Technical Language Lab and CALL - A Descriptive Report

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Abstract

The modern sophisticated language laboratory is an ideal communication tool because it has a number of advanced facilities that help a student learn a language with proficiency to communicate. The learners can change their attitude by attending CALL laboratory and this enables the teacher develop and use suitable materials and methods.

Introduction

In India and in many other nations, English has become a symbol of people's status for quality in education and a tool for a fuller participation in national and international life. English is necessity now to good jobs. Anyone, who wishes to advance his/her better career, has to give importance to English language as A. K. Banerjee states, English "language is simultaneously universal and individual. It allows people to communicate across time and distance, but it also serves to define almost everything that makes a person unique" (50). So, attitude toward English plays an important role in learning it.

Background to Educational Technology

Education is the act or process of imparting or acquiring particular knowledge or skills for a profession. Technology is the use of tools, machines, materials, techniques and sources of power to make work easier and more productive. As Razavi (3289-91) points out, "Educational technology includes instructional technology and the field study in human

teaching and learning" We notice that, "Educational Technology is a creative blend of 'idea' and 'product' technologies with subject-matter content in order to engender and improve teaching and learning process". (www.reference.com).

Thus, the purpose of Educational Technology is promotion of learning by improving communication and interactivity. Crockford defines interactivity as having "more to do with taking part than in making decisions." (293-301). Computer Aided Language Learning (CALL) involves all the three types of learner-interactions, viz., Learner-content, learner–teacher, and learner-learner interactions" (Moore:1-6). In addition, these interactions are carried out with the help of technology. Thus, CALL becomes a rich field for the application of educational principles as well as for testing the efficacy of technology.

Complexities of Challenges

Complexities in using the CALL should be seen against the backdrop of a developmental stage of computerization of individuals and institutions. The transitional phase is a temporary phenomenon. The next generation of teachers and learners will be a part of computer generation. They will take for granted the skills demanded by computer technology and handle it as coolly as switching on a tape recorder or watching a television. Similarly, the learners can change their attitude while attending CALL laboratory in nearer future and this makes the teacher utilize the situations efficiently with suitable materials and methods. Computer assists teachers if it is seen not as a replacement for their work but as a supplement to it. Generally speaking, computer is just a tool without any inborn wisdom or a mind of its own.

English Language Learning

English Language learning involves a number of difficult skills for the second and foreign language learners: For instance, the traditionally recognized skills like listening comprehension, speaking, reading, and writing pose problems for Indian learners because of the wide differences in accent, phonological patters, sentence and morphological structures and semantic nuances, etc., between Indian languages and English. It is required of any learner to have a good command of the language for communication purposes, with clarity and accuracy being vital for effective and efficient communication.

The process and the method of learning the language should help one to acquire fluency as well as proficiency. In this context, CALL becomes an effective tool and strategy.

Ideal Communication Tool

Apart from the traditional skills like listening, speaking, reading and writing, the modern sophisticated language laboratory is an ideal communication tool as it provides the medium for both conveying thoughts and negotiating with others. This is useful for English language acquisition because the ultimate goal of learning a new language is to express one's own ideas and to comprehend the thoughts of others in their own words, and to understand and be understood using computers, headphones and modern sophisticated gadgets.

The language laboratory plays an important role in the language learning process as a technological aid for learning English language which has a number of advanced facilities that can help a student learn a language with proficiency to communicate. Although it has become inevitable in today's context, it also poses certain challenges.

Obstacles to Overcome

Computers and Language Labs can assist the students in their learning process. However, in this process, these equipments and sessions can only be a substitute for a teacher but can't replace them. There is no direct rapport between the teacher and the student when the computer becomes the major instructor. Face-to-Face teaching is impossible because the teacher's presence can be felt only through audio-visual media and in such situation the teacher could not be an effective monitor.

Students of Humanities as well as those who have less technical knowledge may not have the capacity to operate the technical lab individually and effectively because they might not have had the chance of making use of laboratories, so they find it difficult to handle computers. This may become a major hindrance for them to compete with students learning technical subjects. Second language learners from rural backgrounds have less exposure to English, and thus may face great difficulty in listening to and comprehending the voice of the native speakers in the cassette or tape or computer.

Immediate feedback is not possible and so there is less chance for regulating and rectifying their language. If this learning process is appropriately used, it creates interest among the learners and enables them to prepare themselves for an effective use of language. On the other hand, if it is not adapted properly, it may result in a great hazard and totally uproot the eagerness of the learners. The only drawback voiced by the learners is that they miss direct support and the possibility to overcome the handicaps in learning a language in its natural environment.

In real terms, most English language learning in rural areas is foreign language learning in India. Opportunities to practice English learned in the classroom outside of it are rare and inadequate. The teachers of English, almost always, are Indian teachers, with Indian accent, which is country and region-specific, and is not identical or similar to the accent of the native speakers. While differences in accent should not be seen as a disadvantage, lack of fluency and the lack of ability to comprehend the native and native-like speech in English should be considered as a disadvantage. CALL can certainly help improve the situation in these areas.

In our view, use of CALL is actually an effective tool to gradually bridge the gap in English performance between urban and rural students in India. This will also help teachers of English to improve their own knowledge and use of language skills and further increase their fluency of speech with impressive reduction in accent problems.

The Need of the Hour

"[...] interaction and negotiation are important features of communication and therefore of would like to communicate flawlessly in English. The language laboratory is a blessing for

such students as it provides the learners with the technical tools to get the best samples of pronunciation with stress, rhythm and intonation.

The electronic devices used in the language lab will stimulate the eyes and ears of the learner to acquire the language quickly and easily with creative and innovative techniques like virtual reality where a typical language learning classroom can be created using computers. The devices used in the laboratory are designed purposefully to help learners in the acquisition and maintenance of aural comprehension, oral and written proficiency, and cultural awareness. The language laboratory offers broadcasting, telecasting programmes, web assisted materials, and videotaped off-air recordings in the target language. By using the laboratory, the learners can gain the experience of interacting with native speakers through the laboratory. Hence, the language laboratory has become the need of the hour in English language learning process for communication.

Evolution of Language Learning Laboratory

Technically, language laboratory is an instructional technological tool consisting of a source unit that can disseminate audio, audio-visual and/or written materials to any number of students at individual seats or cubicles, with a wide variety of potential feedback mechanisms to the student, teacher or other students. Meunier states that "Advances in recent technology such as audio/video tapes, CD-ROMs, email, Internet and audio-visual conferencing have enabled foreign language professionals to incorporate much needed sociolinguistic authenticity into the L2 classroom" (Meunier: 31-56). The innovativeness of the activities makes learning of language skills a very interesting one.

Tool to Create Awareness

The Language Laboratory has a great role in making successful teaching learning of language skills in very interesting way. The innovativeness of the activities with specially designed courses, according to the communicative needs of the students, is the bottom line in the function of the laboratory

Students can make use of their individual learning styles to learn different aspects of the language. They can also realise their preferences in learning various aspects and try to find out ways to acquire them. The students' sense of responsibility for their own learning is encouraged as observation book is innovative, encourages creativity of students and provides ways for personalized learning. The learners present grammar points in convenient and simple clear-cut way.

Audio Tape-based Language Laboratory

Kern and Warschauer observes, "Language instruction is now viewed not just in terms of providing comprehensible input, but also as helping students enter into the kinds of authentic social discourse situations and discourse communities that they would later encounter outside the classroom" (1-19). A number of technological aids have been used to improve the quality of teaching learning process. Devices such as radio, tape recorder, television, video cassette

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J. Samuel Kirubahar, Ph.D., V. Jeya Santhi, M.A., M.Phil., & A. Subashini, M.A., M.Phil.
Technical Language Lab and CALL - A Descriptive Report

130

recorder, computer, compact disk player and Digital Video disc player have been used since the beginning of using technology for teaching learning as a second language.

Audio-tape based language laboratories have been developed since late 1960's and in those days, the laboratory was considered a solution to the problem of teaching second language to a large number of students in a short time. By the end of 1970s, the laboratory gradually fell out of the favour of teachers and learners due to the lack of imagination in devising activities other than repetitive drills and lack of proper training for teachers. In mid 1980s, the language laboratory was given a new lease of life through user-friendly controls, imaginative materials using cognitive approach, and improved laboratory design.

Audio tape-based language laboratory allows each student practise both interactively and independently with their cassette or all digital computer-emulated cassette recorders. The system offers the students the ability to compare their pronunciation with that of the teacher's model that is also recorded on their tape or computer hard drive. The students can re-record their response and by this the teacher can allow the students to practise for tests and make up compressed answer tapes for later evaluation.

Teaching-learning listening skill and speaking skill in general and pronunciation in particular are emphasized in audio tape-based language laboratory. In real life, listening, speaking, reading, and writing skills are interdependent and integrated but in the laboratory, they are taught independently through particularly designed activities. Rosen states, "Tools don't teach. When effectively implemented, they assist in the learning process".

A Collection of Electronic Devices

The language laboratory is an audio or audio-visual installation used as an aid in modern language teaching. Nowadays, language laboratories are installed in many places especially in schools, universities and academies. The first lab was at the University of Grenoble. From 1950 up to 1990s, tape based systems using reel to reel or cassette are made use of for teaching and learning. Current installations are generally multimedia PCs. The laboratory of past days comprises a masterly console (i.e. teacher position) which is electrically connected to a number of rows of student tape recorder and headset with a boom arm microphone. The teacher console is usually fitted with master playback source equipment (tape recorder), some means of monitoring of each booth in the class via the teacher headset and an intercom facility offering two-way communication between teacher and students (www.wikipedia.org).

Effective Handling of Laboratory

In the beginning, the language laboratory allows the teacher to remotely control the tape transport and at the same time controls the student booths (record, stop, rewind…) from the master desk. This process helps in copying the master programme material at a high speed onto the student positions for later use by the students at their own pace. The tape laboratories housed the tape machines behind a protective plate (leaving only a control panel accessible to the students) or locked the cassette door. This kept the expensive and sensitive decks free from students misuse and dust etc. "What seems to be crucial is the application of technology in education rather than the provision of technology for education" (Spencer : 12-22).

After transferring the master program onto the student recorders, the teacher would hand over the control of the decks to the students. The playback of the programme would be heard by the students simultaneously by pressing the record key in the booth. By the time, the voice of the student can be recorded using the microphone in the pauses. This process is termed as an audio active comparative system. Due to technological development, overdubbing was made possible by use of a two-way channel tape recorder.

Use of CALL for Effective Teaching Learning

Computer has the potential to increase students' interest for language learning and this may be helpful in motivating them to pursue independent and individualised study. (Rosenthal: 303-18). CALL also produces tools, learning materials, and pedagogical approaches of immediate concrete value in enhancing language learning programs. This new climate shall pave an interesting path to acquire language skills through more involvement and greater motivation for effective use of the language. An ideal computer courseware remains not an alternative but an extended application in reinforcing classroom activities.

Evolution of CALL

Evolution of the field, Computer-Aided Language Learning can be broadly categorised into 3 phases namely Behaviourist, Communicative, and Integrative. In Behaviourist phase, computer is used as a vehicle for delivering varied instructional material to provide a lot of information to take the role as a tutor. In communicative phase, computer is used for practising skills with stimulated programs and software with a greater degree of student choice, control, and interaction. In the present Interactive phase, multimedia and internet teach on a one-to-one basis at a pace dictated by the individual's capabilities. Computer – aided Language Learning facilitates various activities to improve learning environment, to provide pedagogical innovations, and to enable experimentation for the best suited methods and materials.

Computer Aided Language Learning

The advent of computer has led to digitalised language laboratories. Computer – aided instruction is being replaced by a new, communication oriented, teacher-directed task based approach, which is termed as 'computer-assisted language learning'. Levy defines computer-assisted language learning (CALL) as "the search for and study of application of the computer in language teaching and learning" (178). Computers are very useful for individualizing instruction with the real world environment in the classroom. The application of multimedia tools can foster this goal by creating a learning environment wherein students practise their language skills and acquire target culture.

CALL Laboratory makes learning more relevant and interesting with the helping hands of interactive multimedia and internet. Interactive multimedia is the powerful combination of text, graphics, sound, animation, and video under computer control. High-speed networks allow access to authentic cultural material and link learners to speakers around the world. CALL laboratories perform the same functions that audio-tape based laboratory did in the

past. Gianturco stated that "computers deliver self-paced, one-to-one instruction and can be thoroughly utilized and provided immediate feedback" (116).

Use of Observation Book in Computer-Aided Language Learning Laboratory

Observation book is the most important and an indispensable tool in computer-supported class to keep the findings in clear and organised way. The practice of keeping up observation book sharpens one's prowess of observation and communication of observations. The primary goal of the book is of clarity and completeness in language learning but not of aesthetic importance. Using observation book in the laboratory has three major advantages:

1. Tool to create awareness
2. Tool for realization
3. Provides true feedback.

It can also be used to find the other four aspects of language learning: phonology, grammar, vocabulary, and writing techniques.

Teaching Language Skills using Multimedia and Language Laboratory

Multimedia tools serve as an important motivator in the language teaching process because media materials can lend authenticity to the classroom situation reinforcing for students the direct relation between the language of the class and that of the outside world (Brinton: 461). Learners are provided with the opportunity to observe effective users of the target language to learn the skills by imitating effective users.

Action vs. Interaction

As learning Language is essentially an individual achievement and exploitation of capacities to make sense of the environment, there are three aspects of the laboratory classroom where students are expected to learn the target language i.e. Classroom planning, action in the classroom, and interaction.

Action in the classroom is the reaction evoked by the students to the lessons of the teacher. Success of any lesson or class can be judged in terms of the learning that results from it and in terms of the kind of interaction that the learners and teachers have. Wick et al. state that working interactively with authentic video motivates students and reinforces essential language skills (217 -23).

Interaction is more than action followed by reaction. It is acting reciprocally, acting upon each other. Action and reaction from both the teacher and students are reflected through the observation book. Bork mentions three components to the quality of interaction; type of required response, method of analysis of the response (answer evaluation), and type of action taken on this help and feedback. Besides these advantages, the greatest one is the amount of involvement that teacher gets from students when they eventually and automatically start deciding the relevant and meaningful aspects of the lessons to them. Individualizing learning

gives the students control in material selection / sequencing and the pace of progress (www.csulb.edu)

Conclusion

Language Lab and Multimedia are integrated into the training of communication skills to technical students since 1990s. Instructional and motivational factors are investigated in the studies dealing with software to impart the skills. The present study has shown that this computer-supported training environment, the essential need of the present era, will be successful in improving the abilities of communication, the essential need of present era and that it is highly accepted by the learners.

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