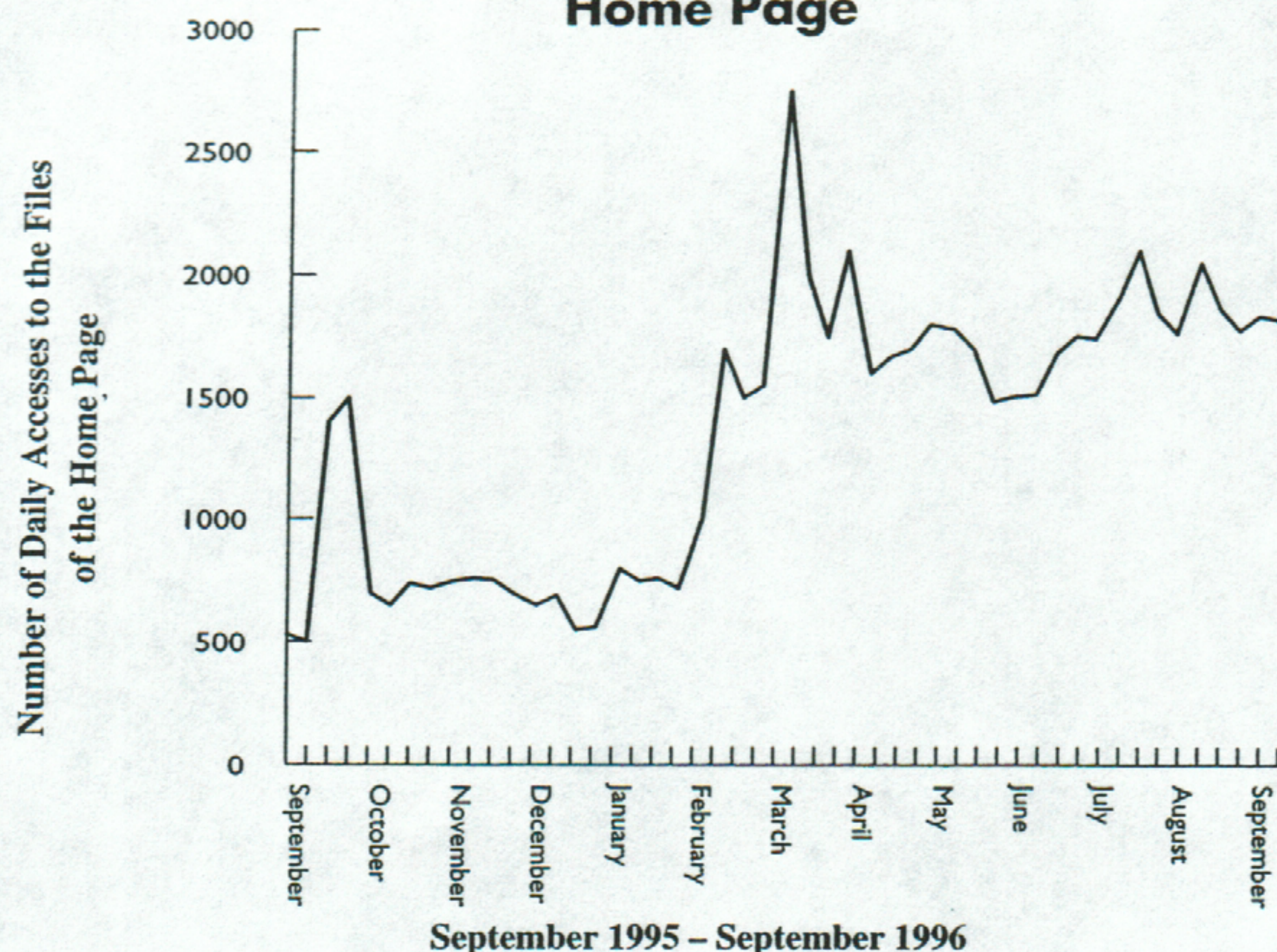


Daily Accesses to English as a Second Language Home Page



examine usage patterns (see left) to gain some impression of the nature of the Web ESL community and its needs.

The number of accesses is generally increasing. Sometimes a peak occurred because the home page was introduced in an ESL journal or newspaper at the time. Among the six sections of the English as a Second Language Home Page, the Listening and Speaking section is accessed most, accounting for 36% of total accesses. It is possible that the novelty of being able to receive audio over the Web has played a role in the popularity of this section, but such a high percentage also suggests that listening and speaking materials are most in demand by ESL learners on the Web.

We have tabulated the frequency of access by country of origin (see page 9). About 46% of the identifiable accesses come from the United States, and the rest are from more than 40 other countries, with Korea, Japan, Canada, Australia, Brazil, Italy, Germany, Taiwan, Hong Kong, and Israel as significant users.

Most of the users are from developed countries. This is undoubtedly because a large portion of ESL learners in developing countries are still unable to access the Web due to scarcity of suitably equipped computers or the expense of Internet communications. Because it is precisely in these countries that other authentic materials are scarce, the demand for Web-based resources will surely increase as ESL learners in these areas begin to gain Web access. A striking feature of the statistics is very high usage by Korea and Japan, each exceeding that of all European countries combined. The explanation for this phenomenon, which cannot plausibly be attributed to population totals or inferior European access, remains unclear to us.

To encourage feedback, the *ESL Home Page* allows users to type in a message and send it via e-mail. We receive messages sent by users of the page almost every day from readers in many different countries. Most of them say that the resources are very useful to them and ask us to make more materials available. Some people asked us to help them with specific problems in using the Web. Others sent the addresses of new ESL resources they had found or created. We respond appropriately to these messages whenever possible. To date we have not received any negative comments.

Conclusions

Technology is evolving so rapidly that any TESOL courseware on the Web must be considered work in progress. We certainly consider our efforts in this light. Though

requires tedious HTML programming.

What is needed is a way to author popular exercise types such as multiple choice, cloze, written response, free response, point-and-click glossary help and annotation, and so on without using HTML. This can be accomplished neatly with the aid of JavaScript, a simple programming language supported by recent Web browsers. Hart is currently developing a set of JavaScript-based exercise templates³ that require instructors to provide nothing but exercise content, yet allow for response analysis, feedback, and instructional management.

Other ESL Learning Resources for the Web

Our experiments are in no way unique. Web-based ESL materials are under intensive development at many locations. Most English language centers and intensive English institutes now maintain their own Web pages as a way to advertise their programs. Many ESL teachers have devoted their time and energy to developing various TESOL resources on the Web, some intended for ESL teachers, others for ESL learners. Resources for teachers include Web magazines such as *The Internet TESOL Journal* (Iteslj, 1995), designed along the lines of a professional journal, with discussion of TESOL issues, lesson plans, and teaching ideas. Bowers (1995) put together *Resources for Teachers of English for Science and Technology*, a Web page that links many Web resources relevant for this group of teachers. Harris's (1995)

Linguistic Funland lists resources including ESL organizations, ESL discussion lists and newsgroups, and ESL employment.

At the moment, there are more Web resources for ESL learners than for ESL teachers. Sperling's (1996) *ESL Help Center on the Web* is a resource in a bulletinlike format. Any ESL learner can post a question and will get an answer from one of the ESL teachers that Sperling has recruited to participate in this project. All the questions and answers are posted on the bulletin board for all the ESL learners to read. The *Weekly Idiom* Web site of the Comenius Group (1995) selects one idiom each week and provides short conversations to illustrate how the idiom can be used. The group plans to build up a large English idiom learning resource on the Web. There are also more traditional ESL materials on the Web, such as English grammar and sample letters for ESL students. All these materials are subject to varying degrees of editorial control and so vary considerably in quality.

Li's (1995a) *English as a Second Language Home Page* provides a general access for a large selection of these materials. It is organized into six sections: *Listening and Speaking*, *Reading*, *Writing*, *ESL-Related Information*, *Other ESL Sites on the Web*, and *ESL Learners' Web pages*. Each section contains links to ESL materials Li has found or created, including the materials discussed above. Because this site is well known and heavily used, with the number of files accessed as high as 2000 per day,⁴ we can