

Use of CALL in No-Tech EFL Classrooms

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**International Conference on English Language Studies 3 (ICELS 3).
Santa Dharma University, Yogyakarta, Indonesia. May 20–21, 2005.**

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Abstract:

While thousands of students and instructors in developed countries are using the Internet and computer assisted technologies to teach language skills, literature or target culture, in some developing countries use of technology in instruction is not yet known, due to insufficient numbers of PC's, lack of internet connectivity, lack of trained instructors, lack of administrative support and insufficient funds. Despite the many obstacles, students and instructors in no-tech environments can still use their PC's and internet connection from home or may set up a small network using few PC's and a phone line. Instructors and students can make use of the many tools and resources available on the net such as e-mail, newsgroups, discussion forums, mailing lists, language websites, online dictionaries, online encyclopedias, authoring tools, online quizzes and online courses to supplement classroom instruction.

Many research findings have shown that use of technology in EFL instruction has resulted in significant gains in achievement and positive attitudes towards learning, because use of CALL provides additional practice, a self-paced and non-threatening learning environment, integrates sound, pictures, motion, color, and different skills. The students enjoy using the internet, find it useful and fun, and consider it a new way of leaning and doing homework. It heightens their motivation and raises their self-esteem. It creates a warm climate between the students and instructor and among the students themselves. They can use it any time and as many times as they need.

Despite the glamour of technology, its use does not guarantee students' success in learning nor higher levels of achievement than traditional classroom techniques. The effective use of technology depends on how it is used, what is being taught, and for how long. Its use is always associated with problems such as: bad connection, slow browsing, some students do not post any responses if not prompted by the instructor and if the instructor does not post new topics, post a sample response, and give marks. Some students do not take online instruction seriously. Using the internet as a learning tool may not be part of some students' culture. Some are so used to traditional instruction that depended on the book. The instructor may not have sufficient time in the classroom to brainstorm topics, provide training and give instructions. The content and difficulty level of the material available on the net may be inappropriate for the students' proficiency level and course objectives. The online course design may be too basic or too complicated for the students.

Teaching with technology does not cancel the teacher's role. It poses new challenges and requires enthusiasm, some training and perseverance. In CALL, the teacher serves as a facilitator. He/she has to provide the students with technical support, train them, respond to individual students' needs, comments, and requests, look for relevant websites, post questions, discussion topics and online activities, write model responses, send public and private messages, and design exercises and quizzes every week. Examples and webpages will be provided.

Keywords: *Technology integration, no-tech classrooms, lack of technology, technology utilization, technology and language learning, teaching with technology.*

1. Introduction

Thousands of students and instructors around the world are using the Internet and computer assisted technologies to teach listening, speaking, reading, writing, vocabulary,

grammar, literature, and the target culture. In many parts of the world, use of technology in EFL instruction in some higher education institutions is not yet known due to insufficient funds, insufficient numbers of PCs in locations where students have access, lack of internet connectivity, lack of trained instructors, and lack of administrative and technical support. Some instructors have no experience in developing CALL materials, are not willing to use technologies that require extra preparation time and feel threatened by technology. Computer specialists do not have the necessary background or expertise to develop or handle CALL materials and software (Al-Jarf, 2001c; Al-Jarf, 1999).

2. Aims of Study

The aims of this study are to introduce the audience to the concept of CALL (computer-assisted Language Learning), the kinds of technology that can be used in EFL college classrooms with no technology, how they can be used, what the advantages and shortcomings of CALL are, as revealed by prior research. The study will illustrate how online course can be integrated in EFL instruction from home. By using an online course with Nicenet, Moodle, or OWCP, several technologies such as word-processing, spell-checking, Powerpoint presentations, WWW resources, e-mail, and discussion forums are utilized.

3. Definition of Terms

- (i) ***Computer-assisted language learning (CALL)*** is an approach to language teaching and learning in which computer technology is used as an aid to the presentation, reinforcement and assessment of material to be learned, usually including a substantial interactive element. Levy (1997) defines CALL as "the search for and study of applications of the computer in language teaching and learning". Professional associations such as EUROCALL, CALICO and IALLT interpret CALL as the use of computers in the learning and teaching of foreign languages in the broadest sense, from the use of word-processors to the Internet.
- (ii) ***Computer-assisted instruction (CAI)*** is a narrower term that refers to drill-and-practice, tutorial, simulation or problem-solving activities and educational games offered either by themselves or as supplements to traditional, teacher-directed instruction (Langenbachand and Bodendorf, 1997).
- (iii) ***Technology Enhanced Language Learning (TELL)*** embraces a wider range of uses of technology in language learning and teaching than CALL.
- (iv) ***Computer-Based Training (CBT)*** refers to courses that use the computer as the primary delivery method of instruction. No textbook is required. It may be self-paced, a self-contained interactive instruction on a CD, or instruction through e-mail and small group computer conferences with other students. The term CBT is often used interchangeably with CAI (Al-Jarf, 2003b).
- (v) ***Web-Based Instruction (WBI)*** is a form of computer-based instruction which uses the World Wide Web as the primary delivery method of information. A textbook is usually required, and all other materials, as well as communication with the instructor, are provided through the course website. The terms "on-line courses" and "web-based instruction" are sometimes used interchangeably with WBT (Al-Jarf, 2003a).

- (vi) ***Computer-Mediated Communication (CMC)*** refers to the use of computers and related technology to create, store, deliver, and process communications. It refers to any form of communication between two or more individual people who interact and/or influence each other via separate computers. It offers many educational opportunities and possibilities when driven by sound visions of learning. The use of e-mail, discussion forums, whiteboards, video conferencing, chat groups, webpages, Compact Disk Training, are a few examples of CMC.
- (vii) ***Computer-Based Education (CBE) and Computer-Based Instruction (CBI)*** are the broadest terms. They refer to any kind of computer use in educational settings, including drill and practice, tutorials, simulations, instructional management, supplementary exercises, programming, database development, writing using word processors, and other applications. These terms refer either to stand-alone computer learning activities or to computer activities which reinforce material introduced and taught by teachers (Langenbachand and Bodendorf, 1997).
- (viii) ***Computer-Managed Instruction (CMI)*** refers either to the use of computers by school staff to organize student data and make instructional decisions, or to activities in which the computer evaluates students' test performance, guides them to appropriate instructional resources, and keeps records of their progress (Langenbachand and Bodendorf, 1997).
- (ix) ***Computer-Enriched Instruction (CEI)*** refers to learning activities in which computers generate data at the students' request to illustrate relationships in models of social or physical reality, execute programs developed by the students, or provide general enrichment in relatively unstructured exercises designed to stimulate and motivate students (Langenbachand and Bodendorf, 1997).

4. What Technologies Can Be Used

CALL embraces many types of computer technologies such as word processing, software, compact disks, authoring tools and software, e-mail, chat, pen pals, mailing lists, discussion forums, videoconferencing, the World Wide Web, online courses and so on. The present study focuses on the following types:

4.1 The World Wide Web (WWW or Web)

It refers to the whole constellation of resources that can be accessed using gopher, FTP, HTTP, Telnet, Usenet, WAIS, and other tools. The Web presents the user with documents (webpages), and links to other documents or information systems. Webpages include text as well as multimedia (images, video, animation, sound). The World Wide Web can be used in a myriad of ways for language teaching. It provides linguistic exercises, authentic reading materials, simulating communicative exercises such as student discussion of trips or vacations, and is used as a medium of student publishing. Web resources can be viewed as bibliographic documents, electronic Web resources, multimedia objects, database concepts, or case tool structures.

4.2 Mailing Lists on the Web (Listservs)

A mailing list is a collection of names and addresses used by an individual or an organization to send information or material to multiple recipients sharing the same area of interest. The term is often extended to include people subscribed to such a list.

4.3 Newsgroups

Thousands of newsgroups or discussion groups are currently active over the Internet, sharing information among millions of people. They cover virtually every subject such as science, entertainment, sports, children's education, nature, or computing. A free newsgroup can be created using Google, Yahoo, Usenet, or MSN groups. A newsgroup has a moderator who watches over and allows uploading rights to the newsgroup that s/he has set up and is responsible for moderating. A moderator may enroll members or send a message to individuals to join the group. Newsgroup members can post messages, pictures, or movies which can be downloaded. Posts are stored in an index.

4.4 Pen pals (or pen friends):

They are people who regularly write to each other. A pen pal relationship is often used to practice writing and reading in a foreign language, to learn more about other countries and life-styles, and to reach out and communicate with a fellow human being.

4.5 Chat:

It is an informal online conversation. Students may engage in a voice chat, video chat with personal contacts using Talk City, Yahoo or MSN. Yahoo, MSN and Windows messengers may be downloaded from the Internet. They can create their own chatroom or join any chatroom available on the net: General chat, official rooms, art, animals and pets, business, finance, technology, cultures and community, entertainment, family & home, games, politics, health, hobbies, crafts and interests, movies, music, recreation, sports, religion, education, science, sports.

4.6 Electronic Mail (e-mail):

It refers to messages, usually text, sent from one person to another via the computer. E-mail accounts can be created with Yahoo, Hotmail, Maktoob, or Lycos.

4.7 Discussion Forums:

They are places where people can exchange messages of common interest.

4.8 Online Courses:

Online courses (web-based instruction) refer to computer based instruction in which courses use the world wide web as the primary delivery method of information. Materials, as well as communication with the instructor, are provided through the course web-site. Students may participate in the class by using the Internet for all or part of the coursework. The instructor posts course information, assignments, hyperlinks and discussion threads. Communication between students and instructors occurs by e-mail (Al-Jarf, 2001a).

5. How to integrate CALL in No-Tech EFL Classrooms

Al-Jarf (2001b) indicated that the integration of technology in no-tech classrooms requires the following:

5.1 Creating a Small Network

According to Al-Jarf, Reima (2005b), a small computer network can be implemented in the classroom. Building the small network helps the students access and share files, share a printer, and share the same Internet connection through the same phone line. The students can be exposed to hands-on practice and are able to browse the internet.

To create a small network, the instructor needs a 5-port 10/100M Ethernet mini switch with a USB bus power supply and several networking cables. A network of two computers can be first tried out at home. Laptops or PC's are usually equipped with an Ethernet port, a modem, a network card, Windows XP, a firewall and Internet Explorer. An Ethernet-based network can be created with the instructor's laptop serving as the server (main computer). Connect the main computer to the hub with a networking cable and connect the hub to the power outlet. Connect the other laptops to the hub with the networking cables. To configure the network, use the Network Setup Wizard that comes with Windows XP to name the laptops in the network, create the workgroup, and create a network bridge. Extend a phone line from the main office to the classroom. Link the main computer to the internet using the phone line. Configure Internet Explorer for network sharing and use Al-Jarf, Reima (2005b).

To enable the students to save, access, share, look at, modify, delete, rename, and add files and webpages, create a shared documents folder. To enable the students to print files from any laptop or from the internet, a printer can be shared by clicking the "Start" button in Windows XP, selecting the "Control Panel", clicking on the "Printers" icon, double-clicking the "Add a Printer" wizard, choosing the "Network Printer" option and clicking Next. The wizard will install the appropriate driver when the CD with the driver software is inserted Al-Jarf, Reima (2005b).

With all the laptops in the network configured, the laptops can be connected to the hub at the beginning of the session and detached from the hub at the end of the session. During the class session, the internet and printer are shared. Webpages and other files can be saved in the Shared Documents folder and copied to the students' laptops later Al-Jarf, Reima (2005b).

5.2 Using Computers from Home

Online chat, pen pals, e-mail, a newsgroup, a discussion forum, or an online course can be used from home or from an internet café as a supplement to EFL in-class instruction. Use a questionnaire to assess the students' computer literacy skills before instruction. Tell the students about the type of CALL to be used, why and how. Create your own mailing list, discussion forum, newsgroup, or chatroom. Sign up with an Online Course Management System such as Nicenet or OWCP as they are easy to use and free of charge. Give the students the course URL and class key and have them enroll themselves. Explain one course component at a time. Start a thread in "Conferencing". The first thread should require the students to introduce themselves. Write a paragraph about yourself and ask the students to write one about themselves. Add some websites related to themes taught in class in the "Link Sharing" are. Sites may cover dictionaries, encyclopedia, writing skills, grammar points, exercises or quizzes. Post one announcement at a time and one thread per week. You may add a new announcement every couple of days. Break complex topics several threads. When you post a new thread, post your own paragraph in response to the thread as an example for the students to follow. Encourage the students to write about something that they know or have experienced. Encourage the students to locate articles about certain themes from www websites such as Yahoo Movies, e-How, Discovery, about.com, NASA Kids. Set a time slot each day to respond to the students. Encourage the students to send e-mails to you and to their classmates. Do not highlight spelling and grammatical errors. Comment on students' messages and allow them to comment on each others and on yours. Behave like a student. Do not react negatively if they critique you. Send group messages every now and then to keep the students interested. Encourage the students to post their own threads and websites.

6. *Benefits of CALL*

Many research findings have shown that use of technology in L2 instruction has resulted in significant gains in achievement and positive attitudes towards learning and CALL. Yuen-kuang (1998) conducted a meta-analysis of thirty-five studies located from three sources, and transformed their quantitative data into effect size. The results suggested that the effects of using hypermedia in instruction are positive when compared to the effects of traditional instruction. The results provide classroom teachers with accumulated research-based evidence for positive outcomes of using technology in instruction.

In five studies with EFL college students, Al-Jarf (2003a; 2004a; 2004b; 2004c; 2005a) found significant differences between pre- and post-test scores of students using in-class instruction and those using a combination of in-class and online instruction in writing and grammar achievement and cultural awareness. The achievement level was higher among active participants who posted messages than those who just browsed and did not write anything, and between members of the latter group and those who did not register in the online courses. Reading comprehension and writing skills of students using Web-based materials improved more than those not using the materials (Liou, 1997). Hypermedia-assisted-instruction had a significant effect on vocabulary learning by ESL international students and on computer attitudes and computer anxiety (Liu & Reed, 1995). Kern (1997) compared conventional writing (i.e., pen and paper) with writing in various computer-mediated media such as electronic conferencing, e-mail, and MOOs (virtual meeting places where users interact in a text-based environment). He concluded that technology-enhanced interaction fosters virtual learning communities, promotes interaction across linguistic and cultural boundaries, and provides a different set of classroom discourse conventions in which to communicate.

Using the Internet and the World Wide Web to teach Spanish to American high school students was a success as it was useful in accommodating different learning styles and in fostering language learning. The students had positive comments and experiences in using the Internet. Computers were found to be popular among students because they were associated with fun and games, and because they were considered fashionable. Student motivation increased, especially when a variety of activities was offered, which made them feel more independent (McNeil, 2000).

Use of online courses in L2 provides additional practice, a self-paced and non-threatening learning environment, integrates sound, pictures, motion, color, and different skills. The students enjoy using the internet, find it useful and fun, and consider it a new way of leaning and doing homework. It heightens their motivation and raises their self-esteem. It creates a warm climate between the students and their instructor and among the students themselves. They can use it any time and as many times as they need. They find Internet exercises useful, as they provide more practice and give instant feedback. The exercises help clarify difficult points and help the students review for their exams (Al-Jarf, 2002; 2003a; 2004b; 2004c; 2005a). New technologies provide stimulating environments in which students become active learners. A long-term study sponsored by Apple Computer revealed that students had a higher degree of social awareness and self-confidence. They were more independent and had more positive attitudes towards learning and themselves. They were able to experiment, and problem solve with greater ease (Apple Computer, Inc. 1991).

Use of electronic mail (e-mail) facilitated communication between professors and students. It was used for announcements, students' questions, counseling, distribution of class assignments, quizzes, grade posting, homework hints, and attendance issues (Poling, 1994). It is viewed as a way to correspond easily with the instructor, and with other students sharing projects in and out of the classroom (Manrique, 1994). It allows individuals, no matter where they are located, to communicate with each other on a regular basis at a low cost. Through e-

mail, instructors can provide notes and materials to students, allowing them to access information at any time (Wilkinson and Buboltz, 1998). It is also used for the submission and critique of assignments and similar work (Juliano, 1997). E-mail can be used for online collaborative and project work, online help, online group discussions, and evaluation (Xu, 1996).

Computer mediated communications in the classroom helps develop academic discourse, collaborative, and project work, build knowledge, maximize the participants' experience, increase equity of participation and allow cross-cultural participation, develop reflective writing skills, and overcome social isolation. It provides ready access to help, support, feedback, active and interactive participation, freedom from constraints of time and location, and learner control (Xu, 1996).

Mailing lists can be used by faculty to broadcast messages to all students registered in specific classes, majors, departments, or academic organizations (Juliano, 1997).

Newsgroups can be used for out-of-class discussion of themes and issues discussed in class and to foster the growth of cultural knowledge (Bernhardt and Kamil, 1997).

Online journals, listservs, newspapers, and magazines provide authentic material for language learners. Teachers can find lesson plans and ideas, exercises, assessment tools, and other materials for use in their classes. Online language tutorials, exercises, and tests are also available to anyone who has access to the Web. This makes Web-based language learning activities attractive to both instructors and learners. Instructors can create their own interactive language learning activities on the Web, which allows them to tailor the activities to suit their own courses and students (Morrison, 2002).

The Internet provides access to a wider array of educational resources for students and faculty (Wilkinson and Buboltz, 1998). The Internet is inherently interesting, incorporates multi-sensory uses of media, provides enormous numbers of connections to other sources of information and interaction, allows everyone an individualized experience, and can both reflect and be a creation of teachers and learners (Fahy, 2000). Course-specific webpages are used to facilitate posting of grades, distribution of announcements and class notes/handouts, course policies and course syllabi, and other similar material (Juliano, 1997). Computers can keep track of what language learners do and provide useful insights into the process.

The multisensory and multidimensional nature of computers, the ability to allow learners to tailor information and tasks to their own level and interests, the possibility of authentic communication and access to authentic cultural resources, and the interactive learning experience afforded by contemporary computer technology to supplement the learning environment are additional advantages of CALL (Frommer, 1997).

Technology provides many opportunities for the students to work cooperatively, in pairs or in small groups. Research supports the use of group interactions to increase instructional effectiveness and efficiency, as well as positive social interactions (Johnson, Johnson, and Stanne, 1986; Schlechter, 1990).

Technology can promote cultural diversity and understanding by linking students from across the country and around the world (Salomon, 1991). Through pen pals, and online courses, the students are provided with opportunities for real communication with native speakers of the target language and students learning the same foreign language in other countries.

7. Shortcomings of CALL

Despite the glamour of technology, its use does not guarantee students' success in learning nor higher levels of achievement than traditional classroom techniques. In some EFL classroom settings, traditional classroom instruction proved to be more effective than that using technology. For example, Izzo (1996) found that hand-written essays were significantly

longer and more organized than technical essays produced by college students learning English for Specific Purposes (ESP) in Japan using computer workstations, because the instructor spent time teaching about workstation use instead of the writing process and the students could not see what the final paper looked like. In addition, they wasted time working on other homework and activities while using the workstations. Results of another study by Huang (1998) with college students in Taiwan showed that face-to-face discussions that preceded writing activities in a traditional classroom were superior to computer-mediated discussions in producing written comments and explanations of their plans for writing more. Students in the face-to-face group could support and refute each other's arguments better than those using the computer-mediated instruction. In a third study with college students enrolled in an introductory academic English writing class in Hong Kong, Roskams (1998) reported that skilled writers found collaboration in a networked writing laboratory to be ineffective in improving their writing skills.

In Chen's study (2001), the attitudes of Taiwanese freshman students exposed to American culture in a constructivist CALL (computer-assisted language learning) environment did not undergo much significant change. The more the subjects participated in the CALL environment, the less strongly they felt that information on the Internet helped them better understand American culture, and the less they liked to explore American culture via the Internet.

Al-Jarf (2002; 2004a; 2004b; 2004; 2005a) found that using online courses as a supplement to in-class instruction was not part of some Saudi students' culture. Some were so much attached to traditional instruction that depended on the book and indicated that they were not net browsers and preferred to read books and references. They also believed that online courses should be used for fun not for credit and serious studying. Therefore, they did not take it seriously. Many Saudi college students do extra work for grades only. If online learning is not part of tests and grades, they will not participate. Inadequate participation was another problem. Less than 40% of class enrollment participated in online courses. Some students do not post any responses if not prompted by the instructor. Others do not use the course tools properly. They write "Thank you" notes and compliments instead of real responses or start a new thread dealing with the same topic instead of posting a response under that topic. In addition, the instructor may not have sufficient time in the classroom to brainstorm topics before and after posting, go through the material in the hyperlinks in class, cannot check and respond to all the e-mails, discussion threads and newsgroup discussion threads. Some of the posts or e-mail content may be irrelevant to the material learnt in class. Other weaknesses are due to the online course design itself. The instructor may not be able to design her own tests and exercises and upload graphics and Powerpoint presentations. The online course design may be too basic or too complicated for the students. The content and difficulty level of the material available on the Internet may be inappropriate for the students' proficiency level, course objectives and topic under study. The content and language difficulty of online materials may keep learners from benefiting (Terrill, 2000). Some links may work at a time and may disappear or not work later. The frequency of using the hyperlinks cannot be traced. Many students prefer anonymous posting which has become popular over the last few years. Identity theft has become widespread. Some learners prefer speaking to writing. Early enthusiasm for Internet-based assignments waned as the novelty of the experience wore off (McNeil, 2000). When tests are given online, some students might cheat. Computerized tests used to measure academic listening comprehension and vocabulary for high-intermediate level ESL students performed at least as well as the paper-and-pencil version, with generally comparable validity (Balizet, Treder and Parshall, 1999).

Problems in the infrastructure might also appear. In a computer-mediated distance learning experiments, Clarken (1993) found that some students faced major problems in

getting the system to work, locating a place in the school to set up the computer, and making the necessary telephone connections from the school. Very little communication was directed either to or from the seminar instructor. The project was not successful in enlisting the participation of first-year teachers or supervising teachers, even though they were offered free use of hardware, software, and telephone lines.

8. Conclusion:

Teaching with technology does not cancel the teacher's role. It poses new challenges and requires enthusiasm, some training and perseverance. In CALL, the teacher serves as a facilitator. He/she has to provide the students with technical support, train them, respond to individual students' needs, comments, and requests. Every week, he/she has to look for relevant websites, post questions, discussion topics and online activities, write model responses, send public and private messages, and design exercises and quizzes.

Any plan to use the Internet and other new technologies as teaching tools must begin with a quality-oriented assessment of the given technology's fitness for use as a teaching tool. Factors to consider include whether the technology is directly related to the learning outcomes of the target learners, is affordable, readily accessible to the students, durable and long-lasting (Fahy, 2000). Before the World Wide Web (WWW) is used for teaching foreign languages, the instructor must examine the students' learning styles and choose appropriate learning and teaching approaches. The effective use of WWW resources in teaching grammar and vocabulary to L2 students means taking advantage of the way students think (Campbell, 1998,).

Finally, CALL provides college students with new opportunities for learning L2 in and out of the classroom. Therefore achievement of course objectives, level of computer sophistication, time commitment, class size, course structure, technical difficulties, complexity, privacy, and time management should be considered (Gillette, 1996). For technology to be used to its full advantage, it should be used to create an enjoyable, active learning environment.

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