# Using Technology in Second Language Study

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## Abstract

*It is difficult to avoid technology in second language study these days. The combination of the text with video, the Web and CD-ROM is beneficial to language learning. As long as the aim of language is communication, any technological tool is worth consideration and investigation. Multimedia and the internet have the potential to make an enormous impact on language study. The internet can break down the walls of the classroom and give access not only to diverse sources of information, but to opportunities for genuine communication. For the moment, technology presents great challenges. As second language educators, we are challenged to explore, exploit and evaluate elements of technology that support and improve language teaching and learning. At the same time, it is important to monitor and research the effectiveness of technology and second language study. In this paper new information and communication technology have been touched upon and the main aim is the appropriate use of the devices for language study in the new era.*

*Keywords: Interpersonal communications, Multimedia computers, Technology Enhanced Language Learning, Computer Assisted Language Learning.*

# استفاده از تکنولوژی در آموزش زبان دوم

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## چکیده

در حال حاضر در آموزش زبان دوم توجه به شیوه و روش تدریس گریزناپذیر است. ترکیب متون درسی با نوارهای ویدیویی، CD و اینترنت بر کیفیت آموزش زبان می‌افزاید. تا هنگامی که هدف از زبان‌آموزی برقراری ارتباط است هرگونه ابزاری ارزش تحقیق و بررسی را دارد. وسایل ارتباط جمعی و اینترنت توانایی این را دارند که بر آموزش زبان تأثیر زیادی بگذارند. اینترنت می‌تواند محدودیت‌های فیزیکی کلاس درسی را از میان بردارد و نه تنها امکان دسترسی به منابع گوناگون اطلاعاتی را فراهم می‌کند، بلکه ارتباط واقعی را نیز امکان‌پذیر می‌سازد. در حال حاضر روش تدریس زبان دوم با چالش‌های مهمی مواجه است. ما به عنوان مربیان آموزش زبان دوم، باید ارکان و اجزای روش تدریس که آموزش و یادگیری زبان دوم را تداوم و بهبود می‌بخشد مورد تحقیق، بررسی و ارزیابی قرار دهیم. علاوه بر این، مهم است که کارایی و اثربخشی روش تدریس زبان را کنترل و بررسی کنیم. در این مقاله به اطلاعات و روش‌های ارتباطی جدید اشاره شده است و هدف اصلی در این‌جا استفاده مناسب از وسایل و ابزار آموزش زبان در عصر حاضر است.

کلیدواژه‌ها: ارتباطات میان‌فردی، کامپیوترهای چندرسانه‌ای، آموزش زبان با کامپیوتر، آموزش زبان با تکنولوژی پیشرفته، شبکه جهان‌گستر، تکنولوژی اطلاعات.

## Introduction

Technology-based language teaching is perceived as using technology in a supportive and supplementary role, as an aid or a tool for the teacher, but not as a substitute. Higher literacy needs and global communication technologies such as the internet require students world-wide to develop academic level mastery of international languages such as English in order to compete globally in academic professions. However, whereas school and university second language programs are frequently able to produce a basic interpersonal communications skill level of mastery of second languages, there are few university second language programs that consistently produce a high level of mastery of cognitive-academic language processing in a second language. Existing second language programs frequently lack the sustained concentration of interactive time dedicated to negotiation of meaning in the second language to make academic levels of mastery a realistic expectation for the majority of university students. Too frequently, existing programs, due to limited resource allocation, are rather more passive than active with few hours per week in which the students can interact on topics of mutual interest.

Recently, preliminary studies using technology have shown low student-initiated interactive second language communication may be used to supplement more traditional approaches, and in particular, the effectiveness of university level immersion ESL courses where students learn academic course content through ESL. In these studies, university students actively negotiated the meaning of extensive resources and readings in a second language on electronic bulletin boards whenever they were interested at home or university. This student centered approach appears promising based on results from a detailed discourse analysis of the student's communications on the bulletin boards as well as from reading comprehension and writing production tests. In addition, extensive formative and summative interviews of the students use and attitude towards reading and discussing course content on the electronic bulletin boards for second language acquisition yielded positive results of how technology bulletin board facilitated SLA.

With the advent of network computers and internet technology, computer-based instruction has been widely used in a language classroom today. Computer technologies have changed the way people gather information, conduct research and communicate with others worldwide. Web-based writing instruction has proved to be an important factor in enhancing the writing quality of English as a foreign language students, in addition to traditional in class writing instructions. Before discussing the advantage of using technology for learning languages, it is important not to refer to technology as if we were dealing with a single, homogeneous tool, as if all technology were the same. Different technologically based tools give different advantages for learning a second language. There is not one technology best suited for language study,

but rather an array of technological tools that can be harnessed to that end, although the tools themselves will continue to change very rapidly. More specifically, there are important technological platforms that provide tools to assist language learning, in order of increasing interactivity: video, the Web, CD-ROM applications, and network-based complication (i.e., email, user groups, and chat rooms).

## Video

When teaching English as a second language (ESL) video can be used in a variety of instructional settings - in classrooms, in distance-learning sites where information is broadcast from a central point to learners who interact with a facilitator via video or computer, and in self-study situations. It can be used in teachers' professional development or with students as ways of presenting content, starting conversations, and providing illustration for concepts. Teachers or students can create their own videotapes as content for the class or as a means to assess learner performance.

There are a number of good reasons to use videos in adult classrooms. Videos combine visual and audio stimuli, and provides context for learning. For English language learners, videos have the added benefit of providing real language and cultural information. Videos can be controlled (stopped, paused, and repeated) and can be presented to a group of students, to individuals, or used for self study. It allows learners to see facial expressions and body language at the same time as they hear the stress, intonation, and rhythm of the language.

Videos can be stimulating for adult learners. Many videos are based on stories, which are enjoyed by almost everyone and particularly favored in some cultures. Videos that use the conventions of entertainment television (plot, character, development, and resolution) may catch the attention of learners who do not yet read. Because many excellent videos are produced as entertainment for native English speakers, they generally present real language that is not simplified and is spoken at a normal speed with genuine accents. These videos include movies, television programs, and news broadcasts. Their compelling story lines can motivate learners to stretch their comprehension. Additionally, using authentic videos in the classroom can provide opportunities for learners to evaluate a medium that they use in their daily life. This is important because just as learners need to develop critical literacy skills in order to analyze what they read to distinguish fact from fiction or to identify an author's position on a topic and compare it to their own, they also need to be able to do this with what they see and hear, i.e., with films, and television programs.

Instructional videos for English language development have been created for use in classrooms or in other educational settings and have additional advantages. They are likely to have been evaluated for language, content, and length, and many instructional videos are packaged as multimedia resources

that include student workbooks, teacher guides, video transcriptions and audiotapes. The use of authentic videos is challenging. Often they do not provide the best means of explaining complex concepts or practicing particular grammar or writing skills. It takes time for the teacher to preview and select authentic videos and then to prepare activities for learners. As the language use and the context of authentic videos are not controlled, teachers will need to take time to explain these.

Whether using authentic or instructional videos, there are criteria to be followed in their selection. I suggest that teachers ask themselves the following questions before choosing a video or video series:

Will the video appeal to my students? Will it make them want to learn? Does the content match my instructional goals? Is it culturally appropriate for my learners? Is the instructional message clear to my students? Here the teacher is vital. Preparing the learner to understand what they are going to watch makes the difference between time wasted and time well spent. Is the rate of the language or instruction too fast for my students? Many authentic videos move at a pace difficult for a nonnative speaker to follow.

Educators of English language learners are exploring the use of video on the World Wide Web and the use of software applications that include video on CD-ROMs. Videos are powerful tools in helping English language learners improve their language skills. They provide the learner with content, context, and language. Videos will play an increased role in providing ESL instruction to students in the classroom as well as in self-study situations.

## The Web

The Web offers a variety of authentic target-language resources. More importantly, the Web gives all peoples of the world a channel for their own voices and promotes their own notion of self, which is reason alone why language students should be reading these Web pages. This sense of authenticity on the Web provides endless topics for cross-cultural analysis and discussions in a content-based classroom.

Teachers are beginning to use Web pages, both original and adapted as the students' primary-source materials, especially in content-based language courses. In this type of course, students' works through the tasks and activities presented them and only gradually have recourse to learning (Debski 1997). For the experienced teacher who knows how to take advantage of these obvious communicative opportunities, a Web-based, content-driven approach is a dream come true and students respond in kind.

## CD-ROM

CD-ROMs offer an ideal medium for the delivery of specific applications that take advantage of large audio, graphics, and video files. The publishing industry is increasingly involved in producing high quality CD-ROMs because the

marketplace demands it (Godwin 1999). One of the jobs of today's language faculty and lab personnel is to keep track of this new generation of language CD-ROMs and to know how to review them. Teachers must be educated in recognizing well grounded pedagogy when they see it, hear it, and read it on the screen. Many of today's CD-ROMs have sophisticated visual interfaces, but care must be exercised so that the best is chosen (McLuhan 1964).

## Computer Assisted Language Learning (CALL)

Computer tools such as word processors and desk-top publishers might serve as a model of Communicative CALL (Computer Assisted Language Learning). Although knowing the truth, they patiently provide only the requested information or activities in order to lead to exploration and discovery on the part of the student. Using this method, we can describe the role of the computer in Communicative CALL as stimulator or reality.

The types of computer programs using a communicative approach might still include those of the drill and practice type. The point with Communicative CALL however is that students' choice, control and interaction play a more important role. Other types of Communicative CALL programs rely on the model of computer-as-stimulus. In this case, the purpose of the CALL activity is not so much to have students discover the right answer, but rather to stimulate student's discussion, writing, or critical thinking.

## Technology-Enhanced Language Learning (TELL)

To emphasize the growing invisibility of the tool and the shift in emphasis on the users of the tool, it would seem appropriate to employ a different term to characterize this period in the evolution of computer use in language teaching. We refer to Computer Assisted Language Learning, we will now instead adopt the term Technology Enhanced Language Learning. The distinction between CALL and Technology-Enhanced Language Learning (TELL) is that the computer simultaneously becomes less visible yet more ubiquitous. The change in emphasis from computer to technology places direct importance on the media of communication made possible by the computer, which itself often remains unseen, rather than on the computer itself. In CALL, the computer assists learning, it might be said that in TELL, the computer supports learning. This third phase of technology use in second and foreign-language teaching is characterized by the use of multimedia and the internet.

The role of the computer once again shifts in this phase of computer use in language teaching. Unlike in the previous phase where the computer served in the role of simulator of reality, in this phase the computer is able to serve as generator of reality. In this phase, the discrepancy disappears between the didactic situation of the classroom and that of the world outside of the

classroom. The computer allows classroom-based learners to experience realities from outside of the classroom.

Multimedia computers can provide an accurate portrayal of the language and provide learners with control and feedback. They facilitate a methodological and theoretical advance that shifts the emphasis away from the traditional production of sentences to facilitate authentic learning. Multimedia provides support for the different learning styles of language learners by deploying different neuro-systems in learning through its reliance on sound, color, animation, etc. In spite of the advantages of multimedia for language learning, there are problems related to its use for language teaching. The lack of programs based on sound pedagogical principles combined with the lack of interactivity and intelligence of these programs limit the ability of multimedia technology to allow for the integration of meaningful and authentic communication.

Computer-mediated communication can allow for a truly integrative approach to technology use by providing an environment where authentic and creative communication are fully integrated. Computer-mediated communication allows not only one-to-one communication, but also one-to-many, allowing a teacher or student to share a message with a small group, the whole class, a partner class, or an international discussion list of hundreds or thousands of people. The integrative function of computer-mediated communication is illustrated as follows:

> Computer-mediated communication allows users to share not only
> brief messages, but also lengthy (formatted or unformatted)
> documents-thus facilitating collaborative writing- and also graphics,
> sounds, and video. Using the World Wide Web, students can search
> through millions of files around the world within minutes to locate
> and access authentic materials (e.g., newspaper and magazine
> articles, radio broadcasts, short videos, movie reviews, book
> excerpts) exactly tailored to their own personal interests. They can
> also use the Web to publish their texts or multimedia materials to
> share with partner classes or with the general public.(Warschauer1996)

Increased linguistic diversity extended listening practice, global interaction with other learners and native speakers through email and chat: there are some of the advantages offered through online learning environments and computer-mediated communication. Authentic language/content-based learning are facilitated, stimulated and simulated through technology use. The World Wide Web allows an instantaneous exchange of information to and from sites and between individuals. Use of the internet demands a level of student engagement in authentic language encounters that would barely be possible face-to-face.

Use of the internet in teaching can also facilitate more proactive, conscious, cognitive learning whereby the student accesses, evaluates, and

deploys his or her own learning methods. Students may research current events, historical and cultural topics, or hundreds of other topics in thousands of online archives. They may also question native speakers using email, look up words online as they try to express themselves, and collaborate with groups of learners, native and nonnative speakers of the foreign language globally and instantaneously.

The language learner requires logic skills in order to search the Web for scientific information. Students must review the information through activities such as scanning, discarding, and evaluative judging. Finally, the learner goes through a process of synthesizing the information in order to make a complete and coherent whole. Such an endeavor permits students to practice reading skills and strategies.

## Conclusion

In conclusion, some of our most important priorities for the teaching of second and foreign languages can be strongly supported by intelligent use of technology. But these will not be accomplished unless and until teachers themselves take the initiative to think through what the technology should be able to do for them and for their students and make their needs known.

## Bibliography

Blake, Robert, David Fahy and Dick Walters. 1999. *Implementing chat software in the foreign-language curriculum*. Boston, Massachusetts: Anker Publishing Co.

Cummins, Jim. 1998. "*E-Lective Language learning: Design of a Computer-assisted Text-based ESL/EFL Learning System.*" *TESOL Journal.* Spring:18-21.

Debski, Robert. 1997. Support of Creativity and Collaboration in the Language Classroom: A New Role for Technology. Pp. 128-156. In *Language Learning Through Social Computing: ALAA's Occasional Papers Number 16.* Robert Debski, June Gassin, Mike Smith (eds.). Melbourne: Applied Linguistics Association.

Ellis, R. 1994. *The Study of Second Language Acquisition.* Oxford: Oxford University Press.

Gass, Susan. 1997. *Input, Interaction, and the Second Language Learner.* Mahwah, New Jersey: Lawrence Erlbaum Associates.

Godwin, James R. 1999. "Web Course Design and Creation for language Learning." *CALICO Journal* 17(1): 43-58. Special Issue on Language Courseware Design.

Kern, Richard. 1995. *Restructuring Classroom Interaction with Networked Computers: Effects on Quality and Characteristics of Language Production. Modern Language Journal* 79: 457-476.

Larsen-Freeman, D., M.H. Long, 1991. *An Introduction to Second Language Acquisition Research*. London: Longman.

Liu, M., Z. Moore, L. Graham, S. Lee. 2002. "A Look at the Research on Computer-Based Technology Use in Second Language Learning: A Review of the Literature from 1990-2000." *Journal of Research on Technology in Education* 34(3): 250-273.

McLuhan, Marshall. 1964. *Understanding Media: The Extension of Man*. New York: Signet.

Warschauer, M. 1996. "Computer-assisted Language Learning: An Introduction." Pp. 3-20. In *Multimedia Language Learning*. S. Fotos (ed.) Tokyo: Logos International.

Zaho, Y. 1996. "Language Learning on the World Wide Web: Toward a Framework of Network Based CALL." *CALICO Journal* 14(1): 37-51.

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