CALL IN ENGLISH LANGUAGE TEACHING

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Abstract
Computer Assisted Language Learning (CALL) is a new tool and technique that can help students improve their language skills. This new technology in language education improves learner autonomy, creativity, productivity and teamwork. Interactive pedagogy and computer-aided language learning are used to supervise language learners through language or skill practice, stimulate discussion and interaction, or as writing and research tools. Overall, the purpose of this article is to study the use of Computer Assisted Language Learning to learn English. The Research study seeks will explore the following: the role of CALL materials in providing interactive English exercises; creating effective teaching environment; in developing interactive and communicative lessons be made and so on.

Key-words: CALL, teaching software, ELT, second language, language skills

Introduction
A computer is a programmable machine designed to automatically carry out a sequence of operations. In modern life-style and education pattern, the computer is playing an important role and catering to a steady progress. In the present era, Computer-Assisted Language Learning (CALL) has attained its furore at peak. Levy (1997) has described CALL as the search for and study of applications of computer in language teaching and learning. The term ‘CALI’ (Computer-Assisted Language Instruction) was in use before CALL, reflecting its origins from CAI (Computer-Assisted Instruction). CALI fell out of favour among language teachers, as it proposed a teacher-centred approach, whereas language teachers are more inclined to prefer a student-centred approach emphasizing learning rather than instruction. CALL embraces a wide range of ICT applications and approach to teaching and learning foreign languages, from the (traditional drill and practice programmes) that characterised CALI in 1960s and 1970s to more recent manifestations of CALL as used in a virtual learning environment and web-based distance learning. It also includes use of corpora and concordancers, interactive whiteboards, computer-mediated communication (CMC), language learning in virtual world, and Mobile-Assisted Language Learning (MALL). The current philosophy of CALL puts a strong emphasis on student-centred materials that allow learners to work on their own. Such materials may be structured or unstructured but they normally consist of two important features – interactive learning and individualized learning. CALL helps teachers to facilitate the language learning process. The technique can be used to reinforce what has been learned in the classroom or as a remedial tool to help the learners who require additional support and help.

History of CALL
The history of CALL dates back to the 1960s when it was first introduced on University Mainframe Computer. Microcomputers came in the late 1970s and brought computing within the range of a wider audience. Christopher Evans published his work The Mighty Micro, Victor Gollancz Ltd (1979). A flurry of publications of books on CALL appeared in the early 1980s. The professional associations, CALICO
(1982) and EUROCALL (1986), were established. In the 1990s came the web which became publicly available in 1993. In 2000, broadband became more widely available opening up new possibilities for delivering audio and video materials via the web, blogs and podcasts. In 2004 came the web 2.0 application describing major changes in the way the web is used. Butler Pascoe (2011) looks the history of CALL from its evolution in the dual field of educational technology and second language acquisition and the paradigm shifts experienced along the way.

**Typology**

CALL programmes were identified by Davies & Higgins (1985), Jones & Fortescue (1987), Hardisty Windeatt (1989) & Levy (1997). Davies & Higgins describes the different types of CALL packages available at the time. These includes gap-filling exercises, multiple-choice exercises, free-format exercises, re-ordering exercises, adventures, simulations, action mazes, games, total-cloze, exploratory programs and writing-word-processing.

**Phases of CALL**

Warschauer and Healey identified three historical phases of CALL in their work *Computers & Language Teaching: An Overview*, classifying according to the underlying pedagogical and methodological approaches:

(a) Behavioristic CALL (1960 &1970s): It consisted of drill and practice materials in which the computer presented a stimulus and the learner provided a response. The computer would analyze student’s input and give feedback and more sophisticated programs would react to student mistakes by branching to help screens and remedial activities.

(b) Communicative CALL (1970s-1980s): In this approach, the focus was on using the language rather than analysis of the language and grammar was taught implicitly rather than explicitly. The computer was used for skill practice but in a non-drill format and with a greater degree of student choice, control and interaction. This phase also included using the computer to stimulate discussion, writing or critical thinking (such as in Sim city) & using the computer as a tool or workhouse; for example, word–processors, spelling and grammar checkers and concordancers.

(c) Integrative CALL: The third phase, starting from the 1990s, tried to address criticisms of the communicative approach by integrating the teaching of language skills into tasks or projects to provide direction and coherence. This phase included the two important innovations in the field of multimedia and internet. (Warschauer and Healey 31)

Bax (2003) prefers to talk about approaches rather than phases in his work *CALL-past, present & future*. He divides it into Restricted CALL (1960s to 1980s), Open CALL (1980s to 2003), and Integrated CALL (still to be achieved). Regarding CALL, Bax says,

I call the first approach ‘Restricted CALL’. In terms of its historical period & its main features, it differs little from Warschauer and Healey’s Behaviorist CALL… the term Restricted is more satisfactory since it allows us to refer not only to a supposed underlying theory of learning but also to the actual software and activity types in use at the time, to the teachers’ role, to the feedback offered to students & to other dimensions- all were relatively ‘restricted’, but not all were ‘behaviorist’ (Bax, 2003:20).
Open CALL is open in terms of feedback given to students, software types & the role of the teacher, including simulations & games. CALL implies normalization, for example, when it was as normal as using a pen. In Bax’s terms (2000, 2006), the central aim for CALL practitioners is to strive for ‘normalization’, namely the state in which the technology is so embedded in our practice that it ceases to be regarded as either a miracle cure at all or something to be feared. Bax notes in his work *Making CALL work: towards normalization* will have been achieved, …when computers… are used every day by language students and teachers as an integral part of every person, like a pen or a book… without fear or inhibition equally without an exaggerated respect for what they can do. They will not be centre of any lesson but will play a part in almost all. They will be completely integrated into all other aspects of classroom life, alongside course books, teachers & notepads. They will go almost unnoticed (Bax, 2003:23).

When CALL works towards normalization, it will help teachers & learners reap its full benefits. The concept of normalization is valuable. Firstly, it allows us to connect with the wider literature on educational change since it is logical that CALL research & thinking should draw on that research. Secondly, it helps in connecting us with the wider research on innovation & change. Research into how human beings deal with innovations and operate has become integrated into daily life. Thirdly, it offers CALL users a clear aim & therefore a clear agenda. This, in turn, gives us an agenda for research and development, namely to find ways of moving towards that normalized state.

**Constituents of CALL**

CALL can be categorized into several groups as follows.

**Flashcards:** A flashcard is a set of cards bearing information, as words or numbers, on either or both sides, used in classroom drills or in private study. A question is written on the card and an answer overleaf. Flashcards can bear vocabulary, historical dates, formulas or any subject matter that can be, learned via a question & answer format. They are widely used as a learning drill to help memorization by way of spaced repetition. It includes the generic super Memo package & programs such as BYKI and phase-6, which have been designed specifically for learners of foreign languages.

**Multimedia:** Kozma in *Learning with Media* (1991) talks about the use of media saying:

Another direction in current software is the integration of media. As computer storage and memory prices have dropped, software developers have been able to add in graphics, sound, animation and video clips. Foreign language teachers are particularly helped by access to a variety of media to help make the language come alive to students for whom it is largely a distant abstraction. This trend can only accelerate, with faster and more powerful computers making longer video and sound clips practical. Intelligent CALL will fit the medium to the learner ensuring that the media work in concert to enhance understanding. Developers need to restrain the urge to add anything and everything just to make a fancy-looking product and instead focus in on selecting media to fit pedagogy not vice-versa.

Gramophone records were among the first technological aids to be used by language teachers presenting students with recordings of native speakers’ voices and broadcasts from foreign radio stations were also used to make recordings on reel to reel tape recorders. Other examples includes: slide projectors, film-strip projectors, film projectors, video cassette recorders and DVD players.
Software Design and Pedagogy
Gimeno & Davies (2010) opines that designing and creating CALL software is an extremely demanding task calling upon a range of skills. Major CALL development projects are usually managed by a team of people, a subject specialist usually a language teacher who is responsible for providing the content and pedagogical input, a programmer who is familiar with the chosen programming language or authoring tool, a graphic designer to produce pictures and icons to advise on fonts, colour, and screen layouts. A professional photographer, a sound engineer and a video technician required if the package is to contain substantial amounts of sound and video, an instructional designer with a background in cognitive psychology and media technology and able to advise the subject specialist in the team on the appropriate use of the chosen technology.

The Internet
The coming of the worldwide web (www) marked a significant change in the use of communication technology. The web is a remarkable invention by Tim Berners–Lee and has transformed the nature of CALL. The language teacher got attracted towards the web. The concept of hypertext was familiar to the language teacher wherein they could point to items of text or images on a page displayed on the computer screen. It is as is used in the hyper card program on Apple Mac Computers. A boom came because of internet as it created a worldwide hypertext system enabling the user to branch to different pages on computer anywhere in the world simply by a click. Wed 2.0 applications has joined in to give a boom to the internet. Web2.0 application implies a shift in emphasis from web-browsing, which is essentially a one-way process, to making use of web applications in the same way as one uses applications on a desktop computer. The tools used by language teachers in web2.0 applications includes image storage and sharing, social bookmarking, discussion lists, blogs, wikis, social networking, chat rooms, MUDS, MOOs & MUVES, podcasting or recording, usually part of a themed series, that can be downloaded from a website to a media player or computer, audio tools, video sharing applications & screen capture tools, animation tools –comic strips, movies, and so on.

Virtual worlds
A virtual world is an online community that takes the form of a computer–based simulated environment through which users can interact with one another and use and create objects. The term has become synonymous with interactive 3D virtual environments where the users take the form of avatars visible to others. In general, virtual worlds allow for multiple users. Virtual worlds dates back to the adventure games and simulations of 1970s, for example, colossal cave adventure, a text-only simulation in which the user communicated with the computer by typing commands at the keyboard. The early adventure games and simulations led on to multi-user variants, which were known as MUDs (multi-user domains). MUDs led them on to MOOs (multi-user domain object-oriented). Then came the graphic user interface. The 3D world of second life was launched in 2003 and attracted the attention of the language teachers.

Corpora and Concordancers
Corpora is a large and structured set of texts and are used to do statistical analysis and hypothesis testing, checking occurrences or validating linguistic rules on a specific universe. A concordancer is computer program that automatically constructs a concordance.

Robb (2003) shows how it is possible to use Google as a concordance but he also points out a number of drawbacks, for example, there is no control over the educational level, nationality or other
characteristics of the creator of the texts that are found and the presentation of the examples is not as easy to read as the output of a dedicated concordance that places the key word in context (*Robb;TESL-EJ*7,2).

**Human Language Technologies (HLT)**

HLT talks about Natural Language Processing (NLP) which includes speech synthesis, speech recognition and parsing. Speech synthesis is used in electronic dictionaries to enable learners to find out how words are pronounced. Speech recognition is less advanced than speech synthesis. Ehsani & Knodt (1998) writes in his work *Language Learning & Technology:* Complex cognitive processes account for the human ability to associate acoustic signals with meanings and intentions. For a computer, on the other hand, speech is essentially a series of digital values. However, despite these differences, the core problem of speech recognition is the same for both humans and machines; namely of finding the best match between a given speech sound and its corresponding word string. Automatic speech recognition technology attempts to simulate and optimize this process computationally (Ehsani & Knodt 45-60).

Parsing, too, is used to analyse sentences, presenting the learner with a true diagram that labels the constituent parts of speech of a sentence and shows the learner how the sentence is structured.

**Impact of CALL**

Felix (2003) in her work entitled “Teaching Language Online: Deconstructing the Myths” has attached more importance to online learning from three perspectives, namely administrators, teachers and students. She concludes by saying, “That costs can be saved in this ambitious enterprise is clearly a myth, as are expectations of saving time or replacing staff with machines”.

Felix (2008) talks about the effectiveness of CALL in promoting the four skills and claims that there is “enough data in CALL to suggest positive effects on spelling, reading and writing”, but more research is needed in order to determine its effectiveness in areas like speaking online. She claims that students’ perceptions of CALL are positive, but she qualifies this claim by stating that the technologies need to be stable and well supported drawing attention to concerns that technical problems may interfere with the learning process. She also points out that older students may not feel comfortable with computers and younger students may not possess the necessary met skills for coping effectively in the challenging new environments. Training in computer literacy for both students and teachers is essential and time constraints may pose additional problems. In order to achieve meaningful results Felix recommends “time-series analysis in which the same group of students is involved in experimental and control treatment for a certain amount of time and then switched more than once if possible” (Felix, *ReCALL* 20).

**Conclusion**

CALL has made modifications in the teaching patterns with the aid from new technological advancements. The impact of CALL may be measured quantitatively and qualitatively in terms of use of hardware and software, budgetary, considerations, internet access, teachers’ & paradigm shift in teachers’ & learners’ roles.

In fact, Computer-Assisted Language Learning is such a concept that favours both the teacher and learner. Its use to change and reform the society is immense. New technological advancement gives way ahead to more progress in terms of CALL. So it will be apt to say that CALL’s furore has reached to such a zenith that its position will always gain more strength by going higher and higher.
References