

## Introduction

Computers can be used as effective tools in any ESL classroom. Whether you teach a LINC One or a LINC Five class, the use of computers offers a different medium through which learning and construction of knowledge is made possible. As language teachers, our job is to teach language first and use the computer to reinforce and enhance language learning. ESL instructors are not expected to become computer experts. However, they are expected to learn the computer skills required to enable them to operate the computer efficiently and utilize the software and hardware that has been made available in the LINC labs.

## What is CALL?

Computer-Assisted Language Learning (CALL) is the use of computer-based technologies for language instruction. Computer software from productivity tools (e.g. word processors) to courseware (e.g. Ellis) and the Internet are some examples of the use of technology at use in English as a Second Language programs today.

## What is CMC?

Computer-Mediated Communication is communicating with others via the computer. Email and chat lines are examples of CMC.

## Models of CALL

### A. BEHAVIORISTIC CALL

This early model of CALL was conceived in the 50s and implemented throughout the 60s and 70s.

- Otherwise known as “drill and practice” (Thrush, 1988) “drill and kill” (Warschauer, 1996), and “Computer as a language teacher” (Cabaj, 1998).
- Is based on “computer as tutor” (Taylor, 1980) model where the computer was used as a vehicle to provide
  - instructional materials for learners
  - repetition of information for learners
  - immediate, non-judgmental feedback.

However, this model failed to be popular with instructors because it demanded a “return to techniques that violated the instructors’ philosophy of language education, and failed to incorporate principles confirmed by research in language learning” (Thrush, 1988). An example of this model is the PLATO system, which included vocabulary drills.

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## B. COMMUNICATIVE CALL

This model was pioneered by Higgins and implemented in the 70s and 80s. It is based on the communicative approach to language teaching.

- Other terms used to address this model include “the games model” (Thrush, 1988) and “computer as a collaborator” (Cabaj, 1998).

The rationale behind this model was to allow authentic communication based on communicative competence (Canale & Swain, 1981). Thrush (1988) gives example of a game called “Adventures in London” where learners travel around a simulation of the London Underground system and visit various places to purchase items. At each place, they must choose a question to ask from a list-correct in grammar and in level of politeness and formality- in order to get what they want. Cabaj (1998) suggests that although this model engages the learner in problem solving activities, the cost associated with it prevent its wide use.

Communicative CALL is used to teach grammar implicitly, engage learners in real life utterances, and use the target language in a natural, authentic way (Warschauer, 1996).

Three models of Communicative CALL suggested by Warschauer are as follows:

- Computer as a tutor but in contrast to the drill and practice model where finding the right answer involves learners in making choices through control and interaction.
- Computer as stimulus where learners are stimulated through discussion, writing or critical thinking.
- Computer as tool where programs do not provide any language materials necessarily; they are rather used as a vehicle to promote language learning. Examples of computer as tool include word processors, spreadsheet, and concordancers. Cabaj (1998) remarks that productivity tools offer the advantage of free content created by the learner based on his/her interests and goals, which ensures higher student involvement. Thrush (1988) mentions cooperative group work as a benefit of using productivity tools in language teaching.

It is important to note, however, that any one of the above models can be used interchangeably with the other. For example, a drill and practice software may stimulate discussion or a word processor may be used for drill and practice purposes.

## C. INTEGRATIVE CALL

This model is based on the technological developments in the last decade, namely multimedia and the Internet. Multimedia provides a rich learning environment where learners can access a variety of media such as text, graphics, sound, animation, and video to navigate their way by pointing and clicking linked resources otherwise known as hypermedia. Explore Canada and Ellis are examples of multimedia-based software.

The advantages of using hypermedia:

- Create authentic learning environment by combining listening (sound), seeing (graphics), and reading (text), thus integrating skills;
- Allow learners to have control over their learning by working at their own pace, going back and forth by using the navigation buttons in a multimedia program;
- Address the content as primary focus and language form and learning strategies as secondary.

## Computer-Mediated Communication (CMC)

- Computer-Mediated Communication (CMC) or human communication by means of the computer has attracted the attention of many educators in the past few years. Researchers have started to examine the nature of CMC and its relationship to collaborative learning.

Warschauer (1997) suggests that CMC:

- creates the opportunity for learners to construct knowledge through reflection and interaction.
- encourages real communication by increasing opportunities for interaction, it supports the situated learning concept in which learning takes place in a specific environment but becomes useful in multiple contexts.
- offers social dynamics that differ from face-to-face-discussions (e.g. turn taking, interruption, and consensus).

Jackson (1997) suggests that CMC in web-based communication increases interaction. In electronic mail or computer conferencing, equal access is provided for all participants.

Other researchers such as Hanson-Smith (1997) believe that the Internet can be used for collaborative tasks that can take place at the global level. Whether it is a joint curriculum project between two classes such as collaborative newsletter, website, or information exchange between the learners, it involves considerable cultural exploration. Sites that are specifically created for ESL learners (e.g. Schmooze University) allow learners to engage in synchronous (real time) communication. “We are only just beginning to see research on learner language use on the Internet, but there is no doubt that this electronic medium is a potent force for global communication, that language students can reap many benefits from the exchanges already possible, and that sites for exchange are growing weekly” (p. 6).

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How can I become a CALL instructor?

The first step is to learn about the hardware and software available in your lab. Just like any other learning process, this requires investing some initial time to learn about the software packages and the structure of the labs at your center and to practice using the software, thus acquiring the skills necessary to integrate the software into your daily lessons. You will find that investing time initially will pay off and you will become skillful in using the software packages. Soon you will need no more than the usual preparation time you take to prepare any ESL lesson. We strongly recommend that you read the entire Before Using Software section..

LEARNING THE BASICS ABOUT YOUR LAB:

■ **What kinds of software packages are available on the machines?**

Check the hard drive of the computers in your lab. Usually programs are either in C:\ or in Program Files folder.

■ **Which software package is suitable for my learners' computer levels?**

This book has been categorized in five levels: LINC One to LINC Five. Every level includes information about all the LINC software. For every software, there is explanation of the features suitable for that level and a checklist of skills that the LINC learners should master. However, we recommend that you use your discretion to adapt the checklists to suit your learners' needs if your learners are not ready to master the skills suggested for a level.

For additional information about the LINC software such as the Canadian Language Benchmarks ratings and for information on other software packages, check the Annotated Inventory of ESL Software website at: <http://207.236.117.20/orlac/>

■ **How are the labs set up?**

Networking means connecting a series of computers to one another to share the contents of the drives, the printers, or the Internet. In general, all the LINC labs in Ontario are networked. However, there might be exceptions where computers have been divided between classrooms and therefore networking is not available. If all computers are in one lab, check the cables in the lab. Are the computers connected to one another? Are they connected to the printer? Ask the lab administrator for additional information.

■ **How are the computers networked?**

There are fifteen computers in a LINC lab. The designation used for the stations are Workstation 1 to Workstation 15 which can be viewed in the Network Neighborhood at any station. The computers are networked in such a way that from any station in the lab, you can access the contents of all the other machines. For example, you can access an activity that you saved on the hard drive of Workstation 1 from Workstation 4 if both stations are switched on. You must be logged on in the Teacher Mode to access Network Neighborhood and you must switch a workstation on if you want to view its contents. See the Lab Maintenance section for more information.

How does networking help my learners access the data files I have prepared for them?

Networking eliminates preparing floppy disks for every station or saving files on every hard drive. Start by creating a folder on a machine (e.g., Workstation 1). Copy all the files that you need to that folder. Teach your learners how to access that folder through Network Neighbourhood (see the Lab

Maintenance section in the guide). Anytime that you want your learners to access a file, write the instructions on the board and walk them through the steps.

■ **How does the printer work?**

The networking in the LINC labs is mostly used for printing purposes. In order to print from any station, the main station (usually the one closest to printer designated as Workstation 1) has to be switched on.

How can I integrate CALL and CMC into my curriculum?

The next step is to learn about CALL methodology, models, and existing literature. Begin by reading about the CALL models in this section and if you are interested in learning more, check the references to become more familiar with the CALL research and practice.

Once this initial investment has been accomplished, you are ready to develop computer-based tasks. You will find that creating computer tasks take almost as long as creating language tasks. The reward can be immense and the more tasks you create, the less time you will need in developing future computer tasks.

When creating the tasks, keep the following points into consideration:

- The task should be appropriate to the learner's computer level.
- The language used in the task should be clear, easy to understand and match the learner's language level.
- Step by step instructions should be provided so that learners' attention and focus is on the task and not on deciphering the instructions.
- Teach the computer skill(s) needed for performing the task well before the task is introduced.
- Create a task that can be self-paced.
- Give adequate time for the completion of the task.
- Make sure that your task complements your topic in some way. For example, it could be reinforcement of a grammar point (e.g., highlight modal verbs in a text or use a grammar exercise in Tense Buster), proofreading (e.g., using spell checking), pronunciation (e.g., Ellis), Canadiana (e.g., Explore Canada), or writing or formatting a letter (e.g., word processing.)
- Make sure your task encourages interaction and cooperative learning.
- Support your task with pre-and post-language or computer tasks.
- Be clear as to what purpose the task serves and what language focus it reinforces; as long as computer tasks reinforce language tasks meaningfully, learners remain interested and see a purpose in carrying out those tasks.
- Finally, make sure that you have a contingency plan in case the machines are not functioning!

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