viewing of texts stored on machines all over the Internet and they can display graphics, transmit sounds, and even play movies in the form of digitized video.

The ease with which Web documents can be created, as well as their worldwide accessibility, multimedia capabilities, and interactive functions, make the WWW an attractive environment for carrying on computer-based instruction. From the viewpoint of English language instruction, an added advantage is the fact that at present, Web documents, which cover a huge set of subject matters, are mostly written in English, with new documents continually appearing. The Web thus offers a rich database of authentic material.

During the past 2 years, we have been examining how this new medium can be utilized for ESL instruction. We have learned that the Web is not only a tremendously effective means for disseminating instructional materials but that it can also provide a

context for efficient collaborative materials development.

## Design of Experimental Web Learning Material for ESL Learners

Our work has focused on creating multimedia learning environments for intermediate-level ESL learners. We targeted this group because intermediate-level learners seem to be the audience who can profit most immediately from Web-based courseware. Beginners need the carefully graded and structured material already provided by textbooks and may find it difficult to use the Web at all because their English is too limited to cope with the operating instructions of the browser programs. Nor is there a pressing need to develop special materials for advanced ESL learners because one can easily find many Web documents that are interesting and appropriate. In our multimedia work, audio rather than video has been our main focus because Web video is still too slow to be practical for anything but very short video clips.

Before discussing our work, we want to point out how Web documents augment the capabilities of conventional text. Web browsers support hypertext, a form of cross-referencing in which a highlighted text selection is linked to another document. When a

user clicks the highlighted text, the linked document, which may be anywhere within WWW, is displayed. Links not only support immediate access to cross-referenced material but also permit Web documents to be structured as elaborate menus and indices. A simple programming language called the *hypertext markup language* (usually abbreviated HTML) allows authors to annotate documents with these hypertext links and to specify text display formats. To see a particular Web document, one must provide its Internet address (called its *uniform resource locator* or *URL*), which specifies both the name of the document and the name of the computer that contains the document. Usually an initial URL leads to a menu or index, and from that point on one can follow hypertext links.

Of course, pure display, even when equipped with links, is not sufficient for a flexible instructional environment; some way of interacting with students is also necessary. WWW supports limited interaction by means of forms, which are areas of a document (specifiable using HTML) where the user can type in a response or select a button to click. Once the user has entered some responses, they can be processed by an author-specified program in order to store them as data and send responses as e-mail, or they can be examined with a view to giving the user feedback about correctness.

*Readership grew almost overnight to more than 100 readers per day from more than 40 different countries.*