Teaching approaches to Computer Assisted
Language Learning

Poone Abbasi

Department of English Language and Literature, Islamic Azad University, Takestan

Branch

Abstract

Computers have been used for language teaching ever since the 1960's.Learning a second language is a challenging endeavor, and, for decades now, proponents of computer assisted language learning (CALL) have declared that help is on the horison. We investigate the suitability of deploying speech technology in computer based systems that can be used to teach foreign language skills. In this case, we make a case for using speech processing technology in CALL. Whether or not Computer Assisted Language teaching offers wide range of accessories to ESL teachers to exploit language teaching. In order to appreciate the potential benefit of using speech technology in CALL, a basic understanding of both the core technology and its limitations-what it can and cannot do-is therefore essential. In this paper listening and computer, financial barriers and CALL and motivation will be covered. The first thing that a student needs to develop to be able to communicate in a foreign language is his listening comprehension skill.

Keywords: computer, assist, technology, speech

Introduction

Computer Assisted Language Learning (CALL) is an adventure, which both exciting and frustrating as a field of research and practice. It is exciting because it is complex, dynamic and quickly changing, and it is frustrating for the same reasons. Since the past 25 years, the rapid growth of technological devices has revolutionized different fields of science. In line with such advancement, the invention and use of computers has had tremendous impact on various aspects of scientific study. Computers, which were primarily used for mathematical concerns at its birth,

have had their unique place in every part of our lives. Soon afterwards they started to be utilized in general education especially in language learning, and the term "Computer-Assisted Language Learning" (CALL), referring to the use of computers in the learning and teaching of English, appeared in the literature. Since then, the technology has undergone a rapid process of improvement and computers in different sizes and functions have become available to almost everyone.

Prensky (2000) states that nowadays for students, "world without computers, digital media or the Internet is meaningless. Named as digital natives, they observe the world of information and communication technology (ICT) in a different way in comparison with the adults in their life, who in contrast, are viewed digital immigrants." (Lenhart, Madden, & Hitlin, 2005) suggest on average students' using some type of technology-based media six hours in a day including listening and viewing more than reading and writing. CALL has played an important role in personalizing education. The recent advances in educational applications of computer hardware and software have provided a rapidly growing resource for language classrooms. The practical applications of Computer Assisted Language Learning (CALL) are growing at such a rapid pace that it is almost impossible for a classroom teacher to keep up with the field. This growth is quite justifiable in terms of educational advantages it offers particularly the availability of rich resources for both learners and teachers and the increased possibility of web-based interaction as a source for further learning. As Roger (1996, cited in Lai, 2006) states, "when the computer is used in conjunction with traditional second language classroom study, students can study more independently, leaving the teacher more time to concentrate on those parts of second language teaching that are still hard or impossible by computer.

Owing to such pedagogical benefits, computer technology has become more accessible to both individuals and schools and the growing understanding of its potentials has encouraged a shift of emphasis away from computer technology itself to various application of such technology in more practical aspects of teaching and learning."

Typicall CALL programs present a stimulus to which the learner must respond.The stimulus may be presented in any combination of text,still images,souns,and motion video.Computers have been a feature of teaching of Modern Foreign Languages since the 1960s in higher education and since the early 1980s in secondary for language pedagogy.

In the new millennium, multimedia, the internet, especially the World Wide Web, and various forms of distance learning are wide spread tools to reinforce language learning and support language teaching. The dynamic integration of computers and language learning has enabled language learners to access and process various resources and to internalize information more easily and meaningfully through personal engagement. According to Mayer (2005), "the theoretical rationale behind the multimedia principle is that when both words and pictures are presented, learners are able to establish verbal and pictorial mental models and build effective connections between the two. Generally speaking, the use of technology inside or outside the classroom tends to make the class more interesting." One way a program or activity can promote motivation in students is by personalizing information, for example by integrating the student's name or familiar contexts as part of the program or task.

Research and practice suggest that, appropriately implemented, network-based technology can contribute significantly to: Experiential Learning, Motivation, Enhanced Student Achievement, Authentic Materials for Study, Greater Interaction, Independence from a Single Source of Information and so on.

In terms of practical classroom activities to exploit the Internet, if teachers have access to several Internet-linked computers for use with their classes, there are numerous possibilities. Learners can fill-in on-line questionnaires, research specific topics, prepare presentations using on-line information, graphs and diagrams, find the answers to questions set by the teacher, do interactive grammar, vocabulary and even pronunciation exercises, read and summarize the latest news, and contribute to on-line discussions and debates. With technology advancing at breakneck speed, it sometimes seems difficult for teachers to keep up but remaining informed is crucial. Our learners may already be several steps ahead in this area and to retain credibility we need to be familiar with the latest developments in computer technology and to be able to integrate computers confidently into our everyday classroom practice.

A. Listening and Computer

In learning a foreign language, listening skill plays an important role. In order to communicate well in foreign language students should have enough sources of input for listening to enhance their listening skills. The first thing that a student needs to develop to be able to communicate in a foreign language is his listening comprehension skill. According to Morley

(1991), "Listening is the most common communicative activity in daily life: we can expect to listen twice as much as we speak, four times more than we read, and five times more than we write." (p. 82). Listening as a chief constituent in language learning and teaching first highlighted in the late 1970s with James Asher's (1977, cited in Brown 2001) work on Total Physical Response. The Natural Approach suggested a considerable "silent period" during which learners were permitted the security of listening without having any anxiety of speaking before they were "ready" to do so. Such approaches were an outcome of different research studies that indicated evidence of the significance of input in second language acquisition.

Based on Krashen's (1985, p.4) suggestion, getting insights from first language acquisition, "stressed the significance of comprehensible input, or the aural reception of language that is just a little beyond the learner's present ability." The significance of listening skill in language learning can scarcely be overvalued. Through reception, we absorb linguistic information, which are necessary for producing language. According to Brown (2001), "listening competence is universally larger than speaking competence" (p.247). According to Schmitt (2002), "Listening involves making sense of spoken language, normally accompanied by other sounds and visual input, with the help of our relevant prior knowledge and the context in which we are listening" (p.1). Benson and Voller (1997, cited in Carter and Nunan, 2002) states that, "The widespread availability of audio tape, videotape, CD-Roms, DVDs, educational softwares and internet downloads of sound and video files has vastly increased potential input material for language learning. Consequently, selection of the most appropriate input, chunking the input into manageable and useful segments, developing support material for self-access learning and training of learners in the best uses of this input is ever more important.

There are a vast sources of input available to English learners to improve their listening skill which among them we can refer to tapes (have not been used anymore), VCDs, DVDs, Blue rays(new technology of film formats which is getting replaced VCDs and DVDs), Flash memories and especially internet which is put through World Wide Web(WWW). According to Davis (1997), "The emergence of the World Wide Web (now known simply as "the Web") in the early 1990s marked a significant change in the use of communications technology for all computer users." Email and other forms of electronic communication had been in existence for many years, but the launch of Mosaic, the first graphical Web browser, in 1993 brought about a radical change in the ways in which we communicate electronically. The launch of the Web in

the public arena immediately began to attract the attention of language teachers. The Web enabled the user to branch to different pages on computers anywhere in the world simply by pointing and clicking at a piece of text or an image. This opened up access to thousands of authentic foreign-language websites to teachers and students that could be used in a variety of ways. Language teachers responded by developing more structured activities and online exercise. According to Leloup & Ponterio 2003, "The three most popular uses of the Internet for language teaching are electronic mail (email), the World Wide Web, and Multiple-user-domains Object Oriented (MOOs)." Numerous programs exist for using electronic mail.

Using e-mail, students can receive effective feedback. The teacher is able to respond to requests from students and examine their work in progress. E-mail feedback makes it possible for a teacher to develop ideas, both collectively and individually and ask better questions and at the same time provide examples and offer remarks. There is a large and increasing amount of educational material on the Web provided by universities worldwide to support online courses and degree programs. For autonomous language learners interested in improving their listening comprehension, the Internet now provides a diversity of audio sources comparable to what is available in text. In a guide to using computers in language teaching, Szendeffy (2005) argues that "computers provide students and teachers with great access and integration of material than tape recorders or videocassettes." In addition, "Having examined the available sources on developing learners" listening skills in language classes, it is easier to understand why Internet audio has suddenly become popular now" (Kavaliauskienė, 2008). According to Smith (2004) "computer technology can provide the student with the means to control his or her own learning, to construct meaning and to evaluate and monitor their own performance" (p.1). Bruce (1993) claims that the "computer will modify the nature of learning by substituting the control of learning more in the hands of the learner in other words it is more learner-centered."

Teachers can also modify and adopt any CALL learning materials and create relaxed atmosphere for learning, as a result, to suite the learners' needs and levels of competence. While using the CALL materials learners have the autonomy to identify and adopt the kind of strategy that would best suit their learning style and choosing such a strategy would also facilitate the learning process.

B. Financial Barriers

Financial barriers are mentioned most frequently in the literature by language education practitioners. They include the cost of hardware, software, maintenance, and extend to some staff development Froke (1994b) said, "concerning the money,the challenge was unique because of the nature of the technology. "Existing universities policies and procedures for budgeting and accounting were well advanced for classroom instruction. The costs of media were accounted for in the university as a part of the cost of instruction. Through the initial investment in hardware is high,inhibiting institution introduction of advance technologies; but Hooper (1994) recommends that the cost of computers will be so low that they will be available in most schools and homes in the future.

Lewis et al. (1994) indicate three conditions under which computer

_assisted learning and other technologies can be cost

_effectiveness. Computer assisted learning costs the same as conventional instruction but ends up with producing higher achievement in the same amount of instructional time,it results in students achieving the same level but in less time.These authors indicate that in examples where costs of using technologies in education are calculated,they are usually understand because the value of factors,such as faculty time and cost of equipment utilization,is ignored (Mc Clelland,1996).

Herschbach (1994) argues firmly that new technologies are add_on expenses and will not,in many cases,lower the cost of providing educational services.He stated that the new technologies probably will not replace the teachers,but will supplement their efforts,as has been the pattern with other technologies.

Weaknesses of computers:

Educators and syllabus designers must be very critical of software programs that they are using in their teaching contexts.A program may look very good the first few times but perhaps it does not have sufficient dynamic visual qualities to assume that it will be effective in teaching the target material.Users may quickly tire of the spinning characters,lights and whistles.

C. CALL and Motivation

According to Gardner and Lambert (1959), "motivation was held to be responsible for second and foreign language learning achievement to a great degree." After the introduction of computers in language teaching, the teaching of English has become more practical and fun for the learners. Therefore, the use of computers in the language classes may improve the learners' attitudes and motivation for language learning. The study of motivation is concerned with "the energy, direction, and exploration of the language learners' behavior, namely, what drives the learner to behave in this way or another way during the language learning process" (Deci & Ryan, 1985). In addition to other benefits of computers, affective sides of CALL like learning style, motivation, personality and other factors have been under question with the use of computers in language classes (Genç & Aydın, 2010). Lumley (1991), for example found that students in traditional classrooms become bored if tasks are too easy and frustrated when they are too difficult. Using technology to diagnose students" strengths and then planning activities to build on those strengths builds a student's motivation to learn and succeed. Technology improves motivation, engagement and interest when students use multimedia programs and software designed to develop skills and knowledge. Using audio and video technologies brings content to life and stimulates learning. Soo (1999 as cited in Nunan and Carter 2002) links motivation and CALL learning style: if a teaching style does not match students" learning style to some degree, instruction may be perceived as boring and incomprehensible, and students are less motivated.

Advances and increased availability of computers have altered and expanded the field of second/foreign language education. Computers can now be used in language laboratories where the main end is improving students" speaking and listening comprehension. From this perspective, CALL can be seen as an approach to teaching and learning foreign languages whereby the computer and computer-based recourses such as the internet are used to present reinforce and assess material to be learned through providing learners with various sources of listening comprehension texts and tasks and involving them in such activities.

Conclusion

The history of CALL suggests that the computer can serve a variety of uses for language teaching. It can be a tutor which offers language drills or skill practice; a stimulus for discussion

and interaction; or a tool for writing and research. With the advent of the Internet. It can also be a medium of global communication and a source of limitless authentic materials. One interesting aspect of CALL is that theoretically it can create a need to which it then responds, should the learner request assistance. Although this type of interaction is impossible for the computer in the context of a real conversation, technology can assist in the input/comprehension/intake process.

Computer Assisted Language teaching is so much effective that it must be introduced in all institutions of the country. Iran as a developing country can gain so much development through this teaching strategy. As with the audio language lab "revolution" of 40 years ago, those who expect to get magnificent results simply from the purchase of expensive systems will likely be disappointed. But those who put computer technology to use in the service of good pedagogy will undoubtedly find ways to enrich their educational program and the learning opportunities of their students.

The end result will be to devise profiles for instruction such that the teacher and the technology work together, making contributions according to the comparative advantage each holds over the other.

References

Brown, H. D. (2001). *Teaching by principles an interactive approach to language pedagogy, second edition.* Addison Weseley: Longman.

Bruce, B. (1993). Innovation and social change. In B. Bruce, J.K. Peyton & T. Batson (Eds.), *Network-based classrooms: promises and realities, pp. 9-32.* Cambridge: Cambridge University Press.

Carter, R., Nunan, D. (2002). *The Cambridge guide to teaching English to speakers of other languages*. United Kingdom: Cambridge University Press.

Davies G. (1997). Lessons from the past, lessons for the future: 20 years of CALL.

Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior.New York: Plenum Press. Gardner, R. & Lambert, W. (1972). *Attitudes and*

Motivation in Second Language Learning. Rowley, Massachussets: Newbury House Publishers.

Genç, G. & Aydın, S. (2010). Students" motivation towards computer use in EFL learning. *IETC*, 1367-1369.

Krashen, S. D.(1985). *The Input Hypothesis*. London: Longman

Lai, C. (2006)The advantages and disadvantages of computer technology in second language Acquisition. *National Journal for Publishing and Mentoring Doctoral Student Research. 3 (1)*, 1-6.

Lenhart, A., Madden, M., & Hitlin, P. (2005). *Teens and technology*. Washington, DC: Pew.

LeLoup J. & Ponterio R. (2003). Interactive and multimedia techniques in online language
lessons: a sampler. *Language Learning & Technology* 7, 3. Retrieved October 12, 2011 from http://llt.msu.edu/vol7num3/net/default.html).

Lumley, D. (1991). *Improving Student Motivation. Electronic Learning*, 11(3), 14- . Retrieved Jan. 07, 2014, from ProQuest database.

Kavaliauskienė, G. (2008). Podcasting: A tool for improving listening skills. *Teaching English with Technology. Vol 8, issue 4.* http://www.tewtjournal.org

Mayer, R. (2005). Interactive multimodal learning environments. *Educational Psychology review,* 19, 309-326.

Morley J. (1991). Listening comprehension in second/foreign language instruction. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (pp. 81-106). Boston, MA: Heinle & Heinle.

Prensky, M. (2000). *Digital game-based learning.* New York: McGraw-Hill.

Smith, B. (2004). Computer-mediated negotiated interaction and lexical acquisition. *Studies in Second Language Acquisition*, 26(3): 365–398.

Schmitt, N. (2002). *An introduction to applied linguistics*. Great Britain: Arnold Publication.

Szendeffy, J. (2005). *A Practical Guide to Using Computers in Language Teaching*. Ann Arbor: University of Michigan Press.

Hartoyo, Ma, ph.D. 2006 individual differences in computer assisted language learning (CALL).Semarang:Universitas Negeri Semarang Press.

Negotiation and TA (transactional analysis) in ESL