

THE USE OF INTERNET IN LANGUAGE TEACHING AND LEARNING ENGLISH AS A FOREIGN LANGUAGE

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INTRODUCTION

Nowadays, we live in age of technology and unlimited communication whereas there are growing demands on everyone, including teachers and students, to be technologically literate. In this era, it is clear that English has been a global language, not only in general life but also in international education for specific. In education, the implementation of internet as the backbone of online-learning, online-course and dedicated course material servers, are not a new things. Moreover, internet as an international computer network has very significant numbers of learning resources. Grey (1999) states that “Basically, the Internet is a network of people and information, linked together by telephone lines which are connected to computers. In fact, more than 100,000 independent networks - public and private - are currently connected to form this vast global communications system. This is the 'road' of the information superhighway.”

The correlation of internet and education as Mark Warschauer (1995) states: “The significant number and amount of information available in internet nowadays has been beyond the imaginations and expectations of the inventors of internet itself. At least, there are two advantages in enrolment of education: for teachers internet as professional development, and for learners internet as learning resources.” Even now it can be assumed that the internet as information superhighway, digital revolution, and electronic library, where most of its contents are in English.

Because of its origin in the United States, most of the communication via the internet takes place in English, in spite of, or perhaps due to, the multilingual nature of its user base. Researcher suggests that this will change as the Internet becomes more popular, but for the moment English is the common global language. This is what makes it such a perfect tool for English language teaching.

English teaching has been implemented in Indonesian schools for five decades; however the result is still below the expectation. Among the other important factors to ensure the goal of teaching English, teaching techniques and teaching materials take significant part in succeeding to fulfill the goal. In relating with teaching and learning English, there are four major skills interaction that are reading, listening, speaking and writing. In internet, those skills are represented, such as in video conference, audio streaming, online real-time chats, mailing list, voice over IP (VoIP), forum and website contents, etc, whereas all are represented in English. In sum, exposures for learning and teaching English are overwhelmingly available in internet.

Several trends seem to be emerging. Computers are becoming increasingly available in schools around the globe. Governments, teachers and parents are advocating the networking of these computers, and making long-range plans for their use at all levels of education. New demands are then being made on teachers to use the technology creatively, leading to a steep rise in the membership of relevant mailing lists and the number of available Internet training courses for teachers. Still, there are many parts of the technology that are not yet being exploited to their full potential, namely the audio and video components, and there is a real lack of substantial research into the pedagogical implications of the technology.

Based on those, English teachers should be able to take advantages of the internet to enrich their teaching references and techniques. These facts have inspired the researcher to explore all the possibility of internet usage in ELT which may useful to be references for English teachers.

INTERNET

1 Definition of the Internet

According to Cononelos and Olivia (1993), the Internet is a worldwide collection of computer networks, cooperating with each other to exchange data using a common software standard. Through telephone wires, wireless media such as radio frequency, and satellite links, etc. technically speaking, The Internet is a network of networks, linking computers to computers sharing the TCP/IP protocols. Each runs software to provide or "serve" information and/or to access and view information. The Internet is the transport vehicle for the information stored in files or documents on another computer. It can be compared to an international communications utility servicing computers. It is sometimes compared to a giant international plumbing system. The Internet itself does not contain information. It is a slight misstatement to say a "document was found on the Internet." It would be more correct to say it was found through or using the Internet. What it was found in (or on) is one of the computers linked to the Internet. Internet users can share information in a variety of forms. The size, scope and design of the Internet allow users to:

- connect easily through ordinary personal computers and local phone numbers;
- exchange electronic mail (E-mail) with friends and colleagues with accounts on the Internet;

- post information for others to access, and update it frequently;
- access multimedia information that includes sound, photographic images and even video; and
- access diverse perspectives from around the world.

2 The History of Internet

In a nutshell, the first version of the Internet was started during the 1960s in the United States as ARPAnet, a defence department network. One computer was linked to another to share information. Gradually, more computers were added to the network, and people began to send simple messages over the network to distant colleagues. This, at that time, incredible communications platform was adopted by the academic community and, with vast improvements added by European computer wizards, became the friendly tool we refer to as the Internet today (Blake,1987).

As a form of international communication, the Internet has been in constant expansion since 1973, when the ARPAnet was first connected to the United Kingdom and Norway. Much of northern Europe was connected to the Net in the early 1980s. Japan and Canada soon followed suit. A special link was established between Germany and China at about the same time. And then in the late 1980s the real growth began as Australia, Iceland, Israel, Italy, Mexico, New Zealand and Puerto Rico joined the Net (Chun & Brandl,1992).

The early 1990s saw many countries in South America and Asia, as well as Eastern Europe, gain access to the Net. The first countries connected from the African continent were Tunisia and South Africa, but others soon followed. By 1992, even Antarctica was officially online. Currently every nation has some type of connection to the Internet,

though access may be highly restricted and extremely expensive. Because of its origin in the United States, most of the communication via the Internet takes place in English, in spite of, or perhaps due to, the multilingual nature of its user base.

3 Applications in Internet and Their Uses

According to Jensen (1993) there are two main applications in internet. They are:

1. The key text-based applications that remain are:

- **E-mail:** This is the electronic postal service.

Its traditional counterpart is known as snail mail, so at first glance the most obvious benefit of using e-mail is speed. It is so fast that you can send written messages back and forth to people several times a day. It is a cost-effective, reliable form of communication that lets you send notes to other Internet users around the globe from the comfort of your own computer. You can also attach enormous documents to that same note so you do not need to send these through the post either. Although they are basically a text-based medium, e-mail programs now make it possible to attach large files, graphics, video or sounds to notes. Some e-mail programs even feature voice-mail so you can listen to your messages.

- **Mailing lists:** These are an automated exchange of e-mail messages about a chosen topic, each one being a kind of supervised discussion group. They are often called discussion lists.
- **Newsgroups:** The system of newsgroups is a worldwide network of open discussion groups on thousands of subjects. They are open in that they are not usually supervised or moderated and can be read by anyone that is interested.

They are interesting spaces for debate, and there are several dedicated to educational themes.

- **Chat:** This kind of program is a popular way to communicate in **realtime**, that is, instantaneously. Whatever you type into a **chat** program is immediately visible to the other participants on their computers. You can chat to strangers from around the world who share your hobbies or interests, or even arrange to meet family or friends for a virtual reunion.

2. Multimedia uses of the Internet require up-to-date computers and several extra bits of hardware and software. Not everyone has access to these applications, but they have been the real force behind the growth of the Internet over the past several years.

They are:

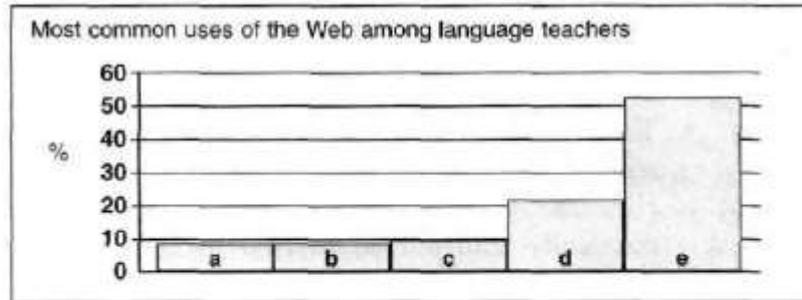
- **Videoconferencing:** This is communicating via a live video link over the Internet. Conferencing and telephony applications usually cost no more to use than a local phone call, whether you are speaking to someone across town or on the other side of the world. However, they require a very fast, stable connection to the Net, special software; and of course, a video camera, microphone and speakers. Teachers have been making active use of this technology for several years now, especially in distance education and cross-curricular project work.
- **The World Wide Web (WWW or Web for short):** This is a multimedia resource and communications tool based on hypertext, a system of clickable links. When you click on a highlighted word or picture you are magically transported to that location - perhaps the next page in the document or another document altogether. Links are also used to view large pictures and to download video or

audio files to your computer. This user-friendly application is the real driving force behind the Internet boom of the 1990s. In fact, it is so popular that you may hear people use the terms Web and Internet interchangeably. This is not so inaccurate as it may seem at first glance, since access to most of the older forms of the Internet is now built into the software for viewing the Web, called a web browser. You can read your e-mail, view newsgroup messages, do videoconferencing - and gain entry to many other useful programs we have not mentioned here - directly through your web browser.

4 Internet and Language Teachers

While the computer is now used in some form or another in most language classrooms, and is considered standard equipment, the Internet is also gradually being introduced in the foreign language classroom as teachers become more familiar with it. The Internet is a confederation of thousands of computers from various sectors of society such as education, business, government and the military. It is a network of thousands of computer networks (Lewis, 1994). Each individual system brings something different to the whole (databases, library services, graphs, maps, electronic journals, etc), and the end result is a vast accumulation of information. It is a worldwide network of computers that interact on a standardized set of protocols which act independently of particular computer operating systems, allowing for a variety of access methods to the Internet. It can be used to both exchange information through electronic mail, newsgroups, list servers, professional on-line discussion groups, and so forth, as well as to retrieve information on a variety of topics through the World Wide Web.

Meena Singhal (1997) conducted a research about the use of internet by teachers and indicated a qualitative improvement in the use of this valuable tool for information retrieval, teaching and idea exchange of the 149 web users, over half had employed it in a variety of instructional uses, in the relative percentages shown after this page:



- a. sources of information:** class syllabuses, teachers' links, cultural information, students' home pages
- b. homework:** exercises, printouts for students, other activities
- c. teaching students how to use the Web**
- d. teacher training**
- e. in-class activities:** listening, reading, exploring, information searches, research

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5 Four Basic Functions

Grey (1999) has identified four ways in which the Internet can function as an educational tool in schools. These can also be considered four basic ways the Internet can be used in ESL/EFL classrooms.

(1) Search for and receive

This category comprises activities that are based on using the Internet as a huge virtual library. In these activities students search for and retrieve information from this library.

(2) Publish and provide

These activities involve not the retrieval, but the publication of information. This publishing is done on web pages, which are the basic places where information is stored on the Internet.

(3) Talk to and reply

These are conversational activities that take place via the Internet through email correspondence and in 'chat' rooms. Strictly speaking, this category could also include Internet phone conversations.

(4) Collaborate and learn

This category includes joint projects that involve students in two or more classrooms that might be thousands of miles apart.

The fourth way of using the Internet usually involves one or more of the other three ways. Collaboration between classrooms almost always involves the use of email. Also, it may include the joint publication of web pages or joint search activities.

THE INTERNET AS A TEACHING AND LEARNING TOOL

1 The Internet As A Material Resource

The Internet has several advantages as a source of teaching materials according to Warchauer (1996):

- 1. Scope:** How big is the Internet? Huge might be the most exact answer -though computer scientists at the NEC Research Institute in the United States estimate that as of April 1998 there were over 320 million pages. As a vast virtual library the Internet offers a seemingly endless range of topics to choose from, all in one handy location. There are even a growing number of materials specifically designed for English language teaching. It is a paperless medium and so it escapes the size restrictions that are characteristic of the coursebook. Internet files *do* have a tangible volume, but the limitations in scope are determined by the users' speed of access and the computer facilities available.
- 2. Topicality:** While some of the content of the Internet is several years old, much of it is updated on a regular basis: monthly, weekly or daily. You can get today's news from any number of publications without buying them all in the hope of finding that one useful item. And of course, many new publications are being added every day, some of them unavailable in print.)
- 3. Personalisation:** Coursebooks are inescapably limited by the magnitude of the audience for which they are written. The topics they deal with may be irrelevant or difficult to discuss with your class, and you may sometimes need alternative topics and texts. The Internet can greatly simplify the task of finding; them.

In addition to the communication benefits of the Internet, the Internet can also be used to retrieve and access information. The World Wide Web is therefore a virtual library at one's fingertips; it is a readily available world of information for the language learner. While the Internet offers numerous benefits to the language learner, a few such possibilities are examined here, in the context of language learning.

Perhaps one of the most essential pedagogical principles of language teaching is one that emphasizes the study of language in a cultural context. Many language teachers believe that language and culture are inextricable and interdependent; Understanding the culture of the target language enhances understanding of the language. To this end, the Internet is a valuable resource to both language teachers and learners. As discussed previously, e-mail on the Internet allows language learners to communicate with native speakers. In this manner, the Internet facilitates the use of the specific language in an authentic setting. The Internet can also be used to acquire information from language resources for a variety of purposes. For example, students can access current information from countries around the world. They can obtain geographical, historical, social/cultural, economic, and political information from the countries in which the target language is spoken. Students can read web versions of daily newspapers and same-day news reports from sources such as the French Embassy's gopher service, the daily *Revue de Press* (Armstrong and Yetter-Vassot, 1994). Such experiences can allow learners to participate in the culture of the target language, which in turn can enable them to further learn how cultural background influences one's view of the world.

The Internet also serves as a medium for experiencing and presenting creative works. While students can peruse the information on the Net, they can also use it as a

platform for their own work such as essays, poetry, or stories. Numerous public schools, for example, are making use of the World Wide Web for publishing student work which can be accessed by other web users. Students therefore become not only consumers of content, but in fact generate the content.

As Mike (1996) describes, the use of the Internet has also been shown to promote higher order thinking skills. A language teacher, for example, may instruct learners to search for specific information. Searching the Web requires logic skills. Once information has been obtained, the results must be reviewed which requires scanning, discarding, and evaluative judgment on part of the learner. The information must be put together to make a complete and coherent whole which entails the synthesis process. Such an endeavor permits students to practice reading skills and strategies. The Internet also promotes literacy for authentic purposes, as stated previously. In addition to being a supplement to reading materials, especially current information, when students are exploring the Net, they are essentially exploring the real world. Such browsing or exploration can also lead to incidental learning as they encounter a variety of information in this way. Communication with native speakers furthers literacy development for authentic purposes, enables language learners to compare student perspectives on an issue, and allows them to practice specific skills such as negotiating, persuading, clarifying meaning, requesting information, and engaging in true-life, authentic discussion. Promotion of literacy also occurs within a social context. The interaction that results from the above situations can lead to cooperative projects and increased communication between students from all over the world, in turn leading to the development of social

skills. Finally, use of the Internet can promote computer skills and the technical and conceptual experiences of using a computer.

Lastly, the Internet provides supplemental language activities which can provide students with additional practice in specific areas of language learning. These include reading tests and comprehension questions, grammar exercises, pronunciation exercises possible through the available multimedia capabilities, cloze tests, vocabulary exercises, and so forth. Students can search the Web for such sites, or teachers may recommend specific sites on the Web. Published lists are also available from various sources. For example, Paramskas (1993) offers a list of sites for both language teachers and language learners, some of which relate to issues of language learning, others which use language as a medium for discussion of culture or current affairs, and others which assist in locating native speakers.

2 Implementing Internet in the Classroom

In order to make effective use of new technologies, teachers must thus take a step back and focus on some basic pedagogical requirements. The following guidelines are designed to help teachers implement computer network-based activities into the foreign language classroom.

#1: Consider Carefully Your Goals

There are several possible reasons for using the Internet in language teaching. One rationale is found in the belief that the linguistic nature of online communication is desirable for promoting language learning. It has been found, for example, that electronic discourse tends to be more lexically and syntactically more complex than oral discourse (Warschauer, 1996a) and features a broad range of linguistic functions beneficial for

language learning (Chun, 1994; Kern, 1995; Wang, 1993). Another possible reason for using the Internet is that it creates optimal conditions for learning to write, since it provides an authentic audience for written communication (see, for example Janda, 1995). A third possible reason is that it can increase students' motivation (Warschauer, 1996c). A fourth possible reason is the belief that learning computer skills is essential to students' future success; this reason suggests that it is not only a matter of using the Internet to learn English but also of learning English to be able to function well on the Internet.

None of these reasons are more or less legitimate than any of the others. However, since there are so many ways to integrate the Internet into classroom instruction, it is important for the teacher to clarify his or her goals. If, for example, one of the teacher's goals is to teach students new computer skills, the teacher may want to choose Internet applications which will be most useful to them outside of the classroom, with activities structured so that students steadily gain mastery of more skills. If the immediate goal is to create a certain kind of linguistic environment for students, once again, the teacher should consider what types of language experiences would be beneficial and structure computer activities accordingly. If the goal is to teach writing, Internet activities should be structured so that they steadily bring about an increase in the types of writing processes and relationships essential to becoming a better writer. As will be discussed further below, little is usually gained by just adding random online activities into a classroom. Clarifying course goals is, thus, an important first step toward successful use of the Internet.

#2: Think Integration

Most teachers who have used the Internet have started out with some kind of simple key pal (computer pen pal) exchanges. And most teachers who have used these exchanges have felt something lacking. Simply put, there is no more reason to expect a significant educational outcome from simply creating a pen pal connection than there is from simply bringing two students into a room and asking them to talk. Over time, greater involvement on the teacher's part in creating learning activities that create sufficient linguistic and cognitive demands on the student is needed to get maximum benefit from Internet exchanges. And, as a number of people have noted, this teacher intervention is most successful when it brings about activities and projects that are well-integrated into the course curriculum as a whole.

There is a significant difference in educational outcome depending on whether a teacher chooses to incorporate e-mail classroom connections as (1) an ADD-ON process, like one would include a guest speaker, or (2) an INTEGRATED process, in the way one would include a new textbook. The e-mail classroom connections seems sufficiently complex and time-consuming that if there are goals beyond merely having each student send a letter to a person at a distant school, the ADD-ON approach can lead to frustration and expected academic results; the necessary time and resources come from other things that also need to be done. On the other hand, when the e-mail classroom connection processes are truly integrated into the ongoing structure of homework and classroom interaction, then the results can be educationally transforming (in Warschauer, 1995)

Of course there are many ways that Internet activities can be integrated into the overall design and goals of a course (see Sayers, 1993 for a good overview). The teacher

can work with students to create research questions which are then investigated in collaboration with foreign partners. Students and long-distant partners can work collaboratively on publications. Or students can use exchange partners as experts to supply information on vocabulary, grammar, or cultural points which emerge in the class. Again, the choice has to be made by the classroom teacher, preferably in ongoing consultation with the students. Nevertheless, as Roberts suggests above, it does behoove the teacher to think about how to integrate online connections into the class rather than adding these connections on top of the rest of the classroom activities in a disconnected fashion.

#3: Don't Underestimate the Complexity

Most English teachers, even those who consider themselves computer novices, have several relative advantages when learning to use the Internet. They are, in most cases, skilled at English, experienced at typing or keyboarding, and have some basic computer literacy (i.e., they probably have at least used a computer for word processing). EFL students, on the other hand, at least in some cases, may lack these basic prerequisites. Though we have had students who are quite experienced with computers, we have also had students who had seldom used a computer; lacked basic knowledge such as how to operate a mouse or open a folder; and lacked the vocabulary, reading, and listening skills to follow instructions for using the computer

Beyond these issues of learner preparation, there are a number of other complexities in introducing Internet-based activities in the EFL classroom. Activities in a single class may be dependent on scheduling the computer lab, and on students finding computers outside the class time to continue their activities. Hardware and software can

malfunction and computer systems can be down. Students' schedules might not permit them to return to the computer lab at a time when computers are available to complete their assignments.

Exchanges between classes are even more complex. The partner class might have absent students, or might not meet in a particular week due to holidays or other activities in that location. The partner teacher might not have the same understanding of the nature of the exchange, and working through differences can cause further delays. The students might have differences in background, language, and experience which can cause further complications.

None of these potential problems mean that Internet based activities shouldn't be used. But in attempting to integrate online teaching, it is best not to be overly ambitious in the beginning. A situation which overwhelms both students and teacher in technical difficulties is not likely to bring about the desired results. It is better to start small and to create the kinds of activities which have a direct purpose and are well-integrated into classroom goals. If these activities prove successful, you can build from there and attempt a more ambitious plan the following semester.

#4: Provide Necessary Support

Mindful of the complexities which can arise in Internet usage, teachers need to provide support sufficient to prevent students from being overwhelmed by difficulties. This kind of support can take numerous forms: creating detailed handouts that students can refer to when class is finished and the teacher's personal help is not accessible; building technology training sessions into the class schedule, not only in the beginning but on an ongoing basis; working with the computer center to set up log-on systems and

other procedures which are as simple and intuitive as possible; assigning students to work in pairs or groups, both in and out of the lab, so that they can provide assistance to each other; providing details to the students about how and when they can get assistance from technology specialists or others on campus outside of class; and being available to help students at times when they are most likely to need it.

#5: Involve Students in Decisions

The concept of a learner-centered curriculum (Nunan, 1987) predates, and has broader significance, than the Internet enhanced classroom. However, this concept seems particularly important when considering network-based teaching.

First of all, as indicated above, network-based teaching involves a number of special complexities. It will be difficult, indeed, for a teacher to be fully aware of the impact of these complexities without regular consultation with students. This might involve anonymous surveys, class discussions, or similar means of involving students in expressing their opinions about the process of implementing technologies.

Notably favorable is that the nature of computer-mediated communication creates opportunities for more decentered interaction (for summaries, see Warschauer, 1996b; Warschauer, Turbee, & Roberts, 1996). To fully exploit these opportunities, the teacher must learn to become a "guide on the side" rather than a "sage on the stage". A situation which is based on communication between students but in which the students have little say over the topics or outcomes of that communication is not likely to lead to the kind of atmosphere optimal for language learning.

As pointed out elsewhere (Warschauer, Turbee, & Roberts, 1996), involving students in determining the class direction does not imply a passive role for teachers.

Teachers' contributions in a learner-centered, network-enhanced classroom include coordinating group planning, focusing students' attention on linguistic aspects of computer mediated texts, helping students gain meta-linguistic awareness of genres and discourses, and assisting students in developing appropriate learning strategies.

3.3 Things Which Can Be Done

There are a great number of ways in which the Internet can be used in a practical way to promote the use of English. Easily the most popular of these is the "pen pal" concept. There are a wide number of sources of pen pals on line. Again, an interested and involved teacher can make this a comfortable and exciting activity for students interested in participating. This may involve the teacher at least offering to correct letters for students before they send them out or practical advice on subjects that may be suitable. It is found that many students simply feel more comfortable participating when they are assured of error free correspondence.

To promote the use of the Internet, the teacher can ask that they email the letters to the teacher first rather than type them or hand write them. For new students, this helps reinforce the basic skills. As a rule, the teacher can print these and correct them on paper as the teacher really do want them to see the corrections that teacher has made so that they can improve their writing ability. The teacher can send an email back when he/she finished correcting it so that they can know when it is ready.

On a more practical level, one activity that students really enjoy is to, in the early stages of Internet use, surf the web and find sites that match their interests or hobbies. This in itself is a motivating activity, but having the students then email the web address

with a few comments to the instructor reinforces email and writing skills as well. Having received the email from students, I then add the URL to the student web page with a comment something like the following:

Mari Suzuki really likes The Rolling Stones

<http://www.the-rolling-stones.com/>

The students can then visit the class homepage and look at items that the other members have suggested. In my experience, most students find this sort of activity very interesting. One last suggestion is to be sure to include a teacher section, as many students are interested in finding out what their instructors interests are.

CONCLUSION

Despite the limitations and obstacles, it must be realized that the Internet's educational potential is immense. Although electronic, the Internet is an entity related to literacy - people still interact with it entirely through reading and writing. For this reason alone, the Internet is a technology that will, without a doubt, have significant implications for both teaching and learning. So what does this imply for language teachers and learners? Teachers must become familiar with using the Internet and its various functions such as e-mail. They must also learn how to use specific search tools in order to access information, search for lesson plans, or material and ideas to supplement their lessons. Lastly, language teachers must learn how to transfer files from Internet sites to their own computer and vice versa. Obtaining information or literature on the Internet, either through the Net itself, through books, or by attending workshops and courses will further assist this process. To avoid facing the same difficulties or problems associated with use of the Internet, teachers can ask students to keep track of problems that arise during use. In essence, language teachers must take the plunge and approach the Internet as a learning experience themselves. The more enthusiastic and more knowledgeable language teachers are, the more successfully they can implement Internet in the language classroom.

For the language learner, the Internet offers a world of information available to students at the touch of a button. While it must be recognized that the Internet cannot replace the language classroom or the interaction between the language teacher and student, it offers a vast amount of information and lends itself to communication possibilities that can greatly enhance the language learning experience.

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