Speaking and Listening Chline A Survey OF Internet Resources

learners to engage in communicative activities. Given the text-based focus of the majority of Internet content, it would not be unreasonable to assume that this electronic medium is mostly used to enhance students' reading and writing skills. However, while the focus on reading and writing is common when the Internet is used in ESL/EFL classrooms, exciting technological advances now offer students and teachers increased opportunities to include online speaking and listening activities. The impressive developments in audio, video, and computer-mediated communications programs offer many possibilities for teachers to construct activities around listening to news programs, watching related videos, and holding conversations in real-time. This article will report on the benefits and limitations of these new technologies, look at some activities teachers can consider, and present some evidence that the technologies are making a positive contribution to the difficult task of second language acquisition.

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Computer Assisted Language Learning and the Internet

The use of computer technology in the classroom is referred to as Computer Aided Instruction (CAI). When CAI is used for language learning, such as in the ESL/EFL classroom, it is known as Computer Assisted Language Learning (CALL). The rapid growth of CALL is reflected by the plethora of professional organizations, journals, and other entities that deal with this topic (see Appendix for some online sources). One subdivision of CALL is called Computer-Mediated Communication (CMC), and it focuses on how students can use the Internet to enhance their speaking, listening, and pronunciation skills in a foreign language.

Since its inception, the use of the Internet has grown exponentially. According to a report issued by the United Nation's Conference on Trade and Development, the number of people worldwide with access to the Internet grew 20 percent between 2001 and 2002; during this period the number of users in developed countries increased by a modest 12 percent, while the number of users in developing countries grew a more impressive 40 percent (UNCTAD 2003). Although English remains the Internet's global lingua franca, the online content of this medium is growing more multilingual (Crystal 2001). In 1997, more than 80 percent of all content on the World Wide Web was in English (Babel 1997). As of March 2004, this figure had decreased to 68 percent (Global Reach 2004). Despite the decline, these are still encouraging figures for teachers who use the Internet in the ESL/EFL classroom.

Before specific activities can be discussed, it is important to distinguish the Internet from the World Wide Web (the Web). The Internet is a network of networks connecting computers all over the world, allowing them to share information using a variety of languages, or protocols (Webopedia 2004a). Because of the tremendous amount of information on the Internet, search engines are important tools that allow users to limit the results of their information searches. Three popular search engines are Google (http://www.google.com), Yahoo Search (http://search.yahoo.com), and Alta-Vista (http://www.altavista.com).

The Web is a section of the Internet that uses a special format called HyperText Transfer

Protocol (http) to transfer information. Users access and navigate *websites*, or *webpages*, using *web browsers* such as Internet Explorer (http://www.microsoft.com/windows/ie/), Netscape (http://channels.netscape.com/ns/browsers/), Opera (http://www.opera.com/), and Mozilla Firefox (http://www.mozilla.org/products/firefox/).

When a website is accessed, the user will typically see portions of text that are highlighted or underlined; these are known as *hyperlinks*, or *links*, and they contain coded text that transfers the user to other websites or to different parts of the same website. These links can also perform an operation, such as printing a document or displaying a picture.

Receptive communication on the Web

Communication activities on the Internet can be categorized as receptive or interactive (Opp-Beckman 1999). In the context of aural/ oral skills, receptive activities are those done by single users, and involve listening. In receptive communication, students receive information from the Web in the form of text, images, audio, and video. Alexander and Tate (1996) classify websites into five types: (1) advocacy/opinion websites, such as http://www.tolerance.org/; (2) business/marketing websites, such as http:// www.south-beach-diet.biz/; (3) news websites, such as http://news.bbc.co.uk/; (4) informational websites, such as http://dictionary.refer ence.com/; and (5) personal websites which are set up and maintained by an individual.

To practice the listening skill, students can access websites that contain stored audio or video files, or that transmit live broadcasts. In order to listen to and/or watch the material, they must download files by clicking a link or button, which is typically labeled Listen, Audio, Watch, Video, or Live. The links that perform these operations are often designated by an icon, which may be an image of headsets to listen, or of a video camera to watch.

In order for the sound and pictures to play, the user's computer must contain special hardware and software that supports audio and video. The hardware necessary to play sound and images includes audio cards, video cards, and speakers. Although headsets are not always necessary, they are strongly recommended to prevent a cacophony of individual voices in the classroom or lab. In addition to a web

browser, computers must have audio and video software. The most common programs, all available as free downloads, are RealOne Player (http://www.real.com/), Windows Media Player (http://www.microsoft.com/win dows/windowsmedia/), and Quick Time (http://www.apple.com/quicktime/).

Activities

For receptive communication activities, teachers can either create their own activities or have students access websites that include prepared exercises. While many free websites are available, some require a fee for access. Randall's ESL Cyber Listening Lab (http:// www.esl-lab.com/) is a free website containing hundreds of audio and video files organized by level of difficulty and covering an array of lifeskill topics. Each file is accompanied by selfscoring multiple-choice questions and gap-fill exercises. CNN's San Francisco Bureau (http://www.literacynet.org/cnnsf/) has a free online literacy website that contains an archive of stories in several categories that comes with audio, video, and a corresponding written text as well as several listening comprehension exercises. Many other websites contain exercises in minimal pairs, tongue twisters, diphthongs, and the phonetic alphabet, and they are available for free to provide students with listening and pronunciation practice. A listing of these websites is available from the U.S. Department of State's Office of English Language Programs (http://exchanges.state.gov/ed ucation/engteaching/eal-res.htm).

For listening comprehension practice, the Web offers students access to radio and television programs, news reports, songs, speeches, interviews, biographies, advertisements, and movie trailers, as well as readings of stories, essays, and poetry. Files range in size from short sound bites to full-length programs and continuous broadcasts. Language teachers can use these web-based audio and video resources to develop their own listening comprehension exercises, just as they would with other media such as CDs and audiocassettes.

Lafford and Lafford (1997) provide some useful suggestions for creating level-specific web-based audio and video listening activities. For beginning-level activities, they suggest an exercise where students listen to a sound file together and then answer a choice or gist question. For example, after listening to a news headline, students can be asked: "Was the story about business or the government?" Teachers can then prepare students to listen for specific information before replaying the audio. For example, the teacher could say: "Listen for the name of the Prime Minister."

Intermediate-level listening activities should require students to pick out more specific information. Teachers can prepare true/ false or multiple-choice questions for students to answer after listening. Or students can be asked to work in pairs or groups to create a title for the audio. For example, students listening to a news piece can be asked to figure out the story's headline. With videos, students can script and record their own narration to match the topic.

For advanced-level listening activities, students can be asked to rewrite an audio segment in more simplified language. They can also compare different audio files on the same subject. For example, they can listen to and compare the coverage of a top news story as reported by both CNN and MSNBC. Both audio and video clips have the potential to provoke extensive discussions on the respective topic.

Benefits and limitations

There are several benefits to using receptive communications on the Internet with language learners. Theoretically, these materials are available at any time and from anywhere, so long as a computer with Internet access is available. This access provides a virtually endless and free supply of current and authentic materials (Lafford and Lafford 1997).

Audio and video technologies on the Internet also have some limitations. In order to successfully utilize these media, an Internet connection must be stable and constant. While these features can be used with dial-up connections, they flow more smoothly on highspeed broadband connections. Extensive download times of audio and video, or any other technical difficulties such as downed servers, may discourage both students and teachers (Lafford and Lafford 1997). Furthermore, these programs work best on high-end computers with updated software (Paramskas 1999). These factors, individually or collectively, have the potential to exclude students and schools with insufficient budgets.

Interactive communications on the Web

Interactive communication activities on the Internet can be synchronous or asynchronous (Lafford and Lafford 1997). Asynchronous activities involve two or more individuals, do not occur in real-time, and include composing and answering messages on email and discussion boards. Given their lack of immediacy—an element essential to dialogic mimicry—asynchronous activities will not be covered here in detail. Synchronous activities allow two or more users to interact simultaneously from different computers, such as live chat and instant messaging. These interactive communication activities are undertaken by dyads or groups of users, with each user stationed at a different computer, and the tasks involve speaking and listening.

Felix (1999) categorizes web-based language learning tasks by the level of interactivity. Low-level point and click activities include those already classified as receptive. More interactive tasks, such as basing lessons on an individual's own perceptions and experiences, would qualify as high-level activities.

Interactive programs on the Internet allow users to communicate by writing and answering text messages in real-time, but many also offer the ability to communicate through audio and video. Because of their similarity to spoken language, text-based electronic communications are considered beneficial to the enhancement of students' aural/oral skills. Chun (1994) proposes that electronic discussions are similar to written language in terms of complexity, yet similar to spoken language in function. Moreover, in evaluating email, the most commonly used text-based communication on the Internet, Maynor (1994) considers the language used to be a combination of both oral and written communication. Some of the features that make email writing similar to speech are the lack of capitalization, the use of icons (also called emoticons and smileys) to represent emotions, the use of phonetic spelling, and specific punctuation such as exclamation points used to indicate emphasis.

Synchronous, Computer-Mediated Communication programs

As a result of the increasing use of interactive multimedia and Internet technologies for language learning, the term Computer-Mediated Communication (CMC) was coined to describe the interactive use of comput-

er and Internet technologies to communicate, and to differentiate natural language discourse analysis from computerized interactions (Paramskas 1999).

In attempting to more clearly define CMC, taxonomies have been based on user groups, types of activities, and formats (Paramskas 1999). However, this classification process is made more difficult by the growing tendency for communications activities on the Internet to multitask, such as instant messengers that have chat capabilities; conferencing software that allows for instant messaging; and chat rooms and instant messengers that allow for text, audio, and video communications. Therefore, the synchronous interactive activities discussed here are categorized functionally as *synchronous*, *computer-mediated communications*.

Several programs lend themselves to interactive audio communications activities on the Internet. Cziko and Park (2003) refer to these as *synchronous, computer-mediated audio communication* programs. The majority of such programs also allow for text-messaging. Many of them are available as free downloads, but they usually require user registration. These programs include *live chat, conferencing,* and *instant messengers*.

Activities

Live chat offers users the possibility to chat in real-time with other users from around the world. Communication can take place via text, where users type their messages onto the screen, or by voice, where users wear headsets complete with earphones and microphones. Two options for accessing live chat are Internet Relay Chat (IRC) programs and chat rooms (Sperling 1998). Both options allow users to select from thousands of channels on various topics, which are specified by the chat room's name. Users can also create their own private rooms, where they can mediate the discussion and control access.

These options vary in several ways. IRCs frequently require users to download software, whereas chat rooms are accessed through a web browser. Both options usually require user registration, but IRCs more often require fees for service. One benefit of using an IRC is an enhanced connection speed. The Internet Relay Chat Help website (http://www.irc help.org/) provides links to popular IRC programs as well as free IRC tutorials.

Some chat rooms created specifically for ESL/EFL learners include Dave's ESL Cafe Chat Central (http://www.eslcafe.com/chat/chatpro.cgi), English Club ESL Chat (http://learners.englishclub.com/esl-chat/), and ALOUD (http://www.thescec.com/aloud/home.htm), which provides English learners the opportunity to chat with ESL teachers in Canada. LanguageTrade (http://www.languagetrade.com/) offers tandem learning, a service that matches native speakers interested in learning each other's language. All the above chat rooms require user registration.

Whereas a chat room "is typically a more permanent gathering of up to 50 individuals," a conference on the Internet "is a temporary gathering of three or more individuals, typically fewer than 10" (Cziko and Park 2003, 16). Another difference is the lack of text-messaging capabilities of conference programs. They do, however, give users the ability to conference with video. By connecting a web camera, or webcam, to the computer, a user can allow others in the conference to see and hear them live. Global SchoolNet Foundation's Classroom Conferencing (http://www.globalschoolhouse. com/cu) connects schools from around the world using the videoconferencing programs CU-SeeMe (http://www.cuworld.com/) and Netmeeting (http://www.microsoft.com/win dows/netmeeting/). Both programs require registration, but provide basic services for free.

Conferencing with audio, video, and chatting is also possible using many *instant messenger* (IM) programs. Webopedia defines instant messaging as "a type of communications service that enables you to create a kind of private chat room with another individual in order to communicate in real time over the Internet, analogous to a telephone conversation" (2004b). Users can communicate with each another with text-messaging and frequently with audio and video. They can also access or create topic-specific chat rooms. Several instant messenger programs are available as free downloads, contingent upon user registration.

Some of the most popular instant messengers are AOL Instant Messenger (http://www.aim.com/), MSN Messenger (http://messenger.msn.com/), and ICQ (http://www.icq.com/download/). Yahoo Messenger (http://messenger.yahoo.com) also offers instant messaging, as well as voice chat, file transfer, and

videoconferencing functions. In order to utilize any of these programs to communicate, users must have the same IM software. However, one program, Trillian (http://www.trillian.cc/) integrates five popular IM programs in a single display. Other programs, such as Parvis' eTandem Partner program (http://www.etandemlearning.com/), broker tandem learning by connecting adult language learners with partners in different countries; communications can take place via chat, videoconferencing, and email.

Aside from video conferencing, elements unique to CMC programs include a lack of nonverbal communication (e.g., gestures, facial expressions), atypical turn-taking skills, and less cohesive discourse (Salaberry 1996). To offset these characteristics, Opp-Beckman (1999, 93) suggests that ESL/EFL students prepare for such communications as they would for other oral presentations because "practice with social exchanges, such as turn-taking strategies and polite requests and interruptions, can make the experience more harmonious." Another element unique to CMC programs is the anonymity they provide users who communicate through assumed identities. For some ESL/EFL learners, this can be both liberating and empowering (Felix 1999).

Benefits and limitations

Research into CMC has indicated several possible benefits of using electronic communications with ESL/EFL learners. Salaberry (1996) proposes that the inherent lack of nonverbal communication could lead to an increase in the spontaneity of idea-sharing and a greater representation of minority interests. And in comparing face-to-face interactions of ESL students with electronic discussions, Warschauer (1996) found that electronic discussions tended to provide for more equal participation among students and that the students in these discussions used language that was more formal and complex, both lexically and syntactically.

Evidence has also shown that ESL/EFL learners can successfully negotiate meaning with other speakers, native or otherwise, in chat rooms (Blake 2000; Tudini 2003). Toyoda and Harrison (2002) provide examples of several negotiations originating from miscommunications between native and non-native speakers in a chat-room, and they categorize the nego-

tiations by level of difficulty. For example, at the word level negotiation occurred regarding the introduction of new words and the misuse of other words; at the sentence level negotiation occurred because of grammatical errors and abbreviated sentences; and at the discourse level negotiation occurred when sudden topic changes and inter-cultural communication gaps caused miscommunication. Although the negotiations were not always successful in repairing the miscommunications, the data provides valuable information regarding the types of problems involved. The authors conclude that students should maintain chat logs (records of chat sessions) so that specific problems can be identified and become the focus of instruction to improve the quality of chat communication.

According to Long's (1981) *Interaction Hypothesis*, the benefit of successful negotiation of meaning is a potential increase in the degree of second language acquisition. Blake (2000) has suggested giving students tasks to expedite both the process of negotiation and the resultant second language acquisition. The World Wide Web, according to Felix (1999), is well suited for task-oriented activities where students have some control over their learning.

The use of CMC also has some limitations, which are frequently teacher-oriented (Paramskas 1999). For example, the more interactive CMC is, the less pedagogically useful it may be for some teachers, especially those who are resistant to student-centered classrooms. Some teachers are resistant to technology, particularly when they feel a lack of control with their students, who are involved in CMC activities that are potentially replete with errors and explicit content. Information overload poses another problem, especially when adequate and sufficient feedback is beyond a teacher's realistic capabilities. Furthermore, chatting activities are typically fast-paced. And as with many computerbased activities, students without keyboarding skills are likely to be at a disadvantage. Nevertheless, the fact that CMC can create so many opportunities for real-time English interactions makes it a valuable tool that teachers can use to enhance the practice of speaking and listening skills.

Conclusion

The use of computers in the foreign language classroom has greatly influenced how teachers teach and students learn, and continuing advances in Internet technology will most likely continue to affect the profession. However, as with many teaching methods, certain principles must be followed to make them successful. Egbert, Chao, and Hanson-Smith (1999, 4) identify the following eight conditions for optimal language learning environments:

- 1. Learners have opportunities to interact and negotiate meaning.
- 2. Learners interact in the target language with an authentic audience.
- 3. Learners are involved in authentic tasks.
- 4. Learners are exposed to and encouraged to produce varied and creative language.
- 5. Learners have enough time and feedback.
- 6. Learners are guided to attend mindfully to the learning process.
- 7. Learners work in an atmosphere with an ideal stress/anxiety level.
- 8. Learner autonomy is supported.

When foreign language teachers are cognizant of these conditions and apply them to Internet speaking and listening communication activities, the new technologies will become optimal tools for enhancing students' second language learning and acquisition.

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GEORGE M. CHINNERY teaches adult ESL at the Carlos Rosario International Career Center and Public Charter School in Washington, D.C. He is pursuing an MA in TESOL at the University of Maryland, Baltimore County.

APPENDIX | INTERNET RESOURCES FOR TEACHERS

Speaking and Listening Online: A Survey of Internet Resources • George Chinnery

TEACHING WITH THE INTERNET

Virginia Commonwealth University Language Interactive: A Trailguide to Creating Dynamic Web Pages http://www.fln.vcu.edu/cgi/interact.html

University of Cambridge: Internet for Modern Languages

http://www.vts.rdn.ac.uk/tutorial/languages/

Widener University: A Modular Approach to Teaching/Learning the World Wide Web http://www2.widener.edu/Wolfgram-Memorial-Library/pyramid.htm

National Institute for Literacy: Teaching and Learning with Internet-based Resources http://www.nifl.gov/nifl/fellowship/reports/susanc/intho

University of Wisconsin: Teaching with the Web http://polyglot.lss.wisc.edu/lss/lang/teach.html

ORGANIZATIONS

Asia-Pacific Association for Computer-Assisted Language Learning (APACALL)

http://www.apacall.org/

The Computer Assisted Language Instruction Consortium (CALICO)

http://calico.org/

European Association for Computer Assisted Language Learning (EUROCALL)

http://www.eurocall-languages.org/

International Association for Language Learning Technology (IALLT)

http://iallt.org/

TESOL Computer Assisted Language Learning Interest Section (CALL-IS)

http://darkwing.uoregon.edu/~call/

WEBSITE CREATION FOR LANGUAGE TEACHERS

Randall's ESL Cyber Listening Lab: Streaming Audio Web Page Creation for Language Learning

http://www.esl-lab.com/online/

Tech Corps Web Teacher

http://www.webteacher.org/

EVALUATING WEBSITES

Cyberbee Web Evaluation

http://www.cyberbee.com/guides.html

Maricopa Community College: What a Site! Finding, Evaluating, and Integrating Web Sites http://www.mcli.dist.maricopa.edu/show/what/ index.html

HISTORY OF COMPUTER ASSISTED LANGUAGE TEACHING

Illustrated History of Computer Assisted Language Teaching (CALL)

http://www.history-of-call.org/

Online Journals and Magazine

The Computer Assisted Language Instruction Consortium (CALICO)

http://calico.org/calicopubs.html

Computer-Mediated Communication Magazine (CMC)

http://www.december.com/cmc/mag/index.html

Educational Technology and Society

http://ifets.ieee.org/periodical/

International Association for Language Learning Technology Journal (IALL)

http://iallt.org/iallj.html

Internet TESL Journal

http://iteslj.org/

Language Learning and Technology

http://llt.msu.edu/

