



Effectiveness of Language Laboratory for Teaching English Phonetics and Phonology in Colleges of Education in North Eastern, Nigeria

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ABSTRACT

The purpose of this study was to determine the effectiveness of language laboratories for teaching English phonetics and phonology in Colleges of Education in North Eastern, Nigeria. The study which adopted a descriptive survey research design was guided by two questions and null hypotheses. The population involves all teachers and students of the English Language Department in colleges of education in North Eastern, Nigeria. A structured questionnaire was the instrument used to collect data for the study. The instrument was face validated by 3 experts. Cronbach's alpha analysis yielded a reliability coefficient of 0.99. The study found that language laboratories were not effectively used by teachers and students in such Colleges of Education. The study revealed that language laboratories were lacking specialists. It was also found that English language teachers/students who taught/learn introduction to phonetics and phonology at the College of Education level had a low concern about using language laboratories when teaching/learning, and most of the language laboratory facilities were not properly maintained. It was recommended that Colleges of Education should train and retrain teachers of the English language in the management of language laboratories or employ staff who specialized in language laboratories for its proper maintenance, English language Teachers should frequently engage in using language laboratories in teaching some aspects of English language and Students should be taught how to use language laboratory facilities so that they should be able to use it independently at their own phase.

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INTRODUCTION

Phonetics and phonology is a course of study in the curriculum for studying English language for Nigeria Certificate in Education. Phonetics is the scientific study of speech, as phonology is the study of the sound system of languages. The minimum standard for Colleges of Education in Nigeria described Introduction to Phonetics and phonology (ENG 112) as a subject designed to expose students' of English to relevant training in English phonetics and phonology with the aim of giving enough drills and practice exercises in the use of segmental and supra segmental phonemes of English

language which is taught mostly in the language laboratory (NCCE minimum standard 2012).

Language laboratory is an audio or audio-visual installation used as an aid in modern language teaching and especially for teaching speaking skills. It allows a teacher to listen to and manage students' audio via a hard-wired analogue tape deck based systems with 'sound booths' in fixed locations (Wilson & Thayalan, 2013). Language laboratory provides much software to enhance the student's linguistic skills, the importance of language labs can solve this problem and make English learning process is very attractive for both teachers and students.



In the contemporary language laboratory, the teacher is provided with a high-class Digital Software System which offers efficient result oriented and full proof means to enrich the English spoken learning process (Stack, 2010). Teachers are able to discreetly monitor student activities even when students are working with live In identical manner, Cuban (2001) noted that language laboratory enables the student to listen to model pronunciations or question; repeat/answer/record the same if required, listen to his own performance and compare the same with the model for self-assessment which is the key to fast learning (Garret, 2003). This showed that language laboratory allows the learner to get effective guidance and individual attention from the teacher. It also permits student to work at their own pace and privacy. Language laboratory supports students' cognize the language in a veritable context and enables the student to master the English language phonemes with ease and flow on his own (Randall, 2006).

Oluikpe (2015) stated that the basic criteria for assessing students proficiency in writing and speaking are generally control of the basic grammatical categories such as punctuation, tense, number and gender etc. Language Teaching in Nigeria had some deficiencies due to lack of instructional facilities for teaching and learning English language (zainab, 2019). It is also proven that one can learn the aspects of the phonetics of a language, such as pronunciation, accent, stress, etc. in the language laboratory. The language laboratory is the perfect place to organize seminars and workshops and various aspects of educational technology, educational software, production techniques, dubbing, etc. It provides learners with a platform to conduct a lot of activities (Umar, 2018). Today, English is the Language for the official communication in Nigeria hence this study is set to assess the effectiveness of language laboratory for teaching English phonetics and phonology in Colleges of Education in North Eastern, Nigeria.

Statement of the Problem

Teaching phonetics and phonology in English is quite different from teaching any other aspect of English. It is not limited to writing an examination and getting marks or award. There are some other aspects of English which need to be put into practice since having the ability to interconnect well is the central purpose in learning any language. Thus, the language laboratory acts as the vital role in the teaching English phonetics and phonology especially in improving one's pronunciation and listening skills. As it is a technological provision for teaching English language, it has many advanced services that can facilitate teaching the language and improving students' listening capacities with an ability to interconnect well in English. The introduction of language laboratory into language teaching gives a lot of support to (English) language teachers to make the students confident in acquiring a peculiar (English) language.

However, in Nigeria, notwithstanding the great impact achievable with language laboratory, Language teachers have continued to register reduced concerned in using language laboratory when it comes to language teaching (Nwosu, 2019), in which ENG 112 (Introduction to phonetics and phonology) is one of the identified courses which required constant use of language laboratory in all activities. Students also were found not exhibiting interest toward activities in language laboratory when learning introduction to phonetics and phonology and find it difficult to pass the course (ENG112) in their study. The above claim, has left many questions to be attended to. Thus, one then silences to ask, to what extent do English teachers and their students make effective use of language laboratories in teaching Introduction to phonetics and phonology at Colleges of Education in North East?

Research Questions

The following research questions guided the study

1. How often do teachers of English use language laboratory in teaching Introduction to phonetics and phonology in Colleges of Education in North Eastern, Nigeria?
2. What is the effectiveness of using language laboratory facilities English phonetics and phonology in Colleges of Education in North Eastern, Nigeria?

Hypotheses

The following null hypotheses were formulated and tested at 0.05 level of significance for this study;

Ho₁: There is no significant difference between the opinion of teachers and that of students in relation to the use of language laboratories in teaching phonetics and phonology in Colleges of Education in North Eastern, Nigeria.

Ho₂: There is no significant difference between the opinion of teachers and students in relation to the effectiveness of language laboratory in teachers' ability to teach English phonemes in Colleges of Education in North Eastern, Nigeria.

METHODOLOGY

The study adopted a descriptive survey research design. According to Iyigwe (2018) descriptive survey research design is one in which a group of people or items are studied by collecting and analyzing data from only a few people or items considered to be representative of the entire group, population or items. The study was guided by two research questions designed from five research objectives and two hypotheses. The study was carried out in North East, Nigeria. The population for the study comprised all teachers and students of English language in the area under the study. Structured questionnaire was the instrument used to collect data for the study. The instrument used was based on four points rating scale. The data were analyzed using mean and standard deviation while the hypothesis were tested with t-test at 0.05 of significance.

RESULTS

The results of the study are presented below;

Table 1: Mean Response and Standard Deviation on the use of language laboratory in teaching English phonetics and phonology

S/No.	Statement	X	SD	Remark
1.	Language laboratory is usually in use when teaching/learning introduction to phonetics and phonology (ENG112).	1.5	1.22	SE
2.	One can teach/learn English sounds efficiently without using language laboratory.	2.18	1.48	VSE
3.	Introduction to phonetics and phonology (ENG112) can only be taught in language laboratories.	1.5	1.22	VSE
4.	Language laboratory is used when teaching/learning some aspects of ENG112.	2.22	1.49	SE
5.	Teachers and students do not mind using language laboratories.	4.73	2.17	VLE
Grand Mean		2.43	1.56	SE

Source: Field survey, 2022

The table above shows that the teachers of English use language laboratories in teaching phonetics and phonology to a small extent (SE). That is both the teachers and the

students do not mind using the language laboratory with a grand mean of 2.43 and standard deviation of 1.56 which is within the range of small extent (SE). This means that



language laboratories are not in proper use in Colleges of Education.

Table 2: Effectiveness of using Language Laboratory Facilities English Phonetics and

S/No.	Statement	X	SD	Remark
1.	Language laboratory plays a key role in the teaching/learning of phonetics and phonology.	3.38	1.83	ME
2.	Language laboratory gives a lot of support to language teachers and students.	3.1	2.16	ME
3.	Language laboratory has become the need of the day in any foreign language learning processes.	3.05	1.76	ME
4.	Language laboratory is one of the media in teaching that is put into application in the teaching domain.	3.53	2.16	LE
5.	Several sounds activities can be given to the students as laboratory exercise using language laboratory.	4.03	2.01	LE
Grand Mean		3.51	1.87	LE

Source: Field survey, 2022

The grand mean (3.51) and standard deviation (1.87) in the above table indicate that language laboratory affects teachers' abilities. This is supported by the responses to the items

under the research question which are mainly ME and LE. This shows language laboratory plays a pivotal role in the learning of English sounds.

Table 3: t-test analysis on the significant difference between the opinions of teachers and that of students regarding the use of Language laboratory in teaching phonetics and phonology

Variables	Teachers	Students
Mean	2.89	4.346
Variance	1.41325	1.10693
Observations	5	5
Hypothesized Mean Difference	0	
Df	8	
t Stat	-2.050834415	
P(T<=t) one-tail	0.037205851	
t Critical one-tail	1.859548038	
P(T<=t) two-tail	0.074411701	
t Critical two-tail	2.306004135	

Since the t-stat (-2.0508) is less than the t-critical (2.30600), we therefore accept the null hypothesis that there is no significant difference between the opinion of the teachers and that of the students in relation to the use of

language laboratories for teaching phonetics and phonology which both the teachers and the students agree to a very large extent (VLE) that both teachers and students don't mind using language laboratories.

Table 3: t-test analysis on the significant difference between the opinion of teachers and that of the students in relation to the effects of language laboratory in teachers' ability to teach English language.

Variables	Teachers	Students
Mean	2.894	3.494
Variance	0.63163	0.57963
Observations	5	5
Hypothesized Mean Difference	0	
Df	8	
t Stat	-1.219038901	
P(T<=t) one-tail	0.128775692	
t Critical one-tail	1.859548038	
P(T<=t) two-tail	0.257551385	
t Critical two-tail	2.306004135	

Since the t-stat (1,2190), is less than the t- critical (2.3060), we therefore accept the null hypothesis (Ho), that there is no significant difference between the opinion of teachers and that of students in relation to the effects of language lab In teachers' ability to teach English phonemes. This agrees with the

questionnaire where the grand mean for teachers is 1.8 and for the students 1.7 which shows they all agree to a very large extent that language laboratory affects teachers' ability to teach English phonemes which correlate with the questionnaire.

CONCLUSION

The study concludes that nevertheless language laboratories are available in Colleges of Education and are designed to support teachers and students in teaching and learning of Languages; on the conflicting part, it was found that language laboratories were not effectively used by teachers and students in such Colleges of Education. The study revealed that language laboratories were lacking specialists. It was also found that English language teachers/students

who taught/learn introduction to phonetics and phonology at Colleges of Education level had low concern in using language laboratories when teaching/learning, and most of the language laboratory facilities were not properly maintained. The findings also discovered that English teachers' ability to teach ENG 112 (introduction to phonetics and phonology) at Colleges of Education Level is associated largely with effective use of language laboratory in their teaching.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations were made;

1. Colleges of Education should train and retrain teachers of English language on management of language laboratory or employ staff who specialized in language laboratory for its proper maintenance.

2. English language Teachers should frequently engage in using language laboratory in teaching some aspect of English language.
3. Students should be taught how to use language laboratory facilities so that they should be able to use it independently at their own phase.



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