Practices and Paradigms of Using Multimedia and Language Laboratory for Teaching Communication Skills to Technical Students

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Abstract

The present paper explores technical and pedagogical prospects in linking multimedia and language laboratory to teach communication skills to technical students. A variety of data, audio and visual sources, is used in the study for the analysis. Learners are given the opportunity to get exposure to various real world environments using the target language in the language laboratory. This exposure facilitates the students to observe and imitate model users of English. Through this, the processes that the learners actually engaged in while interpreting and carrying out multimedia tasks and group activities are illustrated.

A process and eclectic-driven study is made with the ultimate goal of using the laboratory technology effectively. The study focuses on teaching listening, speaking, reading, writing skills, nonverbal communication and speech receptive behaviour using multimedia and language laboratory. The findings emerged from the teaching learning process in computer-aided language learning laboratory are critically examined. In the end, factors that help the integration of multimedia and language laboratory into the training of communication skills to technical students are inferred from the study.

Communication Skills for Technical Students

The paper aims at identifying the technical and pedagogical prospects while using multimedia and language laboratory to teach communication skills for technical students. It is evident that technology is a tool and we need wisdom to use it to serve the desired purpose. Quality use of the computers in the laboratory is understood as an important step that allows for the development of knowledge acquisition, promoting receptive as well as presentation skills.

Pedagogical Theories and CALL

Pedagogical effort in CALL typically means adopting and adapting existing technology-based materials or learning environments to a specific course or learning curriculum. It is the pedagogically innovative environment that researchers investigate to find out how technology-based learning affects the language acquisition process.

Computer-Aided Language Learning is effective if only the pedagogical theories are applied into the facilities provided. The fundamental aspect of communicative language teaching approach is the communicative competence. The approach pays systematic attention to functional as well as structural aspects of language.
A computer simulation used in the class possesses both instruction-oriented and fun-oriented features. Warschauer and Kern, as under, illustrate relationship between CALL developmental stages and the psychology of language learning:

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**Flexibility in Language Laboratory**

Language laboratory provides ideal climate for student–student and student-teacher interaction during the class. Students can take attention of the teacher from their places by switching a button to clarify a doubt while practicing the tape script or listening activity. Teacher can listen to any student and interact with student/s to guide them during the practice. Listening and pronunciation tests can also be conducted in the laboratory whereby only students’ answers are recorded for later evaluation.

Equal audibility, space to oneself, self-pacing, exampled pronunciation, recording for comparing with the best, recording the records, speaking test, effective monitoring, supporting role-plays and archiving for evaluation are the features of the laboratory that makes teaching learning more individualized, interactive, innovative and interesting. In spite of the setbacks like greater investments of money besides time and uncertainty of results in using audio tape-based language laboratory, it is still believed that integrating new technologies should be an important goal of language programs. But a goal of which the cost and complexity should not be underestimated.

**Teaching Language Skills Using CALL and Multimedia**

When the adapted and adopted material for language learning for a group of students is interesting, they pay more attention to listen, speak, read and write during the activities using the information provided through the computer. Cognition and Learning, Analysis, Design,
Development, Implementation and Evaluation become important while theorizing and practicing computer-aided language learning to teach communication skills.

**Teaching Listening Skill**

Listening skill is an essential element in improving the language proficiency. The student listens to oral speeches in English, then separates them into segments the utterances s/he hears, groups them into words, phrases and sentences to understand the meaning. In the laboratory, students listen during various activities for two purposes: to repeat and to understand. While listening to repeat, students imitate and memorize linguistic items such as words, idioms and sentence patterns. This is an important task in initial listening exercises.

However, it is listening to understand that is real listening in its own right. Techniques like developing cognitive strategies, developing listening by integrating with the other language skills, listening to authentic material, listening while using technology, listening for academic purposes, and listening for fun are all important to impart listening skills to the students. For this we need to use various material and activities effectively in the laboratory.

In preparing or selecting materials for the listening sessions in the laboratory to technical students, Morley suggests three important principles: relevance, transferability and task-orientation.

A well-graded listening comprehension lesson selects the teaching points from all the components of language. It may begin with the discrimination of sounds and may proceed to the discriminations of sounds in combination, words, phrases, clauses and sentences.

However, the ultimate goal of listening is to listen for information. Listening comprises the ability to predict information based on linguistic context, the situation and topic of the message conveyed by the linguistic code as well as the expectations about the world. Listening, thinking and remembering are related issues and go together in real life situations.

**Teaching Speaking Skill**

Language laboratory is a good platform to train technical students to improve their speaking skills besides listening skills. Oral interaction is also made possible by audio conferencing tools, and although these require technical support, the findings of studies reporting on the use of such tools to improve oral ability are quite encouraging.

As students practice the speaking skills in the laboratory, the content of the language, confidence and clarity of thinking are improved.

Basic strategies such as asking and answering questions, imitation and repetition, substitution, question-answer dialogues, day-to-day expressions, eliciting, guess and speak, directed dialogues, descriptions and role-play can be used to improve speaking skills in the laboratory sessions.

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Listening and Speaking in Conjunction

Activities used to impart listening and speaking skills provide ample practice in using English language in similar contexts to the real world. The contexts chosen for class activities should be appropriate to the learners’ level of competence in English.

It would be better to find suitable contexts within the nation to guide to an appropriate diction and structure of the language. Assignments involving oral communication between the learner and the English using community shall help them in building up confidence in using the language in real world situations besides developing appropriacy, brevity and clarity.

Teaching Pronunciation

Teaching pronunciation involves internalization of the articulation of consonants, vowels and diphthongs used in English language. These are called segmental sounds. As Doff points out, we need to focus on “the sound clearly in isolation [so that students can focus on it] and in one or two words; and [ask] students to repeat the sound, in chorus and individually.” English language is stress-timed language and hence the span of time between stressed syllables is always nearly same, and if there are several unstressed syllables, they must be uttered quickly. Students are given many opportunities to get exposure to listen to English spoken with a natural rhythm in the laboratory to experience the stress-timing feature.

The techniques of imitation, explanation, practice, comparison and contrast are found effective for improving pronunciation in the language laboratory. Sounds of the language, accent and intonation are taught by drilling the words, phrases and sentences with their books or tape scripts open in the initial activities. This helps the students to develop sensitivity on their own correspondence between pronunciation and spelling. Contextualization of sounds is another important aspect in teaching pronunciation. In the early stages of the practice, students concentrate on practicing individual sounds / words without any context.

Teaching Reading Skill

The goal of reading is not the process of reading itself, but the unraveling of the meaning represented by the words, phrases and sentences. Some times, reading between the lines is demanded, where the association between the letter and the sound does not often play a crucial role.

One can read in four different ways depending on the purpose of reading a text: Skimming, scanning, intensive reading and extensive reading. Reading is a developmental phenomenon. It has three phases in acquisition of the skill, they are i. Beginner’s Reading ii. Intermediate Reading and iii. Advanced Reading. Various aspects of teaching-learning reading skill are illustrated under these three phases.

The interactive nature and storage capabilities of the computer are the features that may serve as a foundation for the creation of unique electronic reading environments as it influences cognitive processing during the reading process. Computer-mediated texts enhance readers’
options for acquiring word meanings during independent reading. Reinking illustrated that computer-mediated texts provide readers with several options for assistance during independent reading.

**Teaching Writing Skill**

Writing is conscious and is thus non-spontaneous. During teaching writing skill, the discrete nature of linguistic signs should be appreciated consciously. Writing skill is independent and can be taught as an end in itself, but classes on improving writing skill have the potential to help, consolidate and improve learners’ speaking and reading skills.

Writing can be viewed and taught as a developmental process like reading. As Bowen suggested the skill is developed in four stages:

- Beginning stage – developing Mechanics of writing
- Elementary stage – developing extended use of language
- Intermediate stage – developing writing with purpose
- Advanced stage – developing expository prose

Raimes classifies approaches to teaching writing into five types: controlled to free, free writing, paragraph pattern, grammar-syntax-organization, communicative, and process approaches. In the controlled to free approach, students are first given sentence exercises, then paragraphs to copy or manipulate grammatically by, for instance, changing questions to statements, present to past, or plural to singular. They might also change words or clauses or combine sentences.

**Teaching Communicative Behaviour Using Multimedia and Language Laboratory**

Communication is a range of purposeful behaviour that is used with intent within the structure of social exchanges, to transmit information, observations, or internal status, or to bring about changes in the immediate environment. Nonverbal communication is defined as the process by which nonverbal behaviours are used, either singly or in combination with verbal behaviors, in the exchange and interpretation of messages within a given situation or context.

Nonverbal cues may be acted subconsciously and reacted upon, regulating proximity, gestures, eye gaze and touch. Computer supported-training environment can be used as cognitive tool to analyze speech receptive behaviour to develop the same. Fostering of speech receptive behaviour improves the effectiveness and efficiency of training the communicative behaviour.

**Learning Goals**

Analysis of the learning goals in the domain of speech receptive behaviour leads to the following results:
A computer supported training environment which is designed to foster speech receptive behaviour has to support the de-automation of the behaviour by
- supporting the learner in bringing his / her own behaviour into consciousness
- supporting the reflection of the learner’s behaviour
- reducing the cognitive load caused by reflection.

The re-automation of communicative behaviour can be supported by
- providing the learner with the opportunity to repeatedly exercise the changed or newly acquired behaviour.

To utilize the material and methods to teach communication skills in computer-supported language class, the following aspects are observed:

- Students’ needs are further pushed to the forefront of any activity, as it is the student making decisions for him / herself rather than the teacher for the group.
- Use of the computer should be phased in – instead of introducing a complex series of exercises to be done for a lesson, teachers should begin by doing a limited amount of work with the computer.

**How Computer-supported Class Enables Students**

Computer-supported class enables students to receive individualized instruction with appropriate blend of hands-on and hands-off approaches with extended applications in reinforcing classroom activities. The following seven factors are identified which are shown to be responsible for the success of the learning environment:

1. Description of the subject matter
2. Software as a tool
3. Integration of software into a course setting
4. Authentic learning scenarios
5. Easy to use:
6. Obligatory participation
7. Adaptability of the software

The seven factors that are responsible for the success of multimedia and language laboratory are identified. The drawback most often voiced by the learners is that they miss direct support and the possibility to discuss their analysis. Consequently, a further technological and pedagogical development can focus on providing online training via internet to overcome such missing direct support.

**References**


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