

## **Technology and Learning English**

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### **ABSTRACT**

*The paper attempts to highlight some significant issues in technology as applied to English teaching and learning. The focus of learning English has shifted from native-like competence to international intelligibility, the term “EFL” (English as a Foreign Language) may need to be changed into “EIL” (English as an International Language). Technology, especially the emergence of the internet, is affecting every aspect of English education and changing the way we teach and learn. The study is to provide a review of related literature on English associates with the world, a brief history of technology and foreign language education, English is the language of the media and technology, the relationship between English and the Internet, need and goals of the technology and English learning, the positive effects of using the WWW (World Wide Web), Web enables new kinds of learning, advantage of Cal (Computer Assisted Instruction) for language learning, the Internet challenges in the language classroom, and the teacher's roles in the use of technology with ELLS (English language Learning Students). Using recent developments in IT (Information Technology), teachers can use the Internet to give more effective instruction and help students improve their four skills in English learning; listening, speaking, reading and writing.*

**Keywords** : CAI (Computer Assisted Instruction), EFL(English as a Foreign Language), EIL(English as an International Language), ELLS (English Language Learning Students), IT (Information Technology), WWW (World Wide Web)

## **INTRODUCTION**

Nothing before has captured the imagination and interest of educators simultaneously around the globe more than the World Wide Web (WWW). The Web is now causing educators, from pre-school to graduate school, to re-think the very nature of teaching, learning, and schooling. In recent years, computer technology has been applied in many areas of language education. Researchers have identified some areas of language learning where computer technology holds great promise, including: phonetics, grammar, vocabulary, reading, writing, translation, aural comprehension, literature appreciation, and testing. To EFL teachers, the computer offers the opportunity to make better use of their time and expertise to teach these language skills. However, such a new technology brings EFL educators not only a new hope but also a big challenge.

English is the most widely-spoken language in the world. It was estimated that English is spoken by an estimated one billion people, or one-fourth of the world's population. Even the ministers preach the Word of God via English- language, literature and materials through the Internet. A meeting of the Bible Societies that was held earlier observed:

“Present reality is that to mount material on a web site is often the only economic way to make it available to public...if ever there were a global market, it is the English-language market (Sue Mills, *The Future of English*, Publishing World, United Bible Societies, September 1999).

A web-based learning environment not only simulates the real classroom but allows more room for creativity and interaction. It provides access to ever increasing resources which assist a teacher to manage the material and control the situation with greater flexibility. Using computer mediated tools such as e-mail and real-time chat, the students are engaged in meaningful communication with their peers, which significantly enriches the content of language learning. Mello (1996) stated that English learning via technology can be flexible and effective.

Waxman and Huang (1995) found that instruction in classroom settings where technology was not often used tended to be whole-class approaches where students generally listened or watched the teacher. On the contrary, instruction in classroom settings where technology was moderately used had much less whole-class instruction and much more independent work. The

studies all support the notion that technology use can change teaching from the traditional, teacher-centered model to a more-centered, instructional approach.

## **SUMMARY OF THE REVIEW OF LITERATURE**

### **English Associates with the World**

English is the most widely-used language in the world. A total of 350 million people around the world speak English as mother tongue. It was estimated that one billion people, or one-fourth of the world's population speak English. It is the lingua franca for India and many Africa countries. Africa has more than 1000 languages and English was the language of the colonizers. Even so, sixteen African countries decided to keep English after decolonization because it represented a neutral language. English was not native to any ethnic group; therefore, favored no one (The Story of English, 1986).

Why has English become so international? It was the political and economic influence of the British Empire in the last century and of the United States in this one.

When Asian people do business with Saudi Arabia and Spain, its representatives do not speak Arabic or Spanish even those languages are taught in some universities in their countries. Some businesses would rather hire language majors than business majors. The reasoning might go like this: It is easy to train and teach an employee enough about business in a few months or a year, but it's hard to teach anyone to speak a language fluently in a couple of months or even years (Kung, 2001).

Some personal qualities of smartness, worldliness, and sophistication are usually associated with proficiency of English. The young women of India recognize the fact that the men of their country prefer wives who speak English (The Story of English, 1986). English is a symbol of social status or class in India and South Africa. Politicians and wealthy business people in Asian countries are known to send their children to schools abroad so these children can start learning English at an early age.

In many countries, knowledge of English is the mark of an educated person. It also means the chance to pursue higher education. The number of graduate students who realize how crucial

English is to their academic pursuits. The language of international conferences and journals or academia is English. The focus of learning English is shifting from native-like competence to international intelligibility, the term “EFL” (English as a Foreign language) may need to be changed into “EIL” (English as an international Language).

### **A Brief History of Technology and Foreign Language Education**

In the sixties and seventies, language laboratories were being installed in numerous educational settings. The traditional language laboratory was comprised of a series of booths, each providing a cassette deck, and accompanying microphone and headphone. Teachers monitored their Language Education students' interactions by using a central control panel. The basic premise behind this technology was that if verbal behavior was modeled, and then reinforced, students would quickly learn the language in question.

The language lab activities were therefore grounded in a stimulus-response behavior pattern. The more drill practice the students encountered, the faster they would learn the second language. While the language laboratory was a positive step in linking technology and language education, it was soon recognized that such activities were both tedious and boring for learners. Furthermore, the amount of student-teacher interaction was minimal, and individualized instruction was irrelevant. These factors led to a shift to the communicative approach to second language education, namely, computer assisted language learning (Singhal, 1997).

At present, there are variety of computer applications available including vocabulary, grammar, and pronunciation tutors, spell checkers, electronic workbooks, writing and reading programs, as well as various authoring packages to allow instructors to create their own exercises to supplement existing language courses. In addition to the range of software available, CALL also can increase learner motivation (Blake, 1987). Chun and Brandl (1992) also proposed that the interactive and multimedia capabilities of the computer make it an attractive teaching/learning tools. Computers provide immediate feedback to students and students can work at an individualized pace.

Though the advantages and widespread use of CALL, it continues to suffer from criticisms for several reasons. Many people believe that learning and practicing grammar rules of a foreign

language through fill-in-the-blank exercises does little to improve a speaker's ability to produce grammatically appropriate utterances (Armstrong&Yetter-Vassort, 1994). Others pointed out that CALL suffers from its rigidity in light of the complexities of natural language. Which are more in line with the current theoretical and pedagogical views of learning are being created.

### **English Is the Language of the Media and Technology**

More than half of the world's newspapers are published in English and half of the world's phones ring in English-speaking countries. A total of 80% of all computer data is in English (The Story of English, 1986). The export of American popular culture through entertainment and advertisement is accepted in different way across the world. American cultural colonialism has become a cause of concern for some countries. A French law mandates the use of French for advertising, labeling and instructional manuals of all products and services in France and bans the airing of TV and radio commercials in foreign languages (Nagorski, 1999).

America also exports words, especially the new ones associated with new or digital technology. The Japanese readily receive its lexicon to the point that it has 20,000 English words in its daily vocabulary. Other cultures, like the French, do not welcome English words as openly. Government commissions preside over a list of almost 120,000 English words or English-based terms that may not be used in official French documents (Nagorski, 1999). The French Academy should create and assign the French equivalent to the foreign words that creep into the French language.

Frinelli (1996) stated that his "travels in cyberspace," have proven that he could connect with people all around the world (especially Americans because they are the majority) at a deep level of understanding provided he was willing to accept American English as the common language, and American culture as the prevailing one. Spennemann, Brickhead, Green, and Atkinson (1996) explained the causes of the domination of American English and culture in the following manner:

The rise of English to preeminence in the academic world began in the past World War II period when the sheer number of U.S. American universities and the large amount of funding poured into them resulted in a large output of research and publications, thus documents written in English dominated and saturated the market. In a concurrent development, the

dominance of the U.S. market economy saw English rise to preeminence in the area of business and communications on the other-and thus reinforces the dominance of English, especially American English. This take-over of American culture also occurs in Australia, which may serve as an example that even large countries are not immune.

### **The Relationship Between English and the Internet**

Researchers from the Tel Aviv University and the University of California at Berkeley have teamed up to gauge the nature of the relationship between linguistic patterns and internet content. Early returns from the work imply that studies predict different scenarios. Currently about 70% of internet content is in English, but only about 44% of internet users are native English speakers. Worldwide, native Spanish speakers outnumber native English speakers, and the number of native Chinese speakers more than equals that of both groups. English dominates online because it was established early on as the lingua franca of the wired world (Bowen, 2001).

The United Nations reports that 80% of the sites on the Internet are in English (Chapman, 1999). Research studies show that there is a positive correlation between the status of English in a nation and how widely the Internet is being used (Vehovar et al., 1999). Only 20% of the content on the web is in other language besides English. Japanese and German are the other languages that occupy a place on the web with approximately 5% and 4% respectively. The considerable disparity in the percentage of web sites that exist in the English and other major languages in the world is expected.

Slovenia concluded that “language matters when the extent and structure of Internet use are in question” (Vehovar et al., 1999, p. 1). The researchers assert that even though age and education are also major factors determining the use of the Internet, familiarity with English stands as the strongest predictor of the Internet use across all sociodemographic groups. Elie (1998) pointed out that highly developed countries of northern Europe where the Internet is more developed than average (Finland, Netherlands, Denmark, Great Britain) share the usual practice of English. On the other hand, highly developed countries of central and south Europe where the Internet is also developed than average (France, Germany, Italy, Spain, and Greece) share the common characteristic of not having such a prevalent use of English. Findings show that among the countries where the Internet has highest diffusion, five use English as their first

language and out of the fifteen countries leading in the number of Internet users in the world, four out of the top six have English for a mother tongue.

Arnum&Conti (1998) found that nations with the highest diffusion rate for transportation, energy and telecommunications are also among the leaders in Internet use. Countries in this group include Finland, the United States, Iceland, Norway, Sweden, Australia, Switzerland, Canada, Demark, and the Netherlands. In the same study he researchers also examined the median per capita per capita income of the countries and Internet activity and found that the two variables are also related.

However, there are countries with high income where the Internet has not quite caught on yet. There were 21 countries above the worldwide median for Wealth that were significantly below the median for the Internet Ratio. This list includes Saudi Arabia, Oman, Venezuela, Thailand, Trinidad, U.A.E., Argentina, Mexico, Brazil, Bahrain, Uruguay, Chile, Kuwait, Poland, Malaysia, Slovakia, South Korea, Cyprus, Latvia but currently low levels of Internet activity (Arnum& Conti, p. 12).

A careful examination of the languages used in these countries shows that none of them speak English as a mother tongue or use it extensively in daily life.

### **Needs and Goals of the Technology and English Learning**

Essential to any web-based course is thoughtful consideration of students needs and teacher goals. A web-based course allows for more equality on teacher expectations and student needs as student enthusiasm is naturally promoted by the technology. According to Trokeloshvili and Jost (1997), a model of what teachers might consider in planning a web-based course should be as following:

#### **Student Needs**

- Need for writing practice.
- Need for writing with a real purpose in mind.
- Need for authentic audience.
- Need for reward or fruit of labor.
- Need for feedback. .

- Need for motivation. .
- Need for new challenge.
- Need for something new.
- Need for new skills.
- Need for skills for future employment.
- Need for creativity.
- Need authenticity in writing.

### **Teacher Goals**

- Improved writing in all areas.
- Higher awareness/consciousness.
- Writing with a purpose.
- General understanding of the technology.
- Active communication
- Student enthusiasm.
- Understanding of the Internet.
- Students working cooperatively.
- General understanding of the web research.
- General computer/typing skills etc.
- Comprehensive understanding...computers
- Work outside usual instruction paradigm.
- Self-Expression in student work.

The model is based on the notion that students do in fact bring to class a set of personal needs, and that teachers often have a goal oriented agenda for the students. The relationship between the two factors need not be mutually exclusive, and that greater flexibility can be allowed in a web-based course. A web-based writing course might create a natural atmosphere in which students realize the experience of producing authentic and creative texts for a real audience, something new for most of them.

### **The Positive Effects of Using the WWW**

Lin (1997) stated that the greatest difference between textbooks and online materials is that online materials function as “a visual stimulus in the form of graphic, sound, animation and



video which may arouse learners' interests in language learning. Just as Elizabeth Hanson-Smith (1996) pointed out that the Web serves as a "facilitator and stimulator of communication." Some significant attributes of the WWW make it particularly attractive for educational purpose: "world wide accessibility, multimedia capabilities, and interactive functions" (Li&Hart, 1996). WWW not only provides students with a broader view of the world but also promotes their active involvement within the multimedia environment. Therefore, the communicative and interactive nature of the WWW allows teachers and students to access and share information in a "time-and-space independent fashion" (Ortega, 1997). Karla Frizler (1995) claimed that the WWW provides a great number of benefits for ESL/EFL writing classes:

1. Real world examples of integrated knowledge.
2. Rich source of authentic language and culture material
3. Collaborative learning
4. Retrieval of timely and abundant information.
5. Appeals to learners with visual/tactile learning styles.
6. Opportunity to write with real purpose for real audience.
7. Builds critical thinking skills.
8. Need to skim and scan through vast amounts of information.
9. Opportunity for online publishing.

Claims have been made that the web can free teaching and learning from the physical boundaries of classrooms and time restraints of class schedules. Traditional lectures and demonstrations can become Web based multimedia learning experiences for students. Moreover, the Web can help us enhance teaching and learning, from teacher to student.

### **Web Enables New Kinds of Learning**

The use of the WWW has a great impact on subverting the traditional roles enacted by teachers and students in the classrooms. In order to be successful for the technology-mediated learning, teachers as well as students must take on new roles in the teaching-learning relationship. Through the electronic access to the world around them, learners develop some new strategies which are different from those they use in the traditional classroom. According to Hanson (1997), one of the significant strategies is learner control-the Web presents a new and alternative type of learning which allows learners to control the direction of their own learning.

Networking fosters “autonomy, equality and learning skill” among learners who are motivated to write “for a broader audience which extends beyond the classroom, and not just compose assignments for the teacher”(Frizler, 1995).

One of the primary advantages of Web use is that appeals very much to the way our students now prefer to learn. Papert, S. (1993) called the computer the “children's machine,” because most students do not know a word computers. It is an integral part of their world. They play, are entertained by, and learn with the computer. They tend to be more visual learners than previous generations because their world is rich in visual stimuli. Students can develop written communication skills readily by using the Web, too. Writing to an authentic-rather only the teacher- has been viewed as critical for the development of students’ writing ability (Graves, 1993).

While students become more active and autonomous during the writing process, teachers are no more the center on instruction-they take on the roles of “facilitators, guides, counselors, and information providers”(Brickle & Truscello, 1996, p. 16). Within the multimedia environment, the teacher plays a subordinate and support role to “select, monitor and adapt, or modify the resource, helping students work independently or collaboratively”(Lin, 1997), Warschauer and Whittaker (1997) also stated that teachers’ contributions in a learner-centered, networked-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.”

In order to accomplish the pedagogical goal of online instruction, teachers must consider the nature of the learner, the learning process and the learning environment when they implement online activities into the classroom. Since there is no censorship, students can easily access some sites not appropriate for them, the teacher should be more careful in guiding students towards finding and storing information via the Web.

### **Advantage of CAI for Language learning**

CAI is good for motivating students to study English. Students are anxious to use computers. Many students are tired of traditional English classes and are interested in a new style of

learning. When they use a computer, they feel that they can master English. They can study English with their learning styles, they see the results of their learning. Students think materials are new and fresh if they are presented on computers, and they are often interested in even routine tasks such as learning to type. They seem to be willing to spend more hours and do more exercises on a computer than by hand (Kitao, 1993c)

Learning can be individualized using computers. Students can study materials related to their individual goals and what they need or are interested in, with the appropriate difficulty level and at their own pace. Computers can analyze the problems of each student, and the teacher can help individual students with their problems based on the analysis (Kitao, 1994b). It is also possible to do programmed instruction using a computer. Students use minimum step programmed materials, with each level slightly more advanced than the previous one. They use what they learned in one step to do the next one (Ishihara, 1992).

Students can use computers to build on the work they have done. They can use a word processing program to write a composition, to edit it before they turn it in to the teacher, and then to change the composition based on their teacher's comments. The computer allows them to make corrections easily so that they do not have to retype the final draft. In addition, computer users can communicate with people all over the world on other computers and use other computers to get information.

### **The Internet Challenges in the Language Classroom**

The above discussion has described some of the potential benefits of the Internet and how it can be used in the second or foreign language classroom. However, such a discussion would be incomplete without addressing the disadvantages or obstacles related to the use of the Internet in the language classroom. While the Internet and its various facets offer a great deal to the language learner, it is not without its problems. The nature of the Internet itself can be a disadvantage now and then. When lines are busy due to many users, it may take time to access information or browse the net and technical glitches themselves can lead to frustration. Lack of training and familiarity on part of the teachers can make it difficult to implement the Internet in the language classroom. Foreign language teachers are especially anxiety prone to computers since they often have little experience with computers. Costs related to training, as well as on-line costs of using a provider are issues that may interfere with implementing such

technology in schools. The internet offers access to all types of issues and topics, some of which are unsuitable for children, and this in itself may result in various problems. This is certainly discouraging for both language teachers and students in such educational settings (Mike, 1996).

### **The Teacher's Role in the Use of Technology with ELLS**

Recent studies have found that the longer that pre-service and in-service teachers are exposed to computers and the greater variety of computers that they have experience with, the more comfortable they feel in using computers (Padron, 1993; Liao, 1993). It has suggested that teacher preparation programs need to include several aspects if technology is to be incorporated from elementary to high school classrooms. These aspects include: (a) addressing classroom management issues, (b) exposing prospective teachers to classrooms where a variety of technologies are being used, (c) demonstrating various types of software and instructional methods that can be utilized with a diverse student population, (d) modeling of teaching and learning strategies by university faculty using computer-related technologies, and (e) training teachers in the evaluation of software (Chisholm, 1993; Hunt, 1994).

For teachers of ELLs, the evaluation of software must also include being able to determine whether the software is culturally appropriate and whether it can be utilized by students with various learning styles (Chisholm, 1993). Teachers need to be taught how to use technology to teach culture, academic content, critical thinking skills, and to enhance students' language development.

### **Conclusion**

Without a doubt, we are in the center of a "monumental technological paradigm shift, one which will eventually change the way that all instructors teach and the way students learn" (Jensen, 1993). While technology should not take over the language classroom, it must be embraced in order to allow educators to do those things which they are unable to do themselves, or those which will improve what is currently being done in the classroom. Today, if we can't read English, the amount of information we can access on the Internet is severely limited. Education is another dimension of the future of language on the global Net. The Web-based instruction is new to EFL/ESL classroom. Since there is no appropriate pedagogy (Hanson-Smith, 1997), clear theory, or established protocol (Frizler, 1995), teaching language

online requires constant experimentation and investigation. Some students are not able to navigate the Web due to the scarcity of suitably equipped computers. Therefore, for online learning, how to design a suitable instruction program and how to help students use of online resources are still two major concerns on English education. It is essential that we make informed decisions about how the technology can be successfully integrated into the language classroom.

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