The Use of the Language Laboratory in the Teaching and Learning of English as a Second Language

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ABSTRACT

The language laboratory is the most advanced form of audio-visual aid used in language teaching or "the apogee in orthophonic devices and material which attempts to make use of all possible mechanical aids in developing faculty in comprehension and speech. It is a special room designed and used primarily for language learning with the aid of electronic equipment whose purpose is to enable students to hear the programme material with utmost clarity and high fidelity. He/she should hear his/her own voice as he/she speaks, for comparison with models. The language laboratory includes facilities that allow the teacher to listen to each individual student without being detected. The language laboratory is meant to supplement the efforts of the classroom teacher to achieve maximum effect on learners. The language laboratory comprises news print, tapes, electronic devices like television sets as well as other hardware. The use of television as an electronic teaching device is readily accepted and widely used for instruction. Television is equally accessible to a great number of viewers at the same time. Today, the use of the language laboratory as a medium of instruction in post-secondary institutions abounds. The use of the language laboratory for instruction is not novel but its usability has just been acknowledged. Today, it is an indispensable arm of the teaching and learning process. Thus, in recognition of this fact, this paper sets to determine the prospects of the language laboratory in the teaching and learning of English as a second language.

Keywords: Language, Laboratory, Teaching, English and Learning.

INTRODUCTION

The use of the language laboratory is not a method of teaching. There is no such thing as a language “laboratory method” as many people falsely assume. The tape recorder is a tool like the textbook or the chalkboard which can be used by a teacher accustomed to any method, but to varying degrees of effectiveness. Just as the use of language laboratory is not in itself a method, it is not a teacher. It will not do the teacher’s work.
for him, nor even reduce the amount of work he is called upon to do. The language laboratory is simply a teaching aid which can provide useful practice in both oral and aural skills and also, to a certain extent, in reading and writing. As a practice instrument, the laboratory has a valid role in language teaching and learning today, but its effectiveness depends on both the quality of the instrument and the way in which it is used [1].

Again, the language laboratory is the most advanced form of audio-visual aid used in language teaching or the apogee in ortophonic devices and materials.... Which attempts to make use of all possible mechanical aids in developing facility in comprehension and in speech [2]. It is special room designed and used primarily for language learning with the aid of electronic equipment whose purpose is to enable the student to hear the program material with utmost clarity and high fidelity. He should hear his own voice as he speaks, for comparison with models. The language laboratory includes facilities that allow the teacher to listen to each individual student without being detected Stack [3]. On the necessity of employing teaching aids to make the teaching and learning of a language effective with particular reference to language laboratory, Ubahakwe [4] maintains that:

The growth of technology especially in the area of electronics has provided more precise tools for studying, analyzing and teaching the sounds of a language: it becomes increasingly obvious that a language laboratory is an essential, if not indispensable requirement for the effective teaching of modern language.

From the above quotation, it would appear that the language laboratory is mainly used in spoken English. To a very large extent this is true, but speech is only a part of the work which can be successfully undertaken by the use of the language laboratory. There are three principal areas of work for the teacher in the language laboratory: Speech
alone; speech and reading; speech and writing, for the activities of speaking, reading and writing are all parts of a sophisticated knowledge of any language today,[5].

Hence, this paper sets out to examine the features of the language laboratory; the aim in using the language laboratory, the role of teachers in the use of the language laboratory; the advantages of the language laboratory in the teaching and learning; some aspects of the English language that can be subjected to the language laboratory technique for more effectiveness; and the problems involved in the use of the language laboratory.

FEATURES OF THE LANGUAGE LABORATORY

The audio-visual materials normally available in a standard language laboratory can be grouped as follows:

A. Visual
   i. Flat materials such as books, pictures, flash cards, maps, charts, car-board figure etc.
   ii. Three-dimensional materials such as puppets, dolls, models, dioramas etc
   iii. Projected materials such as films, films-strips, motion pictures, television etc

B. Auditory
   i. Phonographic discs
   ii. Tape recorder and tapes
   iii. Radio, motion pictures with sound and television with sound [6].

   It can be easily seen from the above grouping that a standard language laboratory contains faculties not only for speech practice but also for reading and comprehension. Thus, the language laboratory places at both the teacher’s and student’s disposal valuable materials for communicative arts acquisition and practice [7].

AIMS OF THE LANGUAGE LABORATORY IN LANGUAGE TEACHING
The rationale behind the use of the language laboratory in language teaching is that it is generally accepted that understanding and speaking are the prime essentials in language acquisition. Since we learn best what we practice, extensive and systematic practice as provided in the language laboratory in hearing and speaking is necessary. In as much as the conventional classroom method does not make sufficient provision for such practice, resulting in the general poor performance in the English language by students in Nigeria, resort must be made to another device-the language laboratory.

The fundamental aim of the language laboratory is to provide much and regular practice in listening to models, in imitating these models, and in repetitive oral drills. Thus, machines used in language teaching can supply the following:

**Listening:** To develop the ability to understand the language spoken at normal speed.

**Imitation:** To develop the sounds, stress, rhythm and intonation of a native pronunciation.

**Repetition:** To develop the ability to speak the language at a normal rate of speed to master the complex skills involved in speaking a language.

**Observation of Context:** Learning language as a co-ordinate system of behaviour.

**Semantic Drill:** To give practice in putting words in the right contexts, thus leading to independent use of the language.

**Pronunciation Drill:** To practice in forming the right sounds and sound patterns.
Testing: To test auditory comprehension, pronunciation, speech, reading and writing. In short, all language skills and essential, language teaching procedure, presentation, repetition, testing, re-testing and contextual expansion may be subject to automation [8].

THE ROLE OF TEACHERS IN THE USE OF THE LANGUAGE LABORATORY

The teacher's role in the laboratory is that of manager. To be an efficient manager, he must ensure that all students are provided with the material that they need to work on; that they need to exploit fully the laboratory facilities to good effect while they are working; and that the responsibility for getting the maximum benefit from laboratory work is largely delegated to the students themselves. As in good classroom practice, the teacher is not in laboratory primarily to teach but rather to help the students learn [9].

Also teachers have to be trained in their laboratory role to orient students to the machinery, and to monitor their work effectively while they are using it. The training should also aim at inculcating positive attitudes toward laboratory work, attitudes which teachers will then pass onto students they train in using the laboratory. The aim of orientation to the laboratory is to familiarize students with how it operates and develop confidence in handling it.

However, good an orientation may be, the teacher cannot then just sit back, confident that the students now know how to use the laboratory effectively. They must be trained to be discriminating and self-critical of their own efforts. This involves a continuous process of training achieved by good monitoring. In fact, monitoring is the main role of the teacher in the laboratory. Hayes (1980)[10], opines that it is particularly important to use a friendly tone and personalized approach in all monitoring work to make up for the somewhat impersonal circumstances of the laboratory itself.
Ike and Okwor (1996)[2] assert that the language laboratory techniques allow the teacher to play the role of designer, co-coordinator manger, diagnostician, adviser, evaluator, instructor, media operator and record keeper in the instructional development and implementation process. With regard to record keeping, they further maintain that the language laboratory technique provides the opportunity for a systematic and sequenced instruction to be made available to learners and that it is therefore necessary that the teacher keeps a comprehensive record of individual learner’s performance as this will indicate the areas and units of instruction that need to be revisited.

The integration of laboratory with classroom work which is essential is also part of the teacher’s role. This is to ensure that the laboratory period is not seen as a one-off session totally unrelated programme. Proper integration of the work done in classroom and laboratory demands that teachers take equal responsibility for both sphere. [11], says that there is a tendency in many institutions to treat “laboratory teacher” as a race a part, with completely different responsibilities from their classroom colleagues. But the classroom teacher cannot do the necessary preparation and follow-up work if he has little idea of what goes on in-between, “the laboratory teacher cannot effectively monitor a class if he does not know how well prepared they are for the laboratory work; nor can he operate effectively if he does not know what kind of follow-up work there is going to be afterwards; the learners themselves cannot be expected to take the laboratory seriously if they feel that their classroom teacher has no connection with it. Integration can only be achieved by a teacher taking his class through all the stages of a laboratory aspect.

THE ADVANTAGES OF THE LANGUAGE LABORATORY IN THE LANGUAGE TEACHING AND LEARNING

In the teaching and learning of English as a second language the television, film, video-tape, the radio, and the language laboratory go a long way in helping
motivation, giving a lot of practice in understanding the spoken language in varied and interesting situations and taking the students away from the often drab, caged classroom situation into the exciting and mature experience of the larger community of adults,[11].

Audio-visual aids are absolutely necessary because they not only provide him (the learner) with the means of extending the horizon of his experience but, also provide him with a kit of tools for carrying out diagnostic research an diemedial work demanded by up to date instructional purposes. In support of this view, Wittich et al (1962)[12] contend that learners should have available combinations reinforce one another if we are to provide the most efficient paths possible for the mastery of understanding of concepts.

Rivers (1968)[13] stressing the importance of the language laboratory in the acquisition of language goes on to list the advantages of language laboratory as follows:

1. Each student is given ample opportunity to hear native speech clearly and distinctly.
2. The student may hear this authentic native’s speech as frequently as he and his teacher desire.
3. The taped lesson provides an unchanging and unwearyingly model of native speech for the student to imitate.
4. In the laboratory, the student may listen to a great varity of foreign voices, both male and female.
5. The laboratory booth provides the student with psychological isolation which releases him from some of his inhibitions about making embarrassing language sounds in front of his fellows.
6. Each student may hear and use the foreign language throughout the laboratory session, instead of wasting time waiting for his turn in a large group, as he does in the usual classroom situation.

7. The laboratory frees the teacher from certain problems of class direction and classroom management, enabling him to concentrate on the problems of individual students. With play back facilities, the student is in a position to compare objectively a specimen of his own speech in the foreign language with that of a native model.

8. Each student may practice each language element as many times as he wishes before moving on to the next.

9. The laboratory provides means for testing oral production in the foreign language in a more detached objective way.

10. The laboratory provides the teacher with a ready means of improving his own articulation and intonation where this is desirable.

11. Each student can study at his own pace, concentrating on the parts of the work in which he needs most practice, rather than being forced to keep pace with his fellows.

Carol (1964)[1] writing on the importance of teaching resources for language study asserts that audio-visual aids like tape recorder, television sets and teaching machines are necessary for effective language study. This is because they are powerful interest arousing devices that posses the capacity of bringing into play all the five senses.

Putnam (1981)[14] opines that the most obvious and chief asset that television offer sis the fact that it has become so common place. He maintains that psychologists tell us that around 90% (ninety percent) of the average person’s sensory perception is visual. It means that hawing something to look at is important to learning. He goes on to say that combining sound and pictures on a television...
screen should make it easier to concentrate, easier to learn and retain whatever language content is being presented. Furthermore, according to him, because one sees people on the screen, television ends up being considerably less impersonal, and because it is live” a television picture is considerably less static than the pictures in books or on posters.

Pimsleur (1959)[15] reviews the functions of the language instruction with particular reference to spoken language. In his article on the “Foundations of the Language Laboratory,” he maintains that the laboratory could create good basic speech habits and with the teacher in collaboration, bring about an acceptable pronunciation. Her further affirms that the laboratory supplements the teacher and makes his efforts more fruitful. Lack of teaching resources with particular reference to the language laboratory is considered by linguists and teachers as an impediment not only to an effective study of language but also to a successful study of other school subjects. The language laboratory is not, of itself, in any way a revolutionary device in the pedagogical sense. It is merely a more efficient way of making available to students the spoken sounds of the language in a form which he or she can imitate in comparative privacy and which provides considerable flexibility in doing this, if conditions of use can be properly arranged. In support of this view, Echetabu (1984)[9] points out that the laboratory functions best and can assure flexibility in the amount of time needed by individual students to achieve mastery of learning tasks according to their individual students need and abilities. She calls the laboratory a kind of “practice filed, the gymnasium, in which detailed operations involved in the game drilled”. The classroom, on the other hand, is described as a football field in which the actual game takes place. It is regrettable that oral English takes place in this filed rather than in the gymnasium.
In Gordon’s word (1991)[16] the advantage of the language laboratory as an aid to learning is that a machine can be controlled; it can be made to repeat; it never tires. These are important considerations in the learning process.

Also according to Stack (1966)[17], the most important advance in language teaching efficiency is the laboratory because classroom instruction and language laboratory drills complement each other with the language laboratory relieving the teacher of endless repetition of patterns and freeing class time for flexible applications of language.

Ross (1970)[18] maintains that tape recorders and the use of a language laboratory can play an important role in the development of good pronunciation. He goes on to say that the language laboratory offers the students the opportunity to speak as much as they need; it offers them the possibility of working at their own speed and the excellent chance to acquire good pronunciation which is of particular importance to those schools which do not have native speakers at their disposal. It is only with full recording and playback faculties that oral language students become used to model English sounds and be able to compare their production with what their teacher has already recorded. Dokun (1979)[9] emphasizes the importance of teaching aids with particular reference to the language laboratory. He points out that it is in language laboratory that two psychological principles utilized by the linguistic method can find immediate application. Those principles are that language learning is primarily habit formation and that correct responses are learned better if they are immediately reinforced by reward.

Moreover, language learning is essentially speech, a skill which is best acquired by practice and repetition, in which sounds made by the voice are more complex and go far beyond the symbols of the international phonetic alphabet because of the presence of many delicate nuances and inflections, grunts and puffs which occur in daily speech but are not represented by any graphic symbol.
Orthophonic devices make it possible for all those vital aspects of a language to be made part of the process of language acquisition, thus increasing the quality and quantity of the student’s performance. From the foregoing assertions, it becomes very clear that, generally speaking, the language laboratory is an invaluable aid worth trying in the Nigeria context. With the advantages of the language laboratory just enunciated, one is in no doubt that the introduction of language laboratories, at least from the secondary school stage, will go a long way in solving many of the communication problems our students face. The trial of this new technique is however on the proviso that the English language teachers are adequately trained on how to use the devices effectively, as some of them are highly sophisticated and complex.

**SOME ASPECTS OF THE ENGLISH LANGUAGE THAT CAN BE SUBJECTED TO THE LANGUAGE LABORATORY TECHNIQUES FOR MORE EFFECTIVE TEACHING AND LEARNING**

Practically all the objectives of an English language can be achieved in a language laboratory since practical lessons in listening and speaking, carrying on a conversation, pronunciation, vocabulary building, dictation, as well as reading and comprehension can be organized and taught with the aid of the audio-visual devices and machines available in the language laboratory. The audio-visual materials can effectively be employed in some aspects of the English language course. For instance, one of the units of the English language course is the Nature and Functions of language. Under this unit, apart from the theoretical approach which is already traditional, recordings in films strips could be made and relayed to illustrate the use of gestures and facial expressions, signs and signals, smoke language, speech and writing as modes of communication. Cassette recordings could also be made and relayed using appropriate passages spoken, recited or read by a native speaker of the language to illustrate the five basic functions of language. In this way, the use of
film strips or short circuit recordings, along with the traditional lecture methods, helps make the lesson more practical and real to the students, thereby ensuring increased understanding of the lesson.

Also, in teaching levels and varieties of the English language usage, it can be made more meaningful by radio and television dramatization of the dialogues and passage. In this way, the two senses of sight and hearing, can be simultaneously employed for increased learning reinforcement.

The language laboratory can be best used in the Use of the Dictionary lesson, especially in teaching pronunciation and spelling. In this case, film and cassette rewarding, or the use of short circuit to television with sound, can be employed to great advantage, especially in teaching phonetic symbols and their appropriate sounds. The selected words especially those with sounds that are often mispronounced, can be recorded on film with sound or patently recorded ones produced, so that the students can watch as native speakers pronounce these words, paying particular attention to the way the speakers pronounce the words as well as how they shape their lips. In this, it becomes more practical illustrating the basic differences in sounds between such vowels and consonants as:

/a:/ and /æ/, in father and pat respectively

/i/ and /i:/, in ship and sheep respectively

/e/ and /ei/, in pet and pay, respectively

/ɔ/ and /ɔ/, in hot and hut respectively

/z/ and /z/, in zest and measure respectively

The same treatment can be given to a lesson on the diphthongs, as well as in treating spelling difficulties. Language laboratory equipment, especially the tape-
recorders linked to the teacher's control desk or "console," can be used to give the students practice in correct word-pronunciation, while the visual image on filmstrips can be run out several times to give them practice, especially, with words that are naturally difficult to spell such as argument, auxiliary, weird, accommodate, superintendent etc.

This, system can be used to give simultaneous practice in both spelling and pronunciation so that the students can internalize all the intricacies of words effortlessly, and so help in rapidly increasing their word power. The homonyms can equally be practically treated using the language laboratory to bring out vividly their similarities in sound and difference in spelling and meaning.

With regard to essay, letter and speech writing, model short passages projected on short circuit television and possibly read by a native speaker and probably the write or simply the writer's voice recorded on cassette or tape recorder can go along way in enlivening lesions in essay, letter or speech writing.

With regard to the use of library, film recordings of the systems of operation of model libraries all over the world could well be used to show students. This will be of invaluable help in making more realistic the theoretical lessons delivered on the use of library. After such language laboratory sessions, the students can further reinforce their classroom and laboratory experiences.

Finally, the language laboratory can be of immense use in developing the students reading skills through the use of the available reading aids like books, the Rateometer and Diagnostic Test can be of immense help to the language teacher in improving the student's reading speed, rate and speed of comprehension and retention, and in helping him to diagnose the students' areas of reading difficulties. There is no doubt that in this way, the reading laboratory will make it easier for...
students cope with the immense load of reading materials they are expected to cover, while at the same time making it possible for the teacher to identify students with reading and comprehension problems, with a view to giving them extra special remedial attention.

PROBLEMS INVOLVED IN THE USE OF LANGUAGE LABORATORY IN THE TEACHING AND LEARNING OF THE ENGLISH LANGUAGE

One of the major problems connected with the use of the language laboratory is that there is considerable evidence that this machinery has very often imposed itself for two slightly unworthy reason. Firstly, its acquisition may represent some kind of attempt by language teachers to obtain a technological status symbol (even the name symptomatic) to help them to face up to their scientific colleagues. Secondly, there is a slight air of magic still surrounding this device. Apart from a small but dedicated number of people who have seriously studied its use for years, original enthusiasm has sometimes been based on hear say or even on press reports about the ways such machines can change language teaching and even make the teacher's task easier. In support of this view, Ike and Okwor (1996)[19] points out that what has happened, is still happening, as a result, is that we are beginning to have the powerful aid of modern technology in language teaching, but comparatively few so far have the necessary knowledge of what to do with such aid in order to gain the maximum benefit from it.

Again, there are still vast numbers of teachers who fail or refuse to be convinced of the effectiveness of the mechanized classroom. Those sensitive teachers critical of the language laboratory often exalt to that elusive entity called “personality” and the influence of those non-linguistic emotive factors count for so much in the classroom situation. These teachers maintain that a machine knows nothing about enthusiasm, vigor, perseverance, patience, leadership, discipline,
humor, good-will, affection, dramatic ability, and flexible adaptation to the needs of
the moment. Cole (1968)[2] supporting the above view asserts that language means
social contact. He further observes that a realization of the place of visual and
audio-visual aids in language teaching would allay any fears that the abilities of the
good teacher are becoming less relevant.

Putnam (1981)[14] commenting on the problems of the language laboratory is
of the view that implementing machines without a thorough understanding of the
capabilities of machines is bound to be disappointing, if not resounding failure. He
further stresses that the efficiency of the machine cannot substitute altogether for
the personal touch that only a teacher can give; that the precise models that the
recorded material can provide should not be used to the exclusion of a teacher’s
correction, encouragement and sympathetic explanation.

Ross (1970)[18] contends that the repetition and structure drills on which
many laboratory courses are based make procedure extremely monotonous and
strenuous and highly motivated students are prepared to put with the monotony. He
further maintains that another, and even more serious short-coming is the tendency
of the students to respond automatically or semi-automatically to the drills. He goes
on to say that although it can be said that automatic response is exactly what we
want from the student, language is a habit, as some linguists like to put it. So, in
this sense, the more automatic the student’s response, the nearer it is to the speech
behavior of a native speaker and more fluently he speaks. Nonetheless, in the
language laboratory, there is danger that the student responds automatically in
another sense, namely that he does not attend to the meaning of what he himself is
saying, and this is, of course, a very serious short coming.

Another fundamental problem of the use of the language laboratory is largely
concerned with spoken language “la parole,” as it is usually called now, not with
mastery of the written language which has traditionally been the main aim of academic language teaching in this country.

CONCLUSION

In discussing this topic, efforts have been made to look at the usefulness of the language laboratory as a modern language teaching device and technique. In doing this, the characteristics of the language laboratory which make it very much amenable for use in the teaching of the English language are worked into from the proposals put forward in this paper, it is established that the language laboratory is best used in teaching oral or spoken English.

However, its usefulness can extend to all other facets of the English language teaching. Since, the use of the language laboratory can be more effective if students are trained in its use, the paper also highlighted the role of teachers in the use of language laboratory not withstanding it is important to stress at this juncture that the use of the language laboratory in higher institutions of learning in this country will minimize the speech inadequacies of students in English.

RECOMMENDATIONS

With the importance of the use of the language laboratory in the teaching and learning of English language as a second language enunciated in this paper, it is quite obvious that for the effective teaching and learning of the English language, a well equipped language laboratory is needed. However, most institutions in this country cannot acquire the language laboratory on financial ground. To overcome this problem and to increase the use of the language laboratory, institutions of learning should rely more on
the use of locally made language laboratory equipment. Furthermore, orientation should be given to both the teachers and students on the adequate use of the language laboratory. This will go along way in curbing the negative attitudes of teachers and students towards the language laboratory attitude which stem largely from tear and ignorance.

REFERENCES


