**CALL—Introduction**

Extracted from Warschauer, M., & Healey, D. (1998)

**Introduction**

**1. The History of CALL**

Computers have been used for language teaching since the 1960s. This 30+ year history can be roughly divided into three main stages: **behavioristic CALL**, **communicative CALL**, and **integrative CALL**. Each stage corresponds to a certain level of technology as well as a certain pedagogical approach.

**Behavioristic CALL**, conceived in the 1950s and implemented in the 1960s and 1970s, could be considered a sub-component of the broader field of computer-assisted instruction. Informed by the behaviorist learning model, this mode of CALL featured repetitive language drills, referred to as drill-and-practice (or, ejoratively, as "drill-and-kill"). In this paradigm, especially popular in the United States, the computer was viewed as a mechanical tutor which never grew tired or judgmental and allowed students to work at an individual pace.

The next stage, **communicative CALL**, emerged in the late 1970s and early 1980s, at the same time that behavioristic approaches to language teaching were being rejected at both the theoretical and pedagogical level, and when new personal computers were creating greater possibilities for individual work. Proponents of communicative CALL stressed that computer-based activities should focus more on using forms than on the forms themselves, teach grammar implicitly rather than explicitly, allow and encourage students to generate original utterances rather than just manipulate prefabricated language, and use the target language predominantly or even exclusively (Jones & Fortescue, 1987; Phillips, 1987; Underwood, 1984). Communicative CALL corresponded to cognitive theories which stressed that learning was a process of discovery, expression, and development. Popular CALL software developed in this period included text reconstruction programs (which allowed students working alone or in groups to rearrange words and texts to discover patterns of language and meaning) and simulations (which stimulated discussion and discovery among students working in pairs or groups). For many proponents of communicative CALL, the focus was not so much on what students did with the machine, but rather what they with each other while working at the computer.

By the late 1980s and early 1990s, many teachers were moving away from a cognitive view of communicative teaching to a more social or socio-cognitive view, which placed greater emphasis on language use in authentic social contexts. Task-based, project-based, and content-based approaches all sought to integrate learners in authentic environments, and also to integrate the various skills of language learning and use. This led to a new perspective on technology and language learning, which has been termed integrative CALL (Warschauer, 1996b), a perspective which seeks both to integrate various skills (e.g., listening, speaking, reading, and writing) and also integrate technology more fully into the language learning process. In integrative approaches, students learn to use a variety of technological tools as an ongoing process of language learning and use, rather than visiting the computer lab on a once a week basis for isolated exercises (whether the exercises be behavioristic or communicative).

**2. Teacher roles**

Teacher roles have also changed with the times. Teachers are rarely the sole source of language information in these days of global interconnectedness, and the literary corpus that may have been the basis of their foreign language training is not the only body of knowledge worth learning. The assumption from cognitive theory is that teachers do not pour information from their store into the heads of waiting and willing students, but that students actively interpret and organize the information they are given, fitting it into prior knowledge or revising prior knowledge in the light of what they have learned (Van Dijk & Kintsch, 1983; Dole, et al., 1991). As a result of all these changes, the teacher has become a facilitator of learning rather than the font of wisdom, and will find, select, and offer information in a variety of ways on the basis of what their students must learn in order to meet diverse needs.

As facilitators, teachers must in many ways know more than they would as directive givers of information. Facilitators must be aware of a variety of material available for improving students' language skill, not just one or two texts. They also need to know how to teach learners to use the material effectively. Teachers as facilitators have to be able to respond to the needs that students have, not just what has been set up ahead of time based on a curriculum developer's idea of who will be in the classroom. Teacher training is a key element to success in this more flexible language classroom, so that teachers can use multimedia and other resources effectively.

**3. The benefits of CALL**

The benefits of adding a computer component to language instruction are many, and include

(1) multimodal practice with feedback

(2) individualization in a large class

(3) pair and small group work on projects, either collaboratively or competitively

(4) the fun factor

(5) variety in the resources available and learning styles used

(6) exploratory learning with large amounts of language data

(7) real-life skill-building in computer use

**4. CALL related acronyms:**

**CBT** Computer Based Training

**CAI** Computer Assisted Instruction

**CAL** Computer Assisted Learning

**CALL** Computer Assisted Language Learning

**WBI** Web Based Instruction

**WBT** Web Based Training