THE IMPACT OF AUDIO-RECORDING AND COMMUNICATION ON PERFORMANCE IN ENGLISH LANGUAGE AMONG JUNIOR SECONDARY SCHOOL STUDENTS IN ZARIA EDUCATION ZONE, KADUNA STATE.

BY

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B.Ed (1990) Creative Arts A.B.U. ZARIA

M.Ed/EDUC/07074/2006-2007

DEPARTMENT OF EDUCATIONAL FOUNDATION AND CURRICULUM
AHMADU BELLO UNIVERSITY
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AN M.Ed. THESIS SUBMITTED TO POST GRADUATE SCHOOL, AHMADU BELLO UNIVERSITY, ZARIA. IN PARTIAL FULLFILMENT OF THE REQUIREMENT FOR THE AWARD OF M.Ed. DEGREE IN INSTRUCTIONAL TECHNOLOGY IN THE DEPARTMENT OF EDUCATIONAL FOUNDATION AND CURRICULUM AHMADU BELLO UNIVERSITY, ZARIA

2012

DECLARATION

I declare that this dissertation entitled "Effect of Audio-Instructions on Learning Performance in English Language among Junior Secondary School Students in Zaria Education Zone" is my personal research work. It has never been presented anywhere either wholly or partially for the purpose of the award of a higher degree. All the quotations and sources of information are duly acknowledged by means of references in this work.

Dahir ABDULKADIR _____ _____
Signature Date

CERTIFICATION

This thesis entitled "Effect of Audio-Instructions on Learning Performance in English Language among Junior Secondary School Students in Zaria Education Zone" written by me has been read and approved as meeting the requirement governing the award of the degree of Master of Education in Instructional Technology in the Department of Educational Foundation and Curriculum Ahmadu Bello University, Zaria and is approved for its contribution to knowledge and literacy presentation.

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Dean, Postgraduate School

DEDICATION

This thesis is dedicated to my parents.

ACKNOWLEDGEMENT

I wish to express my gratitude to Allah (SWT) for keeping me alive from birth to date. Many had come and gone. May their soles rest in peace. I wish to acknowledge the excellent work of supervision and encouragement given by Dr. A. T. Kadage, my major supervisor, Dr. A. I. Azi, my minor supervisor and Dr. B. Maina, my head of department and my mentor. I also wish to acknowledge my profound gratitude to Prof. J. A. Gwani, Dr. Mamman Musa, Dr. Sadiq Mohammed Prof. C. E. Dikki, Prof. Mohammad Ben-Yunus, Dr. H.R. Bayero, Prof. Ibrahim Umar, Dr. Mustapha Isa Qasim, and Mal. Maruf O. Ibrahim all of the Faculty of Education A.B.U Zaria. I thank them so much for their unflinching encouragement and support-: morally, intellectually and spiritually. I must also acknowledge Dr. Suleiman Salau of Mass Communication Department whose guidance and support helped in focusing my search.

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ABSTRACT

This study investigated the effect of Audio-Instructions on Learning Performance in English Language among Junior Secondary School Students in Zaria Education Zone. There is need for Nigerians, teachers and students alike, to put in more efforts in the teaching and learning of English Language, as it is the language of instruction, if the country aims at attaining the 2020 development vision. It is therefore necessary to emphasize the need to improve on the teaching and learning of the subject. To achieve the objectives of this study, four research questions and four null hypotheses were formulated to guide the conduct of the study. The data collection was by means of pre-test and post-test given to students of four Public Junior Secondary Schools in Zaria Education Zone. Teachers and students from two schools were exposed to the treatment of Audio-Instructions on Learning Performance in English Language and the other two schools were not exposed to the treatment. Statistical analyses was carried out with t-test and analysis of variance and the finding shows that the treatment was effective in the sense that students who were exposed to the treatment performed better than those that were not exposed to treatment. Also the study revealed significant difference between the performances of boys and girls, of students whose teachers of the same tribe with them and of those whose teachers are not of the same tribe with them. It also shows difference in performance of students based on their teacher's years of experience. Appropriate recommendations were made.

ABBREVIATIONS

BECTA	British Educational Communication and Technology Information Agency
C.S.C	Classroom Communication System
I.C.T.	Information Communication Technology
I.L.S.	Integrated Learning System
I.P.	Internet Protocol
I.T.	Information Technology
I.T.I.S.	Information Technology in Schools
I.Q.	Intelligent Quotient
N.G.F. L.	New Grant Fund Learning
N .P.E.	National Policy on Education
P.R.S.	Public Response System
R. P.	Received Pronunciation

OPERATIONAL DEFINITION OF TERMS

.**Control Group:** Students who had only the normal classroom teaching

Experimental Group: Students who were exposed to audio instruction given by the researcher.

Participative Teaching and Learning: Learners contribute to the teaching /learning Experience

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CHAPTER ONE

INTRODUCTION

1.1 Background of the study:

Communication is the process through which information, ideas, knowledge or messages are transmitted from the source to another or others. As related to education, it refers to the information transmitted from the teacher to the pupils or learners, from learners to the teacher and from learners to other learners even through audio or audio visual channels. Wholistically, the purpose of all communication is to persuade, influence, modify or change the behavior of others. Communication is cyclical in nature. It is not a linear process. It comprises of sender, receiver, message and channel. However, there certain factors which constitute barriers to effective classroom communication. These barriers bring about a breakdown of communication between the teacher and the learners

These impediments to effective communication may in at any point or stage in a communication process. They can emanate from the source, the channel, the receiver, the language etc. the effectiveness of classroom communication is always hampered by the intrusion of distracters which include:

- Non adherence to the principles of communication

- Sender's oriented problems
- Receivers oriented problems
- Massage and medium oriented problems

Noise and its allied factors:

Non adherence to the principles of education:

This, as Oby N. and Ugwu A.B.U observed emanates in the area of feedback. Failure to realize the expected feedback to non adherence to the principle of communication can bring about a breakdown of communication. According to them, the message to be sent must be precise meaningful, with the level and experience of the learner and must be presented in an orderly and comprehensible manner. The message must be sent through appropriate channel.

Some problems come from the sender. The sender's attitude, knowledge of the content, disposition, his state of mind etc may all make him transmit incomprehensible and poor message. These would adversely affect communication between the teacher and the learners.

Moreover if the sender (teacher) speed is too slow, too fast or disjointed (as in stammering) the receiver (learner) may find it difficult to follow.

Receivers Oriented Problems: As with the sender, the receiver must be knowledgeable enough, experienced and emotionally balanced to avoid giving the received message as senseless interpretation. If the receiver is hard of hearing, has poor eye sight, inattentive, different meaning may be given according to his disposition and interest.

Message and medium oriented problem: the nature of the problem – whether the message is uninteresting is either far above is far below the receivers ability will lead to ineffective communication. Obi and Ngwu (2000) added that distance can also distort or delay message consequently result to wrong, inaccurate or poor reception of message. They further explained that any medium of communication that is alien to the receiver could lead to wrong decoding. Again, when the teacher fails to use the appropriate instructional media in delivering his lesson, there could be communication breakdown in the classroom.

Noise and its allied factors: Any sound that misses the intended audience is noise. Obi and Ngwu (2000) described noise as any interference with a channel of communication in verbal communication where it is regarded as unwanted sound.

Any distraction in any form in communication can be regarded as noise. Noise other than unwanted sound include psychological noise such as poor mental attitude, depression, fatigue, hunger, mental and emotional disabilities and even linguistic noise in the form of semantics and phonology. Noise of all forms; physical, psychological, linguistic etc must be eliminated for an effective communication to take place.

With the apparent knowledge and population explosion it is becoming increasingly difficult to have effective classroom communication. It is not uncommon to have classroom communication crises resulting from breakdown of communication between the teacher and the learners. This warrants the need to have the knowledge and application of the process of human communication to enable the teacher to engage in classroom interaction as well as to promote and enhance learners' active participation in the teaching and learning process.

Audio media on another dimension are an important tool in teaching and learning because of their versatility in facilitating recall in the learners.

Paullinus J.E (2006) stated that audio cassette and discs serve as main material and or support materials for distance learning because these audio media can be played back as many times as possible to the inflexibility of the radio.

The benefits of audio media are numerous, they include:

- The materials can be used at any time the learner want to use them
- The recorded media can be stopped and played back at will and by choice
- Any material that is not necessary can be skipped.

Audio media have created landmarks where printed materials are faulted. Paullinus, (2006) further observed that audio can be used to record and present raw sounds of subject for study. E.g. the barking of a dog, mewing of a cat etc. this means that it can used to record the correct or satisfactory form of articulation – as in English phonology. Poullinus added that it is much easier within the new audio disc because the learner can locate a particular sound on the disc with ease without the burden of playing back the entire tape as when using audio tapes. The advantages of audio media also extend to the learning of terms or words that are difficult to pronounce. He added that listening to the dialogue, discussion, interviews and conversation without loosing the nuances of speech and telling without loosing the understanding are achieved through the use of audio media. This is of great importance, especially in oral production in the English language as most audio media are backed up with printed materials.

Nowadays, the use of what Poullinus referred to as walkabout tapes with the use of light earphones can make it possible for the recorded message to accompany the learner on a nature stroll, town walks and visit as may be appropriate.

According to Abimbola I.O (2001), audio recordings carry messages which are intended to be decoded by the receiver with the sense of hearing. He added that audio recordings can be prepared for entertainment information and instruction. They are also produced in phonographs, records, open reel tapes (reel to reel), audio cassette tapes and compact discs (C.D).

Audio recordings are very useful, very versatile in instructions. It can be used to introduce and evaluate lessons. They are also very useful as Abimbola(2001) puts in, in individualized/ self paced learning. A slow learner, he added, could play several times on audio recordings without the machine becoming impatient.

According to Abdullahi, M. (1998) audio materials can easily be adopted for any vocabulary level, and students who cannot read due to blindness or illiteracy can learn from them without much problem. This clearly shows the versatility and pervasive nature of audio recordings. It can serve all other subjects not just English language. Abdullahi, (1998) added that teachers can record classroom activities such as dramatization, interviews or discussions and play them back later during other sessions. This can prove therapeutics and provide room for self and efficient evaluation. He further stated that teachers can record stories or lessons from

educational radio programs either from a normal classroom work or for the use of their students, either individually or in small groups. Looking at the various uses of audio recordings one can conclude there is no limit to what the teacher can utilize the audio media for.

In the areas of the usability of audio recordings in instruction, Abimbola, (2001) stated the audio tapes could be prepared by teachers to meet specific instructional purposes in any subject area. Students could also record teachers' presentations during the lessons for later reviews. Students can also tape their own voices for self evaluation especially in English training.

Rowntree (1991) opines that audio tapes enable learners to:

i. Use the material at any time they choose
ii. Stop and start the sound at will
iii. Replay a passage as often as they wish
iv. Skip over any material that they do not need

From the above discussion, it is apparent that audio is indeed a great facility to both the teacher and the learners. it would worth it if the teacher and the learners become familiar with the appropriate recording techniques of audio cassette as this would assist them in choosing channels that would bring out fine results with regard to sound with high quality.

Education is generally acknowledged as one of the crucial allies of society's development process. Thus, in recognition of its potentials for enhancing existing social stratification, Nigeria's educational policy makers and social planners have placed a huge premium on the development of the education sectors. This is made clearer in the persistent resonance in the National Policy on Education (NPE 1977, revised 1998 and 2004) which stated that no nation can rise above the quality of its education system. This apparent evidence necessitated the training of those responsible for facilitating the education of Nigerians in the development planning process by the National policy designers. Consequently, the National policy on education clearly stated that, teachers' education will continue to be given attention in all its educational planning because no educational system can rise above the quality of its teachers.

This view was echoed by Lassa (2002) who noted that the importance of teachers Education continues to be the key to educational development here (in Nigeria) and elsewhere, for without adequately trained teaching cadre, Nigeria cannot hope to expand her educational horizon beyond its borders. However, this study opines that till date, the pre-service training and in-service professional development of

Nigerian teachers have not reflected the attention and focus of these observers of the nation's educational system.

Another observation proffered by Jegede (2002), pointed out that teachers training system in Nigeria has failed to achieve the provision of the National Policy on Education (NPE) that teachers' education shall be regularly exposed to innovations in their profession.

This neglect may have taken its negative toll on the standard of education and consequently on National development. This inability to develop educationally is of course, apparent in relative order, the northern parts of the country and its counterpart – and the gap between them seems to be ever widening (Enesi 2002). This, as the historical antecedents put it, is because the southern parts of the country received western education before the northern parts. Even though the North received western education over a century and a half, the gap does not seem to be closing; it is rather widening.

There is a painfully low enrolment at all levels of education in the north as opposed to the south, which increases its enrolment by the years. For example, while there are 4,049 secondary schools with an enrolment figure of 2.84 million students in the southern states, there are only 2,419 secondary schools with an enrolment of only 1.4million students in the north,[National Policy on Education,

2004]. Similarly, the north lags behind their counterpart the south-in terms of enrolment into tertiary institutions in the 1997/98, academic session. The numbers of applications into the university by candidates from the north was 56,904 is far too low as compared with 362,903 from the southern states. Admission into the university was 16,816 from the north and 55,975 from the south in that same academic session (1997-98). The admission into Polytechnics and colleges of education depicts similar situation. At the primary school level, the situation is awfully disheartening.

One of the major reasons for this widening gap, might amongst many others, include, ineffective classroom communication. It must be noted that communication is indispensable in all facets of human endeavour, especially as it affects communication. For example, communication is used in industry, administration, education, commerce and other cooperate organizations.

In the classroom, teachers and learners have to communicate effectively in order for the required teaching and learning to take place. Barde, Egugwu, Mohammed and Mustapha (2003), affirm that the teaching and learning process cannot succeed without an enabling communication frame work. Nwafor and Ngwu (2000) also explained that communication occurs both within the person and between persons as environment cues and situation itself is perceived. These

observations necessitate the need for teachers to equip themselves with the knowledge and application of human communication.

Having experienced classroom activities both as a student (learner) and as a teacher, the researcher noticed that learners enjoy the learning process better when there is effective communication with the teachers. Some learners become so used to their teachers that communicating with any other teacher becomes problematic. Some observations revealed that students on transfer or newly admitted into primary schools or post-primary schools, face a lot of adjustment difficulties in their new schools. It is further noticed that some of the problems faced by such learners emanate from the mode of communication that ensues between them and their new teachers.

These problems, however, seem to be more prevalent among the learners from the rural areas who find themselves in schools in Urban areas competing with learners from the city Olaofe (2004). Having been taught for a long time by for example a Yoruba, Ibo, Efik, Tiv or Indian teacher in the classroom, the learner finds it difficult to comprehend other teachers than those whose accent he is familiar with. This is because the learner has not been exposed to the various language groups, each with its own mother tongue intrusion in the language of instruction – the English Language.

It remains a fact, however, that to communicate effectively is to affect the receiver Barde, et al (2003). Any form of communication barrier that will bring about distraction in the teaching – learning situation such as noise problem of hearing and sending or receiving information, constitutes a communication break-down and consequently a failure of the whole process of Instruction. Ughamadu (1998) further stated that effective communication will enhance the level of achievement of instructional objectives. He reiterated that the knowledge of the process of human communication would facilitate teachers' design and implementation and promote, greater learners active participation in the teaching learning process. Barde et al (2003) also proffered that the learning environment include the teachers, subject matter, method of instruction instructional media and the learners. This suggests a specialized inter-waviness amongst all that contribute towards the achievement of the set educational goals. This also means that the teacher must, of necessity, be fully equipped to deal with most of the problems associated with teaching and learning. The most pertinent asset of the teacher, however, is the ability to communicate well with the learners.

1.2 Statement of the Problem.

In many rural schools most teachers are often indigenes of the locality in which the schools are situated, Olaofe (2004). This means that, whatever speech problem the teachers possess are familiar to the learners. It also means that such learners have no chance of interacting with other teachers or even learners who have different speech problem from theirs. In a culturally cross-pollinated nation like Nigeria, there is every possibility of distractions setting as a result of several communication barriers in the classroom teachers-learners interaction. It is also painfully obvious that Nigerian teachers who work using the official language (English) in a society (section) other than theirs, never take time to assimilate the kind of language that is used in the classroom and the accepted way of interacting with students. As observed by Kato (1998) a class climate contributing to learning can be influenced by the appearance of the teacher. The way the teacher dresses, his countenance and his mannerism all contribute in determining the classroom climate. The way people communicate and the way they receive communication is also culturally influenced and class room communication is no exception in this. Kato concludes that teachers may well be unaware of this aspect of communication, hence he added, that it is essential for teachers to have the opportunity to reflect on their practice and assess various assumptions they may bring from their background into the classroom context.

It is also obvious that there are certain teachers who tenaciously adhere to either the traditional or progressive approaches to teaching and learning. These have their implication on the achievement of the set educational goals. Whereas the traditionalists aim at ensuring that learners acquire a prescribed body of knowledge and set of values, which means they are subject centered, the progressives on the other hand, are purely child centered, who see themselves as mere facilitators of learners learning. Working singly, any of these approaches is laden with a lot of problems.

The traditional approach tends to benefit only those learners who are well motivated and who require little more of their teachers than the specific instruction. Newsam, (2007,) observed that traditional education has often served able pupils well but has been less successful with others. He also found out that progressive education has been less successful with others. He asserted that progressive mode of education has tended to work well enough in the early years of schooling in the hands of committed teachers but has had less success when attempted with older students in tertiary institutions. Newsam puts it, is on the assumption that the only things learners really learn are those which they have discovered for themselves.

The clashes between these two approaches (traditional and progressive) have aggravated the situation in the teaching and learning arena. Perhaps, a synergy of

these approaches might prove therapeutic to those problems entwining the teaching-leavening situation. Newsam, [2007], suggests an eclectic approach which places the teacher in authority as in the traditional approach and engaging learners in their own learning as in the progressive approach. He added that teaching on this view, requires skillful questioning of pupils by the teacher, rather than reliance on tuition.

It is clear that what is lacking in most of our classroom is interactions, in other words, active participation. This is where skillful questioning by the teachers and his ability to direct and challenge learners learning is put to fruition in the teaching – learning milieus. And this can only be achieved through a communication approach that recognizes the prevailing dominant communication culture in particular areas, hence the need for a research on the Effects of Pre-Recorded Instructions on Learners' English Language Performance in Junior Secondary Schools in Zaria Education Division

1.3 Objectives of the Study:

The objectives for this study are to:

Assess the impact of audio recording instruction in enhancing better performance of students in English Language.

To verify whether audio recording instruction could influence the performance of students in English Language based on the tribal background of the teachers.

To find out if audio recording instruction makes students whose teachers have more years of teaching experience perform better than those whose teachers have less years of teaching experience.

To examine whether or not audio recording instruction is capable of influencing the performance of student in English Language based on their gender (male and female).

1.4 Research Questions.

1. Would there be any difference between the English Language performance of students taught using the audio recording and those taught using traditional teaching method?

2. To what extent does the audio recording instruction influence the performance of students in the English Language based on the tribal background of their teachers?

3.Does audio recording instruction make students whose teacher have more years of teaching experience perform better than those whose teachers have less years of teaching experience?

4. Is there any difference between the performance of male and female students who were taught with the use of audio recording instruction.

1 .5 Null Hypotheses

The following null hypotheses were formulated

Ho_1 There is no significant difference between the English Language performance of students taught with the aid of audio recording instruction and of those taught via the traditional teaching method.

Ho_2 There is no significant difference between the English Language performance of students treated with audio recording instruction whose teachers have varied geographical and tribal backgrounds.

Ho3 There is no significant difference between the English Language performances of students treated with audio recording instruction whose teachers have varied years of teaching experience.

Ho_4 There is no significant difference between the English Language performance of male and female students who were taught by the use of audio recording instruction.

1.6 Basic Assumptions about the Study.

The basic assumptions governing this research include:

If learners are taught by teachers who could not communicate well with them, they are likely to misunderstand all the information intended for their consumption as such they either shy away from the subject taught by the teacher or fail woefully in the examinations.

Some of the teachers are not professionally trained as such inject fear into the learners who become timid and develop truancy.

If learners are not drawn into active /participative teaching and learning technique, they are not likely to grasp fully, the concept being taught.

If learners are not encouraged to ask questions and answer some, they may not be able to form their own opinions about any subject.

If the teacher uses the right voice quality e.g. low, raised, stern, or high pitched he is likely to draw the right kind of response from the students.

The ultimate object of this study is therefore, for the teacher to be able to communicate well with the learner in the classroom. Therefore, it is presumed that participation of the learners in the class can be used in supplying some therapeutic lead into classroom communication problems.

1.7 Justification for the Study.

Some of the effective techniques of classroom communication have been proffered by such educational technologists as Barde et-al (2003), who expressed the view that certain procedures and processes must be established and sustained in order for classroom communication to become effective. Therefore, the study was aimed at determining the Effects of Pre- Recorded Audio Instructions on Learners' English Language Performance in Junior Secondary Schools in Zaria Education Division.

Generally, therefore, this study has the following significance among others that warrant a study of this nature:

The study hopes to enhance pupils' interest in the subject and reduce the level of communication barriers in the classroom.

The findings of the study will provide useful information to the teachers on appropriate teaching techniques (Participative Teaching and learning) that will unequivocally address the persistent teaching and learning difficulty faced in Junior Secondary School English language.

The study will enhance active involvement of the teacher and learners for effective classroom communication, considering the level of ability of the learners` language, maximizing the feedback mechanism and the use of the three measures of downward, upward and horizontal movements.

It is also the hope of the researcher that the study would spur up further interest for more researches on the topic in other subjects and in higher levels. Fellow researchers can therefore exploit this study for further researches.

1.8 Scope and Delimitation of the Study.

Due to time and financial constrain, it would be too lofty and ambitious to think one could cover all the language groups of Nigeria because of the huge number of ethnic and language groups, each with its own peculiarities. Beside, the

numerous language groups, there is also the question of cost and time that a study of this nature would require.

Although Zaria is situated in the northern part of the country, its population is a cross-pollination of people from all the language groups of Nigeria and so it gives a fair representation of the country. It is believed that the students and teachers population covered would be adequate enough for acceptable generalization.

Only junior secondary school students and teachers were covered by the study. A total of twenty (20) schools participated in the study. Each school had 3 teachers who participated – bringing the number of teachers who participated to 60. This number comprises of 20 teachers each who are native speakers of the Hausa, Ibo and Yoruba languages.

The proficiency and effectiveness of the teachers communication was determined by the active participation of the students in the classroom. There was no such rating of students' academic performances because this would demand that IQ or some standardized tests be developed and administered for class level and age for all students.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

In this chapter, relevant materials and related literatures are extensively reviewed. Hence, the chapter is presented in the following sub headings:

* The Process of Communication

*Audio Recordings in Instruction

*Classroom Communication and Gender Difference

*Transforming students' learning with Classroom Communication Systems

*Highlights on Classroom Communication System and Impact of locality on Teaching

*Using Information and Communication Technology in Secondary Schools

*The Challenges of Information and Communication Technology in Schools

*Communication and Teachers' years of experience in Teaching and Learning

*Summary

2.2 The process of communication

Communication is referred to as a process which basically involves source Communication is the process of passing information from one person to another or other with the intent of bringing about designed changes in the recipient. Abdullahi, (1998) defined communication as the process of interaction in one form or the other, either by visual, auditory symbols. He added that people are continually interacting with themselves and with their environments by talking to their friends, watching television, listening to the radio and reading printed pages, calling or sending away domestic or other animals etc. message, channel, receiver and feedback. At the mental level according to Paullinus, the source and message are involved. The message, he explained, passes through transmission units e.g. Print and non print, television, films etc. though a suitable channel(air, wire, paper, light) to receivers motor skills (a persons' senses, ear, nose tongue etc) where the message is therefore decoded into mental symbols at the destination which is the brain of the receiver.

Therefore, communication process involves a source (sender) message, transmitted through certain channel to the receiver.

As a process, communication is cyclical with no definite beginning or ending. At some points in the teaching and learning process teacher (sender) and the learners (receiver) might change position with the sender becoming a receiver and the receiver becoming the sender. As Poullinus observed, the sender becomes aware of

the receivers response through a response loop (feedback) and the receiver processes the message by decoding it using their sense modalities. Through the feedback (response loop) the sender becomes a receiver and receives the impact of analysis and interpretation by the initial receiver. The receivers' reaction to the received message may be verbal or nonverbal gesture. For example, the reactions may come in the form or answering questions, performing some physical or mental tasks, logical reasoning, change of attitude, knowledge acquisition etc.

Many communication proponents like Nwafor and Ngwu (2000) argued that communication is a process which implies that it is a continuous activity throughout life. This makes communication seem too simple. In fact, communication is far more complex and multivariable and dynamic than any one can presume. The most basic component or variable in a communication are spelt out in the Berlo communication model of the S.M.C.R which refers to:

Source of communication according to Uwafor and Ugwu (2000), there ought to be a starting point in any communication and that this starting point is the source or initiator of the message.

In everyday life people are playing the role of originators of messages in different spheres of life as parents, teachers, co-business partners, siblings and peer group, they added. This seems to go against other beliefs which hold that communication has no definite beginning or ending as it is cyclical in nature.

Message: the message is one of the basic elements of communication. It is the body of knowledge prepared by the sender (teacher) transmitted to the receiver with the intent of changing his behavior. Nwafor and Ngwu put in differently when they argued that the message is a stimulus that the sender sends or transmits to the receiver. They hold that message refers to the behavior s, events, situations, physical object, words, sound, drawings, charts, essay or any activity to which meaning can be assigned.

Channel: this is the medium by which the message, information travels to the receiver. The channel could be written, oral, projected or non-projected. A teacher can present a "body of knowledge" to the learner through direct interaction (talking) or indirect using printed material, bulletin boards, tape-recorded material, radio, or close circuit television a teacher must select the most appropriate medium from these for his immediate purpose.

Receiver: this is the intended audience, person or persons who receive and respond to the message. Nwafor and Ugwu (2000) added that the message is received and decoded by the receiver. They further explained that the message can create impact only when meaning is attached to it by the receiver. The effectiveness of the communication process, they explained, is measured only by the felt impact on as he responds to the instruction in the message.

It is important to note that not all messages that are transmitted get to the intended receiver as precisely as they left the sender. Some of the messages are lost in transit as a result of communication impediments or barriers. These distorting and distracting elements include are commonly tagged as "noise" which could be physical – animals cry, car, bus, train, thunder, claps, quarrelling students etc. sometimes it could be physiological – emotional imbalance.

The sender (teacher) on becoming aware of such distracters in the learners must avoid or do away with such distracters.

The noise factor is a very important element in the communication process. It is a distracter that must be properly tackled for effective communication to take place. The linguistic form of noise which is the primary concern of a classroom communication comes in many forms. It falls into three major categories – grammatical, semantic and phonological.

Grammatical noise according to Ughamahu K.A (1998) may be in the form of faulty sentences construction, misapplication of rules of language, misuse of punctuation marks etc.

Semantic distraction has to do with ambiguity and wrong use of words – malapropism.

Phonological noise manifests itself in poor pronunciation or stressing of the wrong syllable in a word. For example, 'they "hate" the food', instead of 'they ate the

food'. Write "sort - sort sentences" instead of write short sentences. Ughamadu (1998) concludes that most of such phonological distracters are the direct result of cultural and tribal dialectical influence on the English language.

2.3 Audio Recordings in Instruction: audio recordings are media that utilize such electronic machines as tape recorder, disc player, phonograph, set and the radio for the purpose of facilitating teaching and learning.

According to Abdullahi, (1998) it is generally agreed that hearing and listening consumes the greater part of the students' classroom time. He observed out that student from all level of education – primary through secondary to tertiary institutions spend about 80 percent of their time listening to explanations, comments and lecture from their teacher. They also engage in general discussion inside and outside their classrooms. This observation points out the importance or audio media – for even those who could not see and those who could not read well can benefit from audio media.

The major advantage of audio recording over other instructional media such as overhead projectors, transparencies, slides, films and video tapes as observed by Abimbola (2001) is that their equipments are easy to operate and transport. The equipments can also be operated where electricity is not available – batteries can be used to operate them.

Audio recording as electronic media that carry message which are intended to be decoded be the receiver with the sense of hearing. Audio recordings are found in various formats, he added, which include phonographic records, audio tapes (reel to reel cassette) and compact discs. He explained further that audio recordings can be prepared for entertainment, information and instructions.

Ughamadu (1998) sees the tape recorder as an electronic medium (a form of audio media) that is versatile and useful for preserving and presenting lectures and discussions and for improving communication skills.

With the tape recorder, one can record materials from other tape recorders, a radio, and record player or even television.

The radio is another audio media that appeals only to the sense of hearing, unless if used to accompany visual materials. For example one can record a radio broadcast during transmission with the tape recorder which is later played back at a convenient time together with a specially designed filmstrip. The radio, as observed by Ughamadu, is one of the most popular and cheep mass media.

The radio is one single most extensively used audio – system for basic educational experiences for children in Nigerian primary and secondary schools. Ughamadu reports that the school unit of radio Nigeria produces educational programmes with teachers' notes and time table. These programmes which are produced in collaboration with Ministries of Education and teachers are usually

seat to schools and colleges. The radio is inexpensive so many school teachers can afford it purchase different brands of radio. It is also a good for teaching of languages, especially when the language is being taught as a second language, through the radio, current information is easily obtained on invention, scientific breakthrough and current historical events. The compact disc id another piece of audio media that is so attractive owing to the technology to which it is made. It can be manipulated and used in many ways and as efficiently as one desires Heinich R., molenda M., Russell J.D., and Smaldino S.E. (1996) commented that, users can quickly locate selections on the disc and even programme then tom play in any desired sequence. Information can be selectively retrieved by learners or programmed by the teacher. They (Heinich et al) pointed out that the CD has a major advantage; ie, its resistance to damage. They explained that there are no grooves to scratch, nor tapes to tangle and tear. Stains can easily be washed off and the ordinary scratches do not affect playback.

Generally speaking, the uses of audio media are limited only by the imagination of teachers. Audio media as Heinich et al (1996) put it can be used in all phases of instruction – from introduction of a topic to evaluation of students learning. They observed that the most rapidly general use of audio media is in the area of self paced instruction and in "mastery learning". The slower students can go back and repeat segment of the instruction until they are able to master them. The faster

students can skip ahead or increase the pace of their instruction. Abimbola, (2001) observed that audio recordings can be used to introduce and evaluate lessons. They are also very useful in individualized/ self – paced learning. He also noted that a slow learner could play several times on audio recording without the machine becoming inpatient. Audio recording could be a good medium for introducing new materials.

In history and social studies classes, audio recording can bring to the present, some historical actions and voices of prominent figures, who have long passed away. Current events such as political speeches, rallies and demonstrations can be captured and presented to students for analysis. Audio media can also provide musical accompaniment during games and sports (Heinich, Molenda, and Russell 1982).

It is apparent that all audio recordings and formats inexpensive as such are affordable to many teachers and even a few students. The soft wares are usually compatible with equipment of all makes, from different companies. Some audio media can easily be prepared locally, as during field trips. These could be used later for group discussions. Most of the audio formats (disc record, audio tape, audio cassette etc.) are portable and very easy to store. Audio media equipment are easy to repair than such other media as overhead projector, slide projector, and film projector. Most importantly, equipment of all audio media are easy to operate and

maintain and in many cases, very easy to carry about from one place to another making it very convenient for instructional purposes.

2.4 Theoretical Frame work and Classroom Communication.

Communication technology started since time immemorial, the prehistoric man needed to communicate and so invented symbols and signs to get across his feelings, wishes and needs and to persuade others regarding those wishes, needs etc. This simple and older beginning culminated into a more sophisticated mode of communication as demands grew.

The use and applicability of Technology in education and its applicability in the classroom is explored. However, it has delved into communication as it relates to teaching. In communication in the classroom, the teacher must of necessity required feedback to be able to ascertain the efficacy of his teaching. Ofoefuna (1992), asserts that the information or feedback that the teacher gets, helps him to assess the effectiveness of his original transmission. On the basic of the feedback, the teacher modifies subsequent messages to the student in ways which after a higher probability of success, every teacher receives constant feedback from learners. This feedback could be expressed through facial expression of the students, their behaviour, their responses and performance in tests. This can easily be detected by an experienced teacher but the computer can only use test and responses of the students after certain exercises. This is because communication in teaching and learning involves human contact as Barde et al (2003), put it,

establishing a link with one another for the purpose of informing, entertaining and enlightening.

Barde et al (2003) also observed that the active involvement of the teacher and the learners in class communication informs effective classroom communication. Here both the source and receiver have to make certain contribution for a purposeful interaction. This is strengthened by Dike (1988) in Barde et al where he pointed out that the teacher should not communicate above the learners' intellectual capability just as students must not always remain dormant parties in the class.

It is also observed that communication becomes effective when it is carried out in the downward, upward and horizontal movement. When this is done, an enabling teaching environment, where all the participants in the teaching-learning milieu can start the process of communication when the need arises. It is also of uttermost importance that the teacher uses the language that commensurate with the learners` age and capabilities. Barde et al further observed that language is very important in communication because people depend on it to encode message, define purposes to write or to read. If a teacher communicates at a level in a language above the learners` level, they will not get the message. They added that

the selection of words, pronunciations and gestures which are aspects of language expression are all important in getting messages across.

Since feedback is a means by which the teacher can use to discover if a message has been understood or not, it is, as (Obianwa and Azubuike 1994) put, a source of information upon which the teacher decides to either move ahead or respect a lesson or an aspect of a lesson. It is important to remember that feedback serves as a pointer – a sign post which indicates which way to go. It makes communication self correcting, self regulating and a decider.

Ogunmilade, (1984,), observed that feedback can be received in the teaching and learning process through oral questioning, facial expression behaviours, performance in test and assignments. When feedback is effectively used in communication, it will be easy to identify areas of limitation in a lesson.

. The right feedbacks can only be obtained when communication is effective, such that both the teacher and the learners understand each other and respond accordingly. Confusion and failures on the part of the student most result when there is any form of miscommunication. This study was undertaken to examine the effects of communication on teaching and learning empirically

Saettler, (1968), related that since about 1920 the growth and apparent influence of communications technology have attracted the attention of many

specialists who have attempted isolated communication as a specific fact of their particular interest. Psychologists, in their studies of behaviour and mind, have evolved concepts of communication that are useful to their investigations and proffer therapy to those clinically needing help. Social scientists have identified various forms of communication by which myths, styles of living, mores, and traditions are passed either from generation to generation or from one segment of society to another.. With the advent of new technology (particularly high-speed computers) mathematicians and engineers have tried to quantify and measure components of communicated information and to develop methods for translating various types of messages into quantities or amounts to both their procedures and instruments.

The entire human dispositions are affected by one form of communication or another under varied circumstances. The artists, architects, artisans, writers and others all use communication in their peculiar ways to solve their problems.

In the classroom, communication is all about facilitating teaching and learning. The modern trend of classroom, however, seems to be moving towards interactive teaching. In an interactive class, feedback is essential for checking the effectiveness of the original transmission and modification of subsequent messages

to the students in ways which offer a higher probability of success- Ofoefuna (1992).

Barde, et al (2003) also asserted that effective classroom communication involves active involvement of the teacher and the learners in class communication. This continuous nature of communication, they added, entails that both the source and receiver have to make certain contribution so as to induce a purposeful interaction. The teacher should not communicate alone, just as student, must not always remain dormant in the class-cited from (Dike 1988).

Barde et al also observed that an effective communication can be started by all the participants in the teaching and learning milieu when the need arise. They added that the communication channels should be used properly and that various media channels had to be employed in the learning process.

Ogunmilade (1984,), stated that some nonverbal communication channels like signs, symbols and facial expressions should also be applied.

The language level and proficiency use in the classroom communication is another matter of great concern. The language level should be commensurate with the level and ability of the learner. Language is very important in communication because people depend on it to encode message, define purposes to write or read. Barde et al observe that ‘if a teacher communicates at a level in a language above

the learners, they will not get the message'. The selection of words pronunciation and gesture which are aspects of language expression are all important in getting messages across (Nzerem, 1996). Language, obviously, is the key to an effective interactive class.

Kato (1998,), noted that expectation for standards to be responsible seemed essential to maintain interactive nature of classes where more teacher – student and student – student interaction occurred more frequently than in lecture style lessons.

In Nigeria today, with its population explosion it is becoming increasingly difficult to have effective classroom communication. (Nwafor and Ngwu, 2000), concluded that it is not uncommon to have crisis in the classroom resulting from breakdown of communication between teachers and learners. This, they said, called for the need to have the knowledge and application of the process of human communication as to enable the teacher design and engage in classroom interaction as well as to promote and enhance learners` active participation in teaching and learning process.

It is important to note that inadequate or lack of the ability to use basic communication skills by the teacher is a serious problem to effective teaching and learning. This, according to Barde et al, implies a situation whereby glaring deficiency exhibits in the skills of speaking, writing, listening and reading. This

lack of communication made it difficult for teachers to interact and collaborate with the learners, other teachers and the parents and this created a sense of isolation for all stake holders in education.

In an effort to revolutionize teaching and learning, St Saviour (2008) a good example of a unified communication and wireless connectivity solutions to create a digital learning platform that would not only meet curriculum requirements, but also truly transform the learning experience by placing a phone in every classroom. These phones provided instant communication with the head office or other teachers.

Each classroom is networked in addition to a new fixed and portable computer technology laboratory and classrooms are equipped with desktop computers or laptops, printers, and interactive whiteboards. All these computing tools are connected using wired or wireless technology so that, for the first time, teachers could access educational resources located anywhere in the classrooms.

Prior to the development of the network in St. Saviors, communication across the classrooms in Nigeria was difficult and required "runner"- a special technician who operates and manages the communication gadgets. Now there are IP phones in every class room. In fact, St. Saviours is the first school in Nigeria to use IP telephony information is much easier across, and within all classrooms in

the school. Donnellan (2003) declared that they had alleviated the sense of worry that hung over their staff. Now they felt much more connected and prepared in the event of an emergency. He added that having communication readily available was safer for the teacher and much less worrisome for students. Teachers also felt reassured about the ability to keep tracks of students. The school nurse could immediately inform a teacher if she was holding any student for treatment. The head teacher becomes constantly informed and in charge of any incidents anywhere in the school.

Some of the effective techniques of classroom communication have been proffered by such educational technologist as Barde, et al [2003], who expressed that certain procedures and processes must be established and sustained in order that classroom communication becomes effective. They have clearly held that active involvement of the teacher and learners, consideration of the level of ability of the learners` language, maximizing the feedback mechanism and the use of the three measures of downward, upward and horizontal movement are indispensable for effective classroom communication.

If what these educators hold is acceptable, is it what is being practiced in Nigeria school today? As the population in Nigerian classrooms explode to unimaginable proportions, it will be safe to assume that normal teachers-learners

interaction becomes almost impossible. The level of communication would have been eroded to their base minimum or even lacking altogether. This is because with a much larger class population the likely hood of communication barriers intruding on or disrupting the communication becomes more obvious.

Kato, (1998,) In his research, observed that teachers who find themselves in areas that are culturally different form theirs need more guidelines for classroom observation for practicing case and samples for typical teachers talks and effective communication in English in general. He reiterated that such training in communication and especially cross-cultural communication should in fact, benefit any language teaches regardless of their field, background since in most work places, a multicultural population is the norm and teachers can no longer assume that there is one way of teaching learning situation (Nelson, 1998:22).

The observation above was made by Kato (1998) when he studied classroom communication by Japanese native speaker and English native speaker teachers in some Australian schools. The situation in Australia tends to depict the same conundrum prevalent in Nigerian education sector. As the Nigerian society is multicultural, multiethnic so would be the problems entwining its education. The diversity in the spoken English among educated Nigerians is so much pronounced that a typical Nigerian can easily be reclined on to his typical language grouping

by the way they speak. This could have adverse effect on the teaching learning. This is especially so when teachers are transferred from one section of the country to another without some form of orientation.

Nigeria, a country that is poly cultural, with already existing communications problems in the language of communication (English), brought about more problems by hiring the Indians who worsened the situation. The transaction must have made the country lose a sizeable number of scientists because they could not communicate well with their teachers.

Since communication barriers can be devastating to the teaching-learning situations, a study of this nature is capable of procuring ways of communication that is able to bring about an effective teaching and learning. It can suggest the most appropriate ways to orientate, groom and tackle teachers problems that are likely to surface in other parts of the country,

It is plainly obvious that Nigeria needs a stronger unification in its educational pursuit to be able to develop its technology. If students ran away from such subjects as mathematics and science in the 1960s and 70s because they could not understand the teaching language of the Indians, if there are cases of miscommunication between a teacher from different parts of the country and the learners and if students perform poorly because of these problems, there exists the

necessitating motive for designing a programme that would ensure that teachers are well equipped with the essentials of classroom communication skills.

It may be a little too cumbersome to try to improve all language groups of Nigeria because of its multicultural nature. The research has therefore been designed to cover Zaria educational division and teachers from the three (3) major language groups of Nigeria – Hausa, Ibo and Yoruba. A lot is being taken for granted regarding teachers recruitment, their cadre, professional qualification capabilities and their proficiency in the language of instruction – the English language etc. It is generally assumed that any person holding any form of certification is fit to teach. Some would be degree holders with professional teachers` certificate but may be lacking in confidence, the ability to communicate, logical presentation and explicit directives. 2.5 T**ransforming Students' Learning with Classroom Communication System.**

Wenk (1997), proffered that class talk was the first popular classroom communication system (CCS) which began 1985 and became commercially available from 1992 through 1999. It was developed by a former NASA engineer with natural science foundation funding and in collaboration with educational researchers at several major universities. Class talk used common graphic

calculators as student input devices. Class talk saw the introduction of many other modes of classroom communication.

Roschelled, (1999), related that class talk that started in 1999 was pushed out of the market by simpler, easier and more reliable – though pedagogically more limited than response system like "Public Response System" (PRS) and instruction CPS. This generation of tools employs proprietary "clickers" resembling "Internet Response" (IR) signals to receptors at the front of a classroom.

Bonewell, (2003) asserts that CCS could be used to insert occasional auditory questions into an otherwise traditional lecture, to quiz students for comprehension or to keep them awake. These uses are really a waste of the systems numerous potentialities. To truly realize the benefits of a 'CCS', an instructor must rethink their entire instructional model and the role class time plays within it and make CCS use an integrated part of an organic whole. A successful approach according to him (Bonewell) was to expose students to new subject materials before class, perhaps through reading and web-based multimedia. In-class time can then be devoted to CCS-mediated activities.

Bonewell (2003) further proffered the following cycle as a powerful model for organizing CCS – based teaching in the classroom.

In this figures, the question cycle represents an effective model for (CCS) use in the classroom.

According to D'Avanzo (1997), CCS based instruction makes students become active participants in the learning process. This engagement of students in the teaching and learning results in more learning than the traditional lecture format offers. He concluded that this form of learning makes students develop a more solid integrated, useful understanding of concepts and their interrelationship and applicability.

Wenk (1997) proffered that the largest barrier to the adoption of CCS – based teaching is, perhaps, the fact that instructors must learn new skills and adjust to new roles and this, he added, can be intimidating and demanding. Johnson (1991) in his submission, stated that an instructor must also learn the art of class management – soliciting and moderating discussion and directing students attention using information revealed through CCS answers and discussion to model students.

2.6 HIGHLIGHTS ON CLASSROOM COMMUNICATION SYSTEM

Burbstein (2003,), submits that a classroom response system is a form of technology that:

-allows an instructor to present a question or problem to the class.

-allows students to enter their answers into some kind of device and

-instantly aggregated and summarizes students' answers for the instructor.

-a response system can conceivably be as basic as a button on every seat in the classroom and a readout dial for the instructor showing how many buttons are depressed. ECAR (1997), stated that a classroom communication system (CCS) is a response system that provides additional support for specific students –active question driven discussion – centered pedagogy. This is in the form of: Instantly constructing a histogram of class-wide answers for the instructor.

Providing the instructor with map of the classroom that displays students names and question answers by seat.

Supporting integrated creation, management display and archiving of question. This is likely to draw all students along but it requires diligence and persistence on the part of the teacher.

A successful classroom learning and teaching, according to Littlejohn, (2000), relies on communication between the teacher and the student. He observed that students` own interpretation and understanding are the key to what gets learned.

Candlin, (2008) Says that devices for opening up communication include:

- A short letter to my teacher.

-Students make questionnaire for other students.

-How work will be done (in group or homework behaviour)

-Student in class-room decision making.

Student designed exercise for student.

Students plan for a class session.

Students plan for their own out-of-class work.

Students` determined homework.

Student designed test.

Condlin (2008), also suggested that responses that solicits student involvement in classroom decision making including:

Student designed exercise for the students.

Students plans for classroom session.

Students plan for their own out-of-class work.

Students` determined homework.

Students designed test to be drafted into classroom communication techniques.

Condlin, further suggested that it is important to improve students in classroom decision making through:

Student designed exercise for other students.

Student plans for a classroom session.

Student plans for their own out-of-class work.

Students` determined homework.

Student designed test.

Involving students this way facilitate both the teacher and the learners.

2.7 Using Information and Communication Technology in Secondary Schools.

Thierer (2000,) is of the opinion that the role of technology in teaching and learning is rapidly becoming one of the most important and widely discussed issues in contemporary education policy. Most experts in the field of education agreed that when properly used information and communication technology hold great promise to improve teaching and learning in addition to shaping workforce opportunity.

Poole (1996) indicated that computer illiteracy is now regarded as the new illiteracy. There is no doubt that computer can aid the instructional process and facilitate both teaching and learning.

Becker (1985) reported a comprehensive survey of the instructional uses of computer in the United States public and non public schools. His report explained that over one million computers were in American elementary and secondary schools and that, more than fifteen million students used them in 1985. The report also says half-1-million teachers used computers during the same period and that half of US. Secondary schools (about 16, 500 schools) owned 15 or more computers. It has been almost two decades since the figures quoted above were released. There is no doubt that these figures will have increased tremendously by now.

Okebukola (1997), noted that computer is not a part of classroom technology in 90% of public schools in Nigeria. Thus, the chalkboard and textbooks continue to dominate classroom activities in most secondary school in Nigeria. If a country, like Uganda which has less than fifty percent of Nigeria's resources, is now using information and communication technology to help secondary school students to become better information users, then there is a big question as to why Nigeria is still a non starter in the area.

The question: “Why is Nigeria still lagging behind?” still persists. According to Okebukola (1997) however, the answer to this question relies squarely on dilettantish treatment of matters and gross mismanagement of the huge resources the nation is imbued with, and the inability of leaders to prestige Nigeria development needs. There is no doubt that in the current harsh economic crunch difficulty for most parents to cater well for the education of their children. It is a very welcome development that the private sectors have embraced ICT to stay afloat. The banking sector, insurance manufacturing industries and multinational companies in the oil sector have all embraced multimedia technology to bring innovative solution to their various challenges.

It is painfully obvious that Nigeria must embrace ICT if it desires to be a major player in the global market place of ideas and prepare its citizens for the new environment today and the future. This is because ICT now possesses the versatility for teaching and learning, management, economic development, high technological development and ever as a necessary tool for widening and for strengthening the nations` scientific and technical horizon and capabilities.

On the question why Nigeria needs ICT, Okebukola (1997) states that it would appear and sound too simplistic and unnecessary to say that Nigeria needs information and communication technology. However, the political condition in

Nigeria for the past thirty years leaves no room for continuity in high place, misplaced priority and consumer culture. The direct implication of these is a battered economy and an educational system that is decaying by the day. In 1998, however, in an attempt to keep pace with development in computer education, promising and confronting as this is, it never made any significant impact on most governmental organization. Private organizations have, however, barrowed the designs and are making apparent progress in the area.

The potentiality of ICT as aid or facilitator of teaching and learning is quite obvious. According to Thomas (1987), the importance of ICT is quite evident from the educational perspective, altogether the chalkboard, textbook, radio/television, and films have been used for educational purpose over the years; none has quite impacted on the educational process like the computer. While television had impact on the audio-visual facilities of uses the computer is capable of engaging the sense of sight, hearing and touch of the uses. This is quite true about the computer, but it is important to remember that a sizeable percentage of Nigeria's population is computer illiterate. It is, however hoped that with the trend of ICT awareness, very soon computer will come to stay in the nations educational milieu.

Shavinia (1997) is in the opinion that today's learning contents are domain – specific products and that they dominate the world market. According to Shavinia,

domain-specific educational multimedia is directed to knowledge acquisition skills development in the language arts, history, physics, literature, biology, chemistry etc.

There is no doubt that ICT provides productive teaching and learning in order to increase peoples creative and intellectual capacity and resources especially in today`s society of information and technology. Through the simultaneous use of audio, text, multicolor images, graphics, motion ICT supplies ample and exceptional opportunities to the learners to develop capacities for high quality learning and to increase their ability to come up with fresh ideas.

2.8 The Challenges of Information and Communication Technology in Schools

Daniels (2002) Remarked that ICTS have become, within a very short time, one of the basic building blocks of modern society. Many countries now regard understanding ICT and mastering the basic skills and concept of ICT as part of the case of education, alongside reading, writing and numeracy. However there appear to be a misconception that ICT generally refers to computers and computing related activities. This isn't so, although computers and their application do play significant role in modern information management. Other technologies and /or system also comprise

of the phenomenon commonly regarded as ICTs. According to UNESCO (2002) Information and communication technology, in addition to being a subject in its own right, has an impact on most other curriculum areas. Since the national curriculum requires that all school pupils from 5 to 16yrs to use IT in every compulsory subject. Information Technology is so versatile and pervasive that it is capable of being used in all fields of study. In the sciences, the computer is used with sensors for logging and handling of data; in mathematics IT is being used in collecting and analyzing data, IT is used in modeling, geometry, design and technology. Computers contribute to the pre-manufacture stages in many industries, to modern languages, electronic communication and given access to foreign broadcast and other materials. In music, to the computer enables pupils to learn to play traditional instrument.

2.9 Information Technology and the Curriculum

Solomon (1989) stated that as part of the IT curriculum, learners are encouraged to regard computers as tools to be used in all aspect of their studies. Particularly, the learners need to make use of the new multi-media technologies to communicate ideas, describe projects and order information in their works. This requires the learners to select the right medium for carrying their massages; to

structure information in a hierarchical manner and to link together information to introduce a multidimensional document.

Visscher (2003) observed that another use of IT in learning is currently undergoing trial in the United Kingdom as the "Integrated learning system" (ILS). This involves learning through rather than about It is, by providing structured individualized tuition in numeracy and literacy using the system for short regular sessions, learning progresses through the programme at a steady but challenging rate of performance and produces report for teachers, learners and parents. This approach provides highly structures targeted and assessed learning for short periods of time. Pupils and teachers alike find the individual ILS reports helpful and motivating and teachers have never before had such detailed and accuracy analysis of children's abilities.

2.10 Communication in Teaching and learning

There is hardly any human transaction that is possible without communication. Since communication is a form of interaction between one person and another or others, saying or doing something which, as Abdullahi (1998) will attract reactions in the minds of other people, it has thus become a very important tool with which to transfer information from the teacher to the learner in the case of classroom instruction. In the classroom, the person who initiates the classroom

communication, the message and the person or persons to whom the message is intended are of primary concern. Abdullahi,(1998) stated that, in the classroom situation, the teacher is the communicator(the initiator of communication) and that knowledge being imparted by the teacher is the message, and the receivers are the students. He further observed that when the teacher changes or encodes his thoughts according to his knowledge and skills (experience), the message will reach the students (who are the receivers).

It is important to note that the message can only reach its target (the learners) through a medium or channel. This channel could be, the air (audio), the feeling (stimulus signs) and seeing (Visual) as Abdullahi (998), emphasized that when the message reaches the students, they will make sense out of it by interpreting or decoding the information according to their experiences. He maintained that

> At this point the mental images of the teacher and the students ought to match. However, the communication may go wrong somewhere between the teacher and the students, which will call what is normally referred to as communication gap.

Also to buttress the importance of communication in instruction, Paulinus (2006) observed that communication can be regarded as an agent of change. The aim, he reiterated, is to bring about desirable behavioural change in the learner.

Furthermore, Robert (2001) explained that the space of change brought about by new technologies has had a significant effect on the way people pass messages interact in classrooms and other places of work and play world- wide. New and emerging technologies challenge the traditional process of teaching and the way education is manage.

BECTA (1998 – 2001) British Educational Communication and Technology Information Agency see Education and Information Technology as an important area of study in its own right and so having a major impact across all curriculum areas. This agency asserts that easy worldwide communication provides instant access to a vast array of data, challenging assimilation and assessment skills. Rapid communication, plus increased access to IT in the home, at work and in educational establishment could mean that learning becomes a truly lifelong activity-an activity in which the pace of technological change faces constant evaluation of the learning process itself.

In the United Kingdom, Bolton curriculum ICT centre (1988), the conservative government set up the Information Technology in schools (ITIS) initiative to oversee expenditure in this area initially, the strategy focused on encouraging teacher training in new technologies and the provision of hardware in schools. Students were made to ready to LEAs, before obtaining the grant, each

LEA was required to produced a policy statement and a five year plan for the development of (IT) in its area one may say that Nigeria borrows and adhere to this strategy, the Nation is more than likely to forge ahead in the area of providing qualitative and functional education to its citizens.

The NGFL (2002) New Grant fund learning, asserted that all primary and secondary schools be connected to the (NGFL) and that all teachers should be competent and confident to teach with ICT, the grant further added that all students should have school with good understanding of ICT and that all transactions between central and local government and school will be electronic. This would seem to reduce the human teacher to a mere facilitator or guide, leaving all the teaching to computer. But this (IT), is devoid of any emotional strength, facial or physical contact, thus it is highly dehumanized. When expertly utilized, the (IT) could really assist both the teacher and the learner in gathering materials and simplifying work load for both.

Peter (1993) sees technology as providing easier access for students to materials previously supplied by the teacher. He added that it enhances the role of the teacher as a manager of learning process rather than sources of the content, and afford easier access for students to information, tutorials and assessments together

with the use of (IT), such as word processor and spread sheets. These will help the students to learn more productively.

2.11 Summary

This summary actually touched on the use and applicability of Technology in education (audio and audio visual recording) and their applicability in the classroom. However, this study only delved into communication and audio recording as they are applied to teaching and learning in the classroom

It was also observed that communication becomes effective when it is carried out in the downward, upward and horizontal movement. When this is done, an enabling teaching environment, where all the participants in the teaching-learning milieu can start the process of communication when the need arises. It is of uttermost importance that the teacher uses the language that commensurate with the learners` age and capabilities. Barde et al (2003) observed that language is very important in communication because people depend on it to encode message, define purposes to write or to read. If a teacher communicates at a level in a language above the learners` level, they will not get the message. They added that the selection of words, pronunciations and gestures which are aspects of language expression are all important in getting messages across.

The right feedbacks can only be obtained when communication is effective, such that both the teacher and the learners understand each other and respond accordingly. Confusion and failures on the part of the student most result when there is any form of communication barrier. This study was undertaken to examine the effects of communication and audio recording on teaching and learning empirically.

CHAPTER THREE

METHODOLOGY

3.1 INTRODUCTION

The main object of this study is to investigate the effect of recorded classroom instruction on teaching and learning English language in secondary schools. There exist difficulties amongst different language groups of Nigeria regarding classroom dialogue, this was therefore investigated. The study also sought the reasons why a good number of secondary school students fear the English language and fail woefully, making them unadmittable in tertiary institutions. To obtain answers to these questions, the methodology of this study is described fully in this chapter under the following headings:

i) - The research design

ii) - Population of the study

iii) - Sample and sampling techniques

iv) - Procedure for data collection

v) - Internal validity and reliability of the instruments

vi) - Administration of the instruments

vii) - Statistical techniques for data analysis

3.2 Research Design

This study used pre-test, post-test, control and experimental group method. A Quasi-experimental design was adopted for this research. The experimental group has been subjected to teaching via interactive sessions using pre-recorded classroom instruction. The control group, on the other hand, was left with the stereo-type method of teaching – with no much use of refined pronunciation or articulation in the form of pre-recorded classroom instruction.

3.3 The Population

The target population of this study was Junior Secondary School II students and their teachers of some selected public schools in Zaria Education Division. The selection of the set of students above has been informed by the fact that these students was not bothered by preparations for examinations as was their immediate seniors – the JS III students. This set, the JS II students, would have all the time to concentrate on the activities of the study.

The population of this study is 4963 JS II students and 647 teachers from 20 public secondary schools (Table 3.1).

Table 3.1: Government Secondary Teachers and Students Used in the study Schools Showing Population of Teachers and Students:

S/N	School	Teachers	JSS II Students
1	Alhudahuda College	86	276
2	Barewa Colleger	84	390
3	G.S.S. Chindit Junior	42	332
4	GGSS Chindit Junior	22	158
5	GSS Zaria Junior	45	463
6	GSS Tudun Saibu	10	250
7	GSS Munchia Junior	23	305
8	GSS Yakasai	14	90
9	GSS Matari	5	19
10	GSS Zaria	69	160
11	GGSS Dogon Bauchi Junior	36	540
12	GSS Kofan Doka	25	383
13	GGSS Dinya	10	87
14	GSS Dakace	32	178
15	GGSS Pada Junior	38	215
16	Aminu GSS Junior	23	500
17	GSS Awai	11	87
18	GSS Kugu	9	159
19	GSS Likoro	13	192
20	Sheikh Ibrahim Arab Sec. Sch. Anex	50	188
Total		647	4963

The selected set of students (JSII), offer all the subjects in the curriculum beside having the time and the right frame of mind to participate in the study. This means that there will be full participation especially in the subject chosen for the

study (English Language). Again, since the schools chosen for this study are located in the urban, semi urban or rural areas, the Public schools were selected for the study because most parents can only afford to send their children to public schools where school fees are much lower than those charged in private schools and federal schools. There was also a strong possibility that more communication problems would manifest more in larger population as is the characteristic of public schools.

3.4 The Sample and Sampling Procedure.

The subjects used for this study were drawn from a population of 4963.JS II students and 647 teachers from 20 schools in Zaria Education division of the Kaduna State Ministry of Education. To obtain the sample size from these two populations of teachers and students, the Krejcie and Morgan table was used to meet the recommendation proffered by the American National Education Association.

Therefore, from the students' population of 4963 and teachers' population of 647, samples of 495 and 115 respectively will be recommended. Thus 495 students and 115 teachers will represent the sample size for this study. The purposive sampling was used for selecting responsive and resourceful teachers who use the pre-

recorded instruction and those who are given to conservative or traditional mode of pedagogy. The students will be intact students of the selected teachers

Table 3.2: Government Secondary Schools Showing Sample of Teachers and Students Used in the study

S/N	School	Teachers	JSS II Students		
			Males	Females	Total
1	GGSS Chindit Junior	22	0	158	158
2	GSS Yakasai	14	75	15	90
3	GSS Dinya	10	56	31	87
4	GSS Zaria	69	103	57	160
Total		115	234	261	495

3.5 Procedure for Data Collection

The subjects of the study (students and their teachers) were identified through their respective classes. The teachers who use the audio recording instruction as directed by the researcher) and those who use the traditional methods will be identified. The next procedure will be splitting the groups into control group and the experimental group. A pre test assessment will be given to the two groups to ascertain the homogeneity of the groups. Thereafter, the post test assessment will be administered to the two groups after treatment to the experimental group only.

The difference in the effectiveness of the teaching-learning situations of both the traditional and the pre-recorded methods of instruction will be determined from the post test.

Teachers of the experimental groups will be brainstormed on the use of the pre-recorded methods of instruction and later, in conjunction with the researcher give the learners the audio recording instructions.

The students were tested (post test) after two weeks of the instructions to find out if there was any difference in the performance of the experimental group and the control group. Also from the result of the post test for the experimental group, the difference in performance between male and female students will be compared and impact of school location shall be determined.

3.6 Internal Reliability and Validity of the Instruments.

In order to ascertain the reliability and determine the validity of the instruments used, a pilot study was conducted in Demonstration Secondary School, Ahmadu Bello University (main campus) Zaria. The result of the reliability estimate from the pilot study shows a significant value of 0.76 using test-re-test reliability estimate. Also the validity of the instrument was confirmed from experts' comments that the questions set were adequate and satisfactory.

3.7 Administration of the Instrument.

The participating teachers of the experimental group were each given the test items to go through and be familiar with it.

The control group is located far away from the experimental group to avoid any leakage of the test items. The control groups comprises of G.S.S. Yakasai and G.S.S Dinya which are rural schools situated at some thirty to thirty five kilometers south of Zaria. The control group (G.G.S.S. Chindit and G.S.S. Zaria) is located in Zaria. This distance assures a leakage-free experiment.

Both the control and experimental groups were administered a pre-test to find out their homogeneity. Thereafter, the experimental group was subjected to some teaching via audio recordings for two weeks. The control group, on the other hand was left with the traditional tuition.

After the two weeks of treatment (teaching) to the experimental groups, another test (post-test) was administered to both the control and experimental groups. This is to find if there is any difference in the performance of the two groups. All these tests were administered by the teachers who participated in the study in cognition with the researcher.

3.8 Statistical Techniques for Data Analysis.

The t-test and analysis of variance (ANOVA) was adopted in the analysis of data in this study. t-test was used to analyze the following null hypotheses

Ho_1 There is no significant difference between the English Language performance of students taught by the pre-recorded instruction technique and the traditional teaching method.

Ho_2 There is no significant difference between the English Language performance of student treated with pre-recorded instruction whose teachers are from the same locality and those whose teachers are not from the same locality

Ho_4 There is no significant difference between the English Language performance of male students and female students who were taught by the pre-recorded instruction technique

The use of the t-test will be informed by the fact that two means are involved – dependent and independent variables. As a result the t-test will be used to test the possible differences that will likely be found in the results of the two teaching and learning methods (pre-recorded instruction and traditional instruction). The t-test results from the two localities and differences in performance between male and female students will also be determined.

Also analysis of variance will be used to test the third and fifth hypotheses that says

Ho_3 There is no significant difference between the English Language performances of student treated with pre-recorded instruction whose teachers have varied years of experience

The use of the f-test will be informed by the fact that three or more parametric variables and their means are involved

3.9 SUMMARY

This chapter hinted on the methods and procedures adopted in drawing the sample size of the study. It discussed the instruments and data collection techniques. The trial test informed the reliability of the instrument which were vetted and validated. A total of 610 respondents – 115 teachers and 495 students comprising 234 males and 261 females will form the sample for the study. Twenty two teachers and 158 students were drawn from GGSS Chindit Junior, 14 teachers, 75 male and 15 female students came from GSS Yakasai. Also 10 teachers and 87 students came from GSS Dinya while 69 teachers and 160 students were from GSS Zaria.

CHAPTER FOUR

DATA PRESENTATION, ANALYSES AND DISCUSSIONS

4.1 INTRODUCTION

In this chapter, data are analyzed, presented and discussed in respect of results of pre-test and post-test given to respondents (Students and their Teachers) in both control and experimental groups

4.2 Data Presentation.

The purpose of this section is to provide empirical evidences for drawing conclusions on the research questions and the null hypotheses that were raised during the course of the study. Analyses and interpretation of the findings for the study were carried out based on the post-tests administered on the control group and the experimental group and the conclusions drawn according to the decision rule at 0.05 level of significant.

A total of 177 students from two schools GSS Yakasai and GSS Dinya were randomly classified as the control group, while 318 students from GGSS Chindit (Junior) and GSS Zaria represented Experimental group as shown in table 4.1 below.

Table 4.1 Distribution of Respondents by groups

Groups	School	Teachers	JSS II Students		
			Males	Females	Total
Control	GSS Yakasai	14	75	15	90
	GSS Dinya	10	56	31	87
Experimental	GGSS Chindit (Jr)	22	0	158	158
	GSS Zaria	69	103	57	160
Total		115	234	261	495

Although a total of 115 teachers were involved in the study, only 81 fall under the classification of experimental group and their locality are shown in table 4.2 below

Table 4.2 Distribution of Teachers in the experimental group by the their locality

Locality of Teachers	School	Teachers	JSS II Students		
			Males	Females	Total
Outside locality	GGSS Chindit (Jr)	22	0	158	158
Within locality	GSS Zaria	69	103	57	160
Total		91	103	215	318

Twenty two (22) teachers from GGSS Chindit live far away from the vicinity of the school probably as a result of the school being situated at an army barrack. The 69 teachers from GSS Zaria however, were confirmed to reside within Zaria city.

Teachers' years of teaching experience was also considered as a factor that could affect the English Language performances of students treated with audio-recording instruction therefore, the summary of the distribution of teachers and students by the teacher's years of teaching experience is given in table 4.3 below.

Table 4.3 Distribution of students in the experimental group by teachers' years of teaching experience

Years of Teaching Experience	School	JSS II Students		
		Males	Females	Total
Below 5 years	GGSS Chindit Junior	0	58	58
5-10 years		0	50	50
Above 10 years		0	50	50
Below 5 years	GSS Zaria	25	27	52
5-10 years		48	10	58
Above 10 years		30	20	50
Total		103	215	318

There were 58 students from Chindit School whose teachers had below 5 years teaching experience, 50 students from the same school have teachers with 5 -10 years and above 10 years teaching experiences respectively. In GSS Zaria

however, 52 students have teachers whose teaching experience is below 5 years, 58 of the students have teachers with 5 -10 years teaching experiences and those whose teachers have above 10 years teaching experiences are 50.

4.3 Answers to Research Questions.

In order to establish the existence or otherwise of homogeneity among all the students engaged in the study and also to provide answers to the research questions raised in the study, descriptive analyses was used in computing the results as shown in the tables corresponding to each question below

In order to establish the homogeneity of the students engaged in the study, a random sample was used to group the students into experimental and control groups. The summary of students' pretest performance in oral instruction in English Language is presented in table 4.4 below

Table 4.4 Descriptive Statistics for pre-test between experimental and control groups

Source	N	Mean	Std. Deviation
Experimental Goup	318	54.1101	12.41516
Control Group	177	44.4407	12.60493

The descriptive analysis of the data which explained the equality level computation in table 4.4 showed that there was no much difference between the

mean score of the control group and the experimental group, the mean score and standard deviation for control group was 54.11 and 12.42 respectively while the experimental group being respectively 44.44 and 12.6. The mean and standard deviation indices shown in table 4.04 above were indication that all the students engaged in the study had equal level of performance in oral English before the treatment.

Research Question 1

Would there be any difference between the English Language performance of students taught using audio recording instruction and those taught using the traditional teaching method?

In order to provide answer to the above question, table 4.5 shows a summary of the descriptive statistics for the answer.

Table 4.5 Descriptive Statistics for post-test between experimental and control groups

Groups	N	Mean	Std. Deviation
Experimental	**318**	**56.1415**	**10.30032**
Control	**177**	**45.5593**	**11.70995**

The post-test analysis on research question 1 was to determine the effect of the treatment on the experimental groups. The result as contained in table 4.05 shown above, had a slight difference in mean and standard deviation scores of 45.56 and 11.71 respectively for control group when compared with the scores in the pre-test.

However, there was a wide difference in the indices for the experimental group before and after the treatment. The mean and standard deviation for the experimental group were respectively 56.14 and 10.30 as shown in the table.

Therefore, one can categorically say that there were differences between the English Language performance of students taught by the pre-recorded instruction technique and those taught by the traditional teaching method.

Research Question 2

> To what extent does the audio recording instruction make students whose teachers are from varied tribal backgrounds perform better than one another?

The answer to research question 2 is summarized in table 4.6 below.

Table 4.6 Descriptive Statistics for performance of students within same locality with teachers and those outside teachers' locality

Locality	N	Mean	Std. Deviation
Within	158	56.9557	9.44400
Outside	160	55.3375	11.05213

The answer to research question 2 was to determine the effect of the treatment on the students' performance with respect to their being within same locality as the teachers or outside of the locality of their teachers. The result as contained in table 4.06 showed that the students whose teachers are within the same locality had a mean score of 56.96 as against a mean score of 55.34 for students whose teachers are outside their locality. Their standard deviation stood at 9.44 and 11.05 respectively which implied that the average scores for the two groups are not too wide. However, the mean score showed for performance of students who are in the same locality with their teacher were more at advantage than those who are not in the same locality with their teachers.

Research Question 3

Do audio recording instructions make students whose teachers have varied years of experience perform better than one another?

In order to provide answer to research question 3, table 4.7 gave a summary of the descriptive statistics for the answer.

Table 4.7 Descriptive Statistics for performance of students with respect to their Teachers teaching experience

Years of Experience	N	Mean	Std. Deviation	Minimum	Maximum
Below 5	110	54.2182	9.80487	34.00	75.00
Between 5 to 10	108	57.7130	8.99434	37.00	80.00
Above 10	100	56.5600	11.80936	30.00	85.00
Total	318	56.1415	10.30032	30.00	85.00

The result as contained in table 4.07 shown above had slight differences in mean and standard deviation of students' performance with respect to their teachers' years of experience. The performance of students whose teachers had below five years of teaching experience was 54.22 and 9.80 respectively, the performance of students whose teachers had between five and ten years of teaching experience was 57.71 for mean score and 9.80 for the standard deviation. Performance of students whose teachers had over ten years of teaching experience showed a mean score of 56.56 and standard deviation of 11.81.

Research Question 4

Is there any difference between the performance of male and female students who were taught by the pre-recorded instruction technique?

The answer to research question 4 is summarized in table 4.8 below.

Table 4.8 Descriptive Statistics for performance of male and female students

Gender	N	Mean	Std. Deviation
Male	103	58.1359	8.63423
Female	215	55.1860	10.89940

The result as contained in table 4.7, indicated that male students scored higher than the female students as male had mean and standard deviation of students performance to stood at 58.14 and 8.63 respectively, female students' scores stood at 55.19 for mean and 10.90 for the standard deviation.

In order to determine the existence or otherwise of significant difference in the variables under study, the four hypotheses formulated were tested as shown below.

4.4 Testing the Hypotheses

The following null hypotheses were tested to aid the findings of the study.

Ho_1 There is no significant difference between the performance of students in English Language taught using the audio recording instruction and those taught using the traditional teaching method.

The test of this hypothesis was to ascertain the effectiveness or otherwise of teaching English Language via the pre-recorded instruction technique. The summary of the test is shown in table 4.9

Table 4.9 Independent Samples t-test for difference between Experimental and Control group post-test

Groups	N	Mean	Std. Dev	Df	t	p-value	Decision
Experimental	318	56.14	10.30	493	10.42	0.000	$H_0$1 Rejected
Control	177	45.56	11.70				

The experimental and control groups stood at approximately 56.14 and 45.56 respectively. The standard deviation were respectively 10.30 and 11.71, the decision rule rejected the hypothesis based on the fact that the significant p-value (0.000) was less than alpha value (α =0.05) adopted for the study. The computed t-test value was 10.43 at a degree of freedom 493. Therefore the computation revealed that there was significant difference between the performance of students taught English Language by the pre-recorded instruction technique and those taught by the traditional method.

Ho_2 There is no significant difference between the English Language performance of student treated with audio recording instruction, whose teachers are from varied geographical and tribal backgrounds.

The second hypothesis was to verify the influence of students-teachers locality on the performance of students treated with pre-recorded instruction whose teachers are from the same locality and those whose teachers are not from the same locality, the summary is shown in table 4.10.

Table 4.10 Independent Samples t-test for difference in performance with respect to locality

Locality	N	Mean	Std. Dev	Df	t	Sig. (2-tld)	Decision
Within	158	56.96	9.44	316	1.40	0.16	H_{o2} Retained
Outside	160	55.34	11.05				

Independent sample t-test was used to analyze the hypothesis and the mean performance of students' treated with pre-recorded instruction whose teachers are from the same locality with the students was found to be 56.96 with standard deviation 9.44 while students' whose teachers are not from the same locality had a mean score of 55.34 with a standard deviation of 11.05. The calculated t-value and the p-value stood at 1.40 and 0.162 respectively on a degree of freedom 316. The decision rule showed that the hypothesis was retained which implied that there was no significant difference between the English Language performance of student treated with pre-recorded instruction whose teachers are from the same locality and those whose teachers are not from the same locality.

The third hypothesis verified influence of teachers' years of teaching experience on English Language performances of student treated with pre-recorded instruction.

Ho_3 There is no significant difference between the English Language performances of student treated with audio recording instruction whose teachers have varied years of experience

The summary of the test of the third hypothesis was shown in table 4.11 below

Table 4.11 ANOVA (f-test) for difference in performance in respect of teachers' years of experience

Sources	Sum of Squares	Df	Mean Square	F	Sig.	Decision
Betw Groups	691.137	2	345.56	3.30	.04	H_{o3} Rejcted
Wthin Groups	32941.51	315	104.58			
Total	33632.63	317				

Analysis of variance was used to analyzed the hypothesis and the sum of square for performance of students' treated with pre-recorded instruction between the categories of teachers' years of experience stood at 691.127, while the sum of square for within the categories of teachers' years of experience was found to be 32941.505.the mean sum of square for the categories are respectively 345.563 and 104.576, the computed f –test stood at 3.304 and the significant value was 0. 038. The decision rule therefore was to reject the hypothesis, since the significant value is higher than the p-value of 0.05 adopted in the study. Rejecting hypothesis simply

implied that there was significant difference in the performance of students from the three categories of teachers with varying years of experience. It is therefore, necessary to find out where and at what point does the different existed by the use of Scheffe's post-hoc test as shown in table 4.12 below.

Table 4.12 Post Hoc Tests for difference in performance in respect of teachers' years of experience

Year A	Year B	Mean Difference (Year A – Year B)	Sig.
Below 5	5 to 10	-3.49478*	.043*
	Below 5	3.49478*	.043*
5 to 10	Above 10	-2.34182	.255
	Above 10	1.15296	.719
Above 10	Below 5	2.34182	.255
	5 to 10	-1.15296	.719

The mean difference is significant at the 0.05 level.

It is glaring that that there is difference in the performance of students with respect to their teachers' years of teaching experiences most especially, those whose teachers had experience of less than 5 years and those whose teachers had between 5 to 10 years teaching experience, as the post-hoc analysis revealed that significant difference of 0.043 existed between students' performance whose teachers have

below 5 years teaching experience and those whose teachers have between 5 to 10 years teaching experience. There was no significant difference between performance of students whose teachers have less than 5 years and those with above 10 years teaching experience, also no significant difference between performance of students whose teachers had between 5 to 10 and above 10 years teaching experience. Hence, one can rightly say that teachers experience influenced English Language performances of student treated with pre-recorded instruction.

The forth hypothesis focused on gender impact on the English Language performances of student treated with pre-recorded instruction. The hypothesis given below stated that

Ho_4 There is no significant difference between the English Language performance of male and female students who were taught using audio recording instruction.

The summary of the test of the forth hypothesis was shown in table 4.13 below

Table 4.13 Descriptive Statistics for performance of male and female students

Gender	N	Mean	Std. Dev	Df	T	Sig. (2-tailed)	Decision
Male	103	58.14	8.63	316	2.41	.02	H_{o4} Rejected
Female	215	55.19	10.90				

A t-test statistics was used to analyzed the hypothesis and the calculated t –score for performance of students' treated with pre-recorded instruction between male and female students stood at 2.408, the significance was 0.017, and the decision rule entailed the rejection of the hypothesis. There existed significant difference between the performance of male and female students' treated with pre-recorded instruction.

4.5 Discussion of the Result:

From the data analyzed in this chapter, it was revealed that there was significant difference between the performance of students taught English Language by the pre-recorded instruction technique and those taught by the traditional method, the second hypothesis however showed that the hypothesis was retained which implied

that there was no significant difference between the English Language performance of student treated with pre-recorded instruction whose teachers are from the same locality and those whose teachers are not from the same locality

The study also revealed that there was significant difference in the performance of students from the three categories of teachers with varying years of experience. Difference existed between students' performance whose teachers have below 5 years teaching experience and those whose teachers have between 5 to 10 years teaching experience. However, there was no significant difference between performance of students whose teachers have less than 5 years and those with above 10 years teaching experience, also no significant difference between performance of students whose teachers had between 5 to 10 and above 10 years teaching experience.

The study also revealed that there existed significant difference between the performance of male and female students' treated with pre-recorded instruction.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS`

5.1 Introduction

This chapter gives summary of the study. Based on the research findings, conclusions were drawn and recommendations were made. The study looked into the effects of audio-instructions on learning performance in English Language among junior secondary school students in Zaria.

Based on the data gathered from all the post-test, four research questions and corresponding four null hypotheses were formulated for the study, the research questions were answered and the four hypotheses were tested at a significant level of 0.05. Null hypotheses 1, 2, and 4 were tested using t-test statistics while hypothesis 3 was tested using analysis of variance (ANOVA) and Scheffe post hoc analysis was used to determine point of difference after analyzing hypothesis three. The summary of the major findings is given in section 5.2 below.

5.2 Summary of Major Findings

After analyzing the data, the following were the major findings:

(a) The performance of students treated with audio recording instruction performed better than students who were taught using traditional method of teaching.

(b) Similarly, there was no significant difference between the performance of students in the English Language whose teachers are from different geographical and tribal backgrounds.

(c) The study also revealed that there was significant difference in the performance of students from the three categories of teachers with varying years of experience.

(d) The study also revealed that there was significant difference between the performance of male and female students treated with audio recording instruction.

5.3 Conclusion

Based on the findings of the study, the following conclusion could be drawn.

The performance of students hinges on their teachers tribal backgrounds and their exposure to audio recordings, synectics and participative developmental programme. As evident from the findings, students whose teachers had more years of teaching experience performed better than the students whose teachers had fewer years of teaching .After treatment, the experimental group performed better than the control group. However there is no difference in the performance of boys and girls –both genders performed better after the treatment with audio recording instruction. Finally, audio recordings showed significant impact on students' performance in English Language as could be seen from the result of the study.

5.4 Recommendations

Based on the findings made in this study, the following recommendations are advanced:

There was a marked improvement in the performance of students after being taught with the aid of audio recording, as such it is recommended that schools see to it that their students get taught with the audio recordings by providing their teachers with all necessary facilities and support.

2

Audio recording assisted instruction seemed to help improve the performance of both male and female students in the English Language. It is therefore, recommended that teachers adopt and continue using audio recordings in their schools.

3. The findings of this research work also revealed that the performance of students taught with audio recordings was much higher under teachers with many years of teaching experience than under teachers with less experience. It is thus recommended that all teachers should be trained in the use of audio recordings through workshops and inductions.

4.

1. From the result of the findings, it was revealed that teachers whose students find it difficult to interact with them came mostly from different geographical and tribal backgrounds. It is therefore important that such teachers mingle more freely with the students, colleagues and others in the school locality.

5. The ministry of education should introduce periodic developmental programmes like audio recording instruction workshops and induction

programmes that will familiarize teachers with the use of audio electronics and their use in teaching-learning experiences in schools. This will enhance teacher-learner participation in the classrooms thus improve students' performance and teachers' effectiveness. Since teachers of secondary schools within the scope of the study are made up of those from within and outside the locality of the schools in which they teach, interactive and socialization sessions must be organized frequently so as to smelt any existing differences and difficulties in communication. This will help in polishing teachers' efficiency in their delivery of instruction.

6. This study recommends that a period be created for interactive synectics and dramatics that would encourage participation and probably build healthy competitive composure in the learners. This is likely to help wipe out timidity and complacence in the learners, and thus create room for more active responses in the classroom.

7. It is also advised that Text book publishers put together packages that would comprise of both audio and text for use in schools so that not even the learners but also those teachers who experience some difficulties communicating with learners might benefit.

8. Since this area of research permeates all fields of study, the researcher is also recommending that fellow researchers can exploit this study for further researches on the topic in other levels as well as in other subject areas.

9. There is also the need for Nigerians; teachers and students alike; to put in more efforts in the teaching and learning of English Language, as it is the language of instruction, if the country wishes to attain the 2020 development vision.

5.5 Suggestions for Further Studies:

Further studies in a number of areas related to the use of audio media to enhance performance not only in the English Language but in all other subjects among junior secondary school students in Zaria Education zone Kaduna State in particular, and in Nigeria as a whole should provide a therapeutic research experience.

There is also the need for further investigation to find out the efficacy of the use of audio visual media in facilitating performance of students in the science. Even though many studies have found audio visual to be effective in enhancing recall, grasping concept, imagination etc. it is the researches belief that the impact of audio and audio visual should still be searched and researched since new technological finds are still emerging and their use in the field of education still new.

Looking at the results of the findings in the study one is inclined to think that programs like “Sesame Street” could not only be replicated in Nigeria but produce it with the Nigerian culture injected into it.

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APPENDIX A

LESSON PLAN FOR ORAL PRODUCTION

IN EXPERIMENTAL GROUP

USING PRE-RECORDED EXERCISES

Group: Experimental (Oral production).

Class : JSII

Time : 45 Minutes.

Subject Area: Oral English

Topic : Oral production of vowel symbols (monophthongs & diphthongs)

Instructional Material : An excerpt from: "Success in oral English for Schools and Higher Institutions; by H. I. Iyiola ;and an audio production rig (a combination of CD player and loudspeakers). Behavioural Objectives :At the end of the lesson, students should be able to identify sound symbols from given words and be able to say them satisfactorily.

Previous Knowledge : Students are familiar with the sounds of certain words and names of common objects around them. They can say some of the words with some degree of proficiency

Introduction : The teacher introduces the lesson by writing some common words on the board and asking the students to read them the best way they can. Words such as,: bird, bed; sun, son; cot, cut etc. are used to draw sound distinction within each pair. The teacher then introduces the pronunciation key to the students. The students are asked to listen to a sound production of the pronunciation key as thus:

Presentation Step I: The teacher supplies each student with a written text of the exercise and instructs them to listen to the oral production as they read the texts. Vowel sounds 1 to 4 are treated under this step. This covers the symbols, : /i:/,/i/,/e/ and/æ/.

VOWEL 1/i:/: pronounced ee Ω Listen to the tape:

This vowel is produced by raising the front of the tongue behind the front of the loer teeth. The lips are spread with the tongue tensed and the rims making contact with the upper molars. The following letters or groups of letters are used to realize the sound.

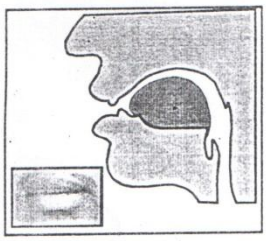


fig 4: diagram showing shape of lips and position of tongue in vowel /i:/

ee as in:					
breeze	/bri:z/	screen	/skri:n/	heed	/hi:d/
fee	/fi:/	cheek	/ʧi:k/	agree	/ə'gri:/
squeeze	/skwi:z/	feed	/fi:d/	wheel	/wi:l/
been	/bi:n/	deed	/di:d/	geese	/gi:s/
e as in:					
complete	/kəm'pli:t/	she	/ʃi:/	media	/'mi:dɪə/
compete	/kəm'pi:t/	delete	/dɪ'li:t/	mete	/mi:t/
he	/hi:/	precede	/prɪ'si:d/	evil	/'i:vɪl/
these	/ði:z/	secede	/sɪ'si:d/	female	/'fi:meɪl/
we	/wi:/	concede	/kən'si:d/	stampede	/stæm'pi:d/
secret	/'si:krɪt/	concrete	/'kɒŋkri:t/	epoch	/'i:pɒk/
secrete	/sɪ'kri:t/	convene	/kən'vi:n/	arena	/ə'ri:nə/
legal	/'li:gl/	me	/mi:/	devious	/'di:viəs/
penal	/'pi:nl/	supreme	/su:'pri:m//sju:/	renege	/rɪ'ni:dʒ/
eke	/i:k/	even	/'i:vən/	ego	/'i:gəʊ/
Eden	/'i:dn/	kerosene	/'kerəsi:n/	genius	/'dʒi:niəs /
ie as in:					
belief	/bɪ'li:f/	relief	/rɪ'li:f/	siege	/si:dʒ/
grief	/gri:f/	field	/fi:ld/	achieve	/ə'ʧi:v/
brief	/bri:f/	thief	/θi:f/	shield	/ʃi:ld/
piece	/pi:s/	chief	/ʧi:f/	niece	/ni:s/
ea as in:					
beat	/bi:t/	cheat	/ʧi:t/	teach	/ti:ʧ/
deal	/di:l/	meat	/mi:t/	heal	/hi:l/
seat	/si:t/	leaves	/li:vz/	feature	/'fi:tʃə/
peace	/pi:s/	lead (v)	/li:d/	league	/li:g/

ei as in:

conceive	/kən'si:v/	conceit	/kən'si:t/	protein /'p-əʊti:n/
deceive	/dɪ'si:v/	receipt	/rɪ'si:t/	ceiling /'si:lɪŋ/
seize	/si:z/	receive	/rɪ'si:v/	caffeine/'kæfi:n/

ey as in:

key	/ki:/	donkey	/'dɒŋki:/	geyser /'gi:zə/

/i:/

uay as in:

quay	/ki:/	eo as in:		
		people	/'pi:pl/	feoff /fi:f//fef/

i:as in:

machine	/mə'ʃi:n/	elite	/eɪ'li:t/	physique /fɪ'zi:k/
police	/pə'li:s/	routine	/'ru:ti:n/	vaccine /'væksi:n/
prestige	/pres'ti:ʒ/	marine	/mə'ri:n/	fatique /fə'ti:g/
magazine	/mægə'zi:n/	chlorine	/'klɔ:ri:n/	ravine /rə'vi:n/
vaseline	/'væsli:n/	margarine	/mɑ:dʒə'ri:n/	invitro /in'vi:trəʊ/

oe as in

l/

foetus	/'fi:təs/	oedipal	/'i:dɪpl/	phoenix/'fi:nɪks/
oestrogen	/'i:strədʒən/	amoeba	/ə'mi:bə/	subpoena /sə'pi:nə/

ui as in

suite	/swi:t/	mosquito	/mə'ski:təʊ/

ae as in

orthopaedic	/ɔ:θə'pi:dɪk/	formulae	/'fɔ:mjəli:/	antennae /æn'teni:/
vertebrae	/'v3:tɪbreɪ//i:/	anaemia	/ə'ni:miə/	aegis /'i:dʒɪs/
medi(e)aeval	/mɪdɪ'i:vl/	paediatrics	/pi:'dɪətrɪks/	aesthetics /i:s'θetɪks/

VOWEL 2/ɪ/ pronounced e 🎧 Listen to the tape:
This is a short vowel and it is articulated in the same manner as the long /i:/ sound. However, the position of the tongue is nearer the centre than to the front of the teeth and the tongue is relaxed instead of being tensed as in the former. Letters used in realizing the sound include the following.

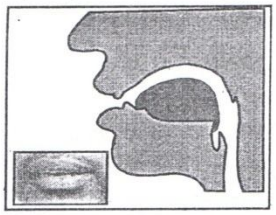


fig 5: diagram showing shape of lips and position of tongue in vowel /ɪ/

i as in:					
sit	/sɪt/	fit	/fɪt/	simple	/'sɪmpl/
bit	/bɪt/	kit	/kɪt/	mistake	/mɪ'steɪk/
misfit	/'mɪsfɪt/	bid	/bɪd/	filter	/'fɪltə/
with	/wɪð//θ/	resit	/rɪ'sɪt/	spirit	/'spɪrɪt/
chin	/ʧɪn/	this	/ðɪz/	skip	/skɪp/
y as in:					
city	/'sɪti/	lorry	/'lɒri/	merry	/'meri/
rhythm	/'rɪðəm/	symbol	/'sɪmbəl/	myth	/mɪθ/
happy	/'hæpi/	sympathy	/'sɪmpəθi/	hymn	/hɪm/
synonym	/'sɪnənɪm/	lady	/'leɪdi/	plenty	/'plenti/
e as in:					
pretty	/'prɪti/	ticket	/'tɪkɪt/	wicked	/'wɪkɪd/
bucket	/'bʌkɪt/	examination	/ɪgzæmɪ'neɪʃən/	epitome	/ɪ'pɪtəmi/
market	/'mɑ:kɪt/	engagement	/ɪŋ'geɪdʒmənt/	bonafide	/bəʊnə'faɪdi/
basket	/'bɑ:skɪt/	jacket	/'dʒækɪt/	reduce	/rɪ'dju:s/
except	/ɪk'sept/	houses	/'haʊsɪz(n)/	presume	prɪ'sju:m/
women	/'wɪmɪn/	target	/'tɑ:gɪt/	release	/rɪ'li:s/
enforce	/ɪn'fɔ:s/	English	/'ɪŋglɪʃ/	pretend	/prɪ'tend/
college	/'kɒlɪdʒ/	decision	/dɪ'sɪʒən/	prefect	/'prɪfekt/

Note: students should note that `ed' participial morpheme that occurs before the consonants /t/ and /d/ are also realized as the short /ɪ/ sound.

as in:					
wanted	/'wɒntɪd/	needed	/'ni:dɪd/	counted	/'kaʊntɪd/
planted	/'plɑ:ntɪd/	hunted	/'hʌntɪd/	painted	/'peɪntɪd/

founded	/ˈfaʊndɪd/	shouted	/ˈʃaʊtɪd/	landed	/ˈlændɪd/
stranded	/ˈstrændɪd/	grounded	/ˈgraʊndɪd/	sounded	/ˈsaʊndɪd/
blessed(adj)	/blesɪd/	sighted	/saɪtɪd/	needed	/ni:dɪd/

ie as in:

ladies	/ˈleɪdɪz/	families	/ˈfæmɪlɪz/	babies	/ˈbeɪbɪz/
countries	/ˈkʌntrɪz/	cities	/ˈsɪtɪz/	ferries	/ˈferɪz/
carries	/ˈkærɪz/	buries	/ˈberɪz/	marries	/ˈmærɪz/
berries	/ˈberɪz/	sieve	/sɪv/	reverie	/ˈrevəri/

Note: Most of the words in 'ie' above are plural nouns and singular verbs.

a as in:

village	/ˈvɪlɪdʒ/	mortgage	/ˈmɔ:gɪdʒ/	private	/ˈpraɪvɪt/
cottage	/ˈkɒtɪdʒ/	manage	/ˈmænɪdʒ/	percentage	/pəˈsentɪdʒ/
courage	/ˈkʌrɪdʒ/	advantage	/ədˈvɑ:ntɪdʒ/	adage	/əˈdɪdʒ/

ui as in:

build	/bɪld/	guild	/gɪld/	guilt	/gɪlt/
guinea	/ˈgɪni/	biscuit	/ˈbɪskɪt/	guitar	/gɪtɑ:/
quilt	/kɪlt/				

ay as in:

Monday	/ˈmʌndi/ or /eɪ/	Tuesday	/ˈtju:zdi/ or /eɪ/
Wednesday	/ˈwenzdi/ or /eɪ/	Thursday	/ˈθ3:zdi/ or /eɪ/
Friday	/ˈfraɪdi/ or /eɪ/	Saturday	/ˈsætədi/ or /eɪ/
Sunday	/ˈsʌndi/ or /eɪ/		

ei as in:

counterfeit /ˈkaʊntəfɪt/ forfeit /ˈfɔ:fɪt/ surfeit /ˈs3:fɪt/

u as in:

business	/ˈbɪznəs/	busy	/ˈbɪzi/	minute(n)	/ˈmɪnɪt/
lettuce	/ˈletɪs/				

ice/ime/ite as in:

favourite	/ˈfeɪvərɪt/	granite	/ˈgrænɪt/	opposite	/ˈɒpəzɪt/
cowardice	/ˈkaʊədɪs/	intestine	/ɪnˈtestɪn/	feminine	/ˈfemənɪn/
famine	/ˈfæmɪn/	exquisite	/ɪkˈskwɪzɪt//eks-/	masculine	/ˈmæskjəlɪn/

founded	/ˈfaʊndɪd/	shouted	/ˈʃaʊtɪd/	landed	/ˈlændɪd/
stranded	/ˈstrændɪd/	grounded	/ˈgraʊndɪd/	sounded	/ˈsaʊndɪd/
blessed(adj)	/blesɪd/	sighted	/saɪtɪd/	needed	/ni:dɪd/

ie as in:

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countries	/ˈkʌntrɪz/	cities	/ˈsɪtɪz/	ferries	/ˈferɪz/
carries	/ˈkærɪz/	buries	/ˈberɪz/	marries	/ˈmærɪz/
berries	/ˈberɪz/	sieve	/sɪv/	reverie	/ˈrevəri/

Note: Most of the words in 'ie' above are plural nouns and singular verbs.

a as in:

village	/ˈvɪlɪdʒ/	mortgage	/ˈmɔ:gɪdʒ/	private	/ˈpraɪvɪt/
cottage	/ˈkɒtɪdʒ/	manage	/ˈmænɪdʒ/	percentage	/pəˈsentɪdʒ/
courage	/ˈkʌrɪdʒ/	advantage	/ədˈvɑ:ntɪdʒ/	adage	/əˈdɪdʒ/

ui as in:

build	/bɪld/	guild	/gɪld/	guilt	/gɪlt/
guinea	/ˈgɪni/	biscuit	/ˈbɪskɪt/	guitar	/gɪtɑ:/
quilt	/kɪlt/				

ay as in:

Monday	/ˈmʌndi/ or /eɪ/	Tuesday	/ˈtju:zdi/ or /eɪ/
Wednesday	/ˈwenzdi/ or /eɪ/	Thursday	/ˈθ3:zdi/ or /eɪ/
Friday	/ˈfraɪdi/ or /eɪ/	Saturday	/ˈsætədi/ or /eɪ/
Sunday	/ˈsʌndi/ or /eɪ/		

ei as in:

counterfeit /ˈkaʊntəfɪt/	forfeit /ˈfɔ:fɪt/	surfeit /ˈs3:fɪt/

u as in:

business /ˈbɪznəs/	busy /ˈbɪzi/	minute(n) /ˈmɪnɪt/
lettuce /ˈletɪs/		

ice/ime/ite as in:

favourite	/ˈfeɪvərɪt/	granite	/ˈgrænɪt/	opposite	/ˈɒpəzɪt/
cowardice	/ˈkaʊədɪs/	intestine	/ɪnˈtestɪn/	feminine	/ˈfemənɪn/
famine	/ˈfæmɪn/	exquisite	/ɪkˈskwɪzɪt//eks-/	masculine	/ˈmæskjəlɪn/

oe as in		o as in		ei as in	
oesophagus	/ɪ'sɒfəgəs/	women	/'wɪmɪn/	sovereign	/'sɒvrɪn/

ey as in					
monkey	/'mʌŋki/	turkey	/'tɜ:ki/	money	/'mʌni/
honey	/'hʌni/	valley	/'væli/	volley	/'vɒli/

ai as in:					
captain	/'kæptɪn/	chaplain	/'tʃæplɪn/	plantain	/'plæntɪn/

ee as in:					
toffee	/'tɒfi/	coffee	/'kɒfi/	levee	/'levi/

ia as in			
marriage	/'mærɪdʒ/	carriage	/'kærɪdʒ/

SPEECH DRILL

/i:/	/ɪ/	/i:/	/ɪ/
seen/scene	sin	cheek	chick
been/bean/being	bin	keel	kill
canteen	candid	eel	ill

VOWEL 3 /e/ pronounced eh ↗ 🎧 Listen to the tape:

For this vowel, the front of the tongue touches the lower teeth in a raised position. The lips are loosely spread and slightly wider apart than in the short /ɪ/. The tongue may also be more tensed than in short /ɪ/, while the rim of the tongue makes a slight contact with the upper molars. The following are used to realize the sound.

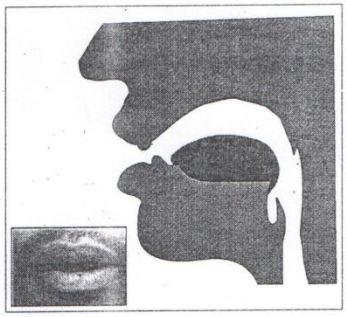


fig 6: diagram showing shape of lips and position of tongue in vowel /e/

e as in:

bed	/bed/	lend	/lend/	bend	/bend/
tend	/tend/	bet	/bet/	let	/let/
pretend	/prɪˈtend/	offend	/əˈfend/	commend	/kəˈmend/
depend	/dɪˈpend/	pet	/pet/	recent	/ˈrɪsnt/

ea as in:

head	/hed/	bread	/bred/	breath	/breθ/
meant	/ment/	dead	/ded/	death	/deθ/
dread	/dred/	threat	/θret/	spread	/spred/
tread	/tred/	lead (n)	/led/	instead	/ˈɪnsted/
read	/red/	ready	/ˈredi/	cleanse	/klens/
breakfast	/ˈbrekfəst/	realm	/relm/	pheasant	/ˈfeznt/

a as in:

many	/ˈmeni/	Thames	/temz/	any	/ˈeni/
ate	/et/				

ay as in:

says	/sez/

ie as in:

friend	/frend/

u as in:

bury	/ˈberi/

ai as in:

said	/sed/	again	/əˈgen//-eɪn/	against	/əˈgenst/

eo as in:

Geoffrey	/ˈdʒefri/	leopard	/ˈlepəd/	jeopardize	/ˈdʒepɑːdaɪz/

ue as in

guess	/ges/	guest	/gest/	guerrilla	/gəˈrɪlə/

ieu as in

lieutenant	/ˈleftenənt//luːte-/

ei as in

leisure	/ˈleʒə/
heifer	/ˈhefə/

VOWEL 4 /æ/ pronounced eh ⟶ ☊ Listen to the tape:
In this sound, the mouth is more open than in the articulation of /e/. The front of the tongue is raised and the rims make a slight contact with the back upper molars. The following are used to realize the sound.

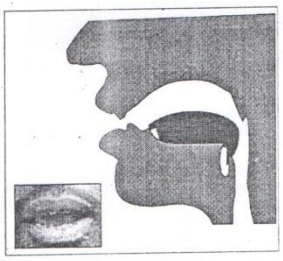


fig 7: diagram showing shape of lips and position of tongue in vowel /æ/

a as in:

bat	/bæt/	fat	/fæt/	gadget	/'gædʒɪt/
sat	/sæt/	cat	/kæt/	tablet	/'tæblət/
hat	/hæt/	man	/mæn/	tobacco	/tə'bækəʊ/
hand	/hænd/	dam	/dæm/	canny	/'kæni/
lamp	/læmp/	stamp	/stæmp/	glacier	/'glæʃɪə/
damn	/dæm/	map	/mæp/	chasm	/'kæzɪəm/
band	/bænd/	plaque	/plæk//-ɑ:k/	thanks	/θæŋks/
marry	/'mæri/	lap	/læp/	album	/'ælbəm/
panic	/'pænɪk/	packet	/'pækɪt/	alibi	/'ælɪbaɪ/

ai as in:

plait	/plæt/or/pleɪt/	plaid/	/plæd/

i as in

impasse/'æmpɑ:s/

The students are asked to give more words of similar sounds to the ones given in the text.

Step ii: The teacher guides the students into vowel symbols 5 to 8 and plays the oral part accompanying the text. The sounds of these symbols(/□/,/α:/,/□/,/□:/),are used to produce other words containing similar sounds. A speech drill and an exercise are given for students' practice under this step.

VOWEL 5 /ʌ/ pronounced ah ♫ Listen to the tape:
This is a short vowel sound which is articulated with jaws considerably separated and the lips neutrally open. There is no contact with the upper molars. The following are used to realize the sound.

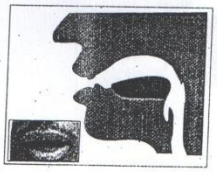


fig 8: diagram showing shape of lips and position of tongue in vowel /ʌ/

u as in:

sun	/sʌn/	punch	/pʌntʃ/	humming	/'hʌmɪŋ/
understand	/ʌndə'stænd/	jump	/dʒʌmp/	buzz	/bʌz/
fundamental	/fʌndə'mentl/	cut	/kʌt/	lucky	/'lʌki/
function	/'fʌŋkʃən/	judges	/'dʒʌdʒɪz/	culprit	/'kʌlprɪt
dull	/dʌl/	culture	/'kʌltʃə/	usher	/'ʌʃə/
stunned	/stʌnd/	bumped	/bʌmpt/	much	/mʌtʃ/

o as in:

son	/sʌn/	mother	/'mʌðə/	nothing	/'nʌθɪŋ/
onions	/'ʌnjənz/	brother	/'brʌðə/	company	/'kʌmpəni/
done	/dʌn/	among	/ə'mʌŋ/	shovel	/'ʃʌvl/
oven	/'ʌvən/	one	/wʌn/	stomach	/'stʌmək/
London	/'lʌndən/	money	/'mʌni/	dozen	/'dʌzn/
monday	/'mʌndi/ or /eɪ/	monkey	/'mʌŋki/	govern	/'gʌvən/
wonder	/wʌndə/	come	/kʌm/	worry	/'wʌri/
some	/sʌm/	above	/ə'bʌv/	love	/lʌv/
dove	/dʌv/	front	/frʌnt/	tongue	/tʌŋ/

ou as in:

country	/'kʌntri/	young	/jʌŋ/	enough	/ɪ'nʌf/
couple	/'kʌpl/	tough	/tʌf/	courage	/'kʌrɪdʒ/
touch	/tʌʧ/	trouble	/'trʌbl/	nourish	/'nʌrɪʃ/
flourish,	/'flʌrɪʃ/	cousin	/'kʌzn/	southern	/'sʌðən/
rough	/rʌf/				

oo as in:

blood	/blʌd/	flood	/flʌd/

oe as in:

does	/dʌz/

SPEECH DRILL

/ʌ/	/ɒ/	/ʌ/	/ɒ/
hut	hot	shut	shot
cut	cot	cud	cod
luck	lock	stuck	stock

VOWEL 6 /a:/ pronounced aah ♫ Listen to the tape:
The articulation of this sound is similar to the short /ʌ/ sound, except that the latter is a long sound. The following are used to realize the sound.

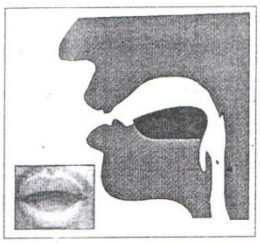


fig 9: diagram showing shape of lips and position of tongue in vowel /ɑ:/

a as in:

pass	/pɑ:s/	fast	/fɑ:st/	banana	/bə'nɑ:nə/
brass	/brɑ:s/	tomatoes	/tə'mɑ:təʊz/	chaff	/ʧɑ:f/
class	/klɑ:s/	ranch	/rɑ:nʧ/	debacle	/deɪ'bɑ:kl//dɪ-/
clasp	/klɑ:sp/	father	/'fɑ:ðə/	rafter	/'rɑ:ftə/
last	/lɑ:st/	branch	/brɑ:nʧ/	shan't	/ʃɑ:nt/
after	/'ɑ:ftə/	cast	/kɑ:st/	can't	/kɑ:nt/
dance	/dɑ:ns/	chance	/ʧɑ:ns/	task	/tɑ:sk/
brand	/brɑ:nd/	amen	/'ɑ:men//eɪ-/	lava	/'lɑ:və/
trance	/trɑ:ns/	draft	/drɑ:ft/	Islam	/'ɪzlɑ:m/
grant	/grɑ:nt/	ask	/ɑ:sk/	graph	/grɑ:f/

Note: but mass /mæs/; lass /læs/; ass /æs/

ar/aar/aarh as in:

bark	/bɑ:k/	park	/pɑ:k/	bazaar	/bə'zɑ:/
remark	/rɪ'mɑ:k/	embark	/ɪm'bɑ:k/	catarrh	/kə'tɑ:/
embargo	/ɪm'bɑ:gəʊ/	part	/pɑ:t/	radar	/'reɪdɑ:/
cart	/kɑ:t /	march	/mɑ:ʧ/	seminar	/'semɪnɑ:/
car	/kɑ:/	bar	/bɑ:/	archaic	/ɑ:'keɪk/
tar	/tɑ:/	mark	/mɑ:k/	shark	/ʃɑ:k/

ear as in:

heart	/hɑ:t/	hearth	/hɑ:θ/	hearken	/'hɑ:kən/

er as in:

clerk	/klɑ:k/	sergent	/'sɑ:ʤənt/	derby	/'dɑ:bi/

al as in:

calm	/kɑ:m/	psalm	/sɑ:m/	qualms	/kwɑ:mz/

palm	/pɑ:m/	calf	/kɑ:f/	almond	/'ɑ:mənd/
half	/hɑ:f/	balm	/bɑ:m/	embalm	/ɪm'bɑ:m/

au/ua as in:

aunt	/ɑ:nt/	laugh	/lɑ:f/	guava	/'gwɑ:və/

uar as in		augh as in		oi as in	
guard	/gɑ:d/	draughts	/drɑ:fts/	coiffeur	/'kwɑ:fjuə(r)/

ɑ:/

oir/oire as in:

repertoire /'repətwɑ:/
reservoir /'rezəvwɑ:/
abettoir /'æbətwɑ:/

eois/ois as in

chamois	/'ʃæmwɑ:/
bourgeois	/'bʊəʒwɑ:/

SPEECH DRILL

/e/	/æ/	/ʌ/	/ɑ:/
men	match	much	march
beck	back	buck	bark
kent	cat	cut	cart
benz	banns	buns	barns
mend	manned	mud	marred
peck	pack	puck	park
bet	bat	but	bart
hem	ham	hum	harm
ten	tan	tun	tarn

EXERCISE 1

Identify the sound underlined in each of the following sets of words.

1.	hill	1.	hell	1.	heal		
2.	knit	2.	neat	2.	net		
3.	red	3.	reed	3.	rid		
4.	feel	4.	fell	4.	fill		
5.	bread	5.	breed	5.	bred		
6.	rich	6.	wretch	6.	reach		
7.	disc	7.	desk	7.	dusk		
8.	march	8.	much	8.	match		
9.	fund	9.	fanned	9.	fend		
10.	exercise	10.	enter	10.	eel	10.	ill
11.	wean	11.	when	11.	win	11.	one
12.	lead(v)	12.	led	12.	lid	12.	Lad

13.	harm	13.	hum	13.	hymn	13.	hem	
14.	dense	14.	dance	14.	dunce	14.	deans	
15.	hard	15.	head	15.	had	15.	heed	
16.	luck	16.	lark	16.	lick	16.	leak	
17.	big	17.	bag	17.	beg	17	barge	
18.	cut	18.	cart	18.	cat	18.	kit	
19.	pet	19.	part	19.	pat	19.	pit	19.peat
20.	teen	20.	tin	20.	ten	20.	tan	20. tarn

VOWEL 7 /ɒ/ or /ɔ/ pronounced or 🎧 Listen to the tape:

The articulation of this short vowel is done with wide open jaws and slight open lip rounding. No contact is made between the tongue and the upper molars. The following are used to realize the sound.

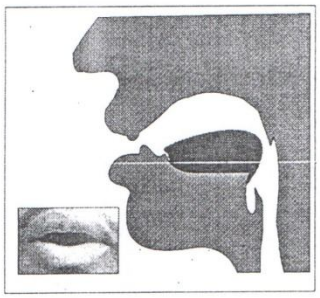


fig 10: diagram showing shape of lips and position of tongue in vowel /ɒ/ or /ɔ/

o as in:

God	/gɒd/	cot	/kɒt/	dog	/dɒg/
lot	/lɒt/	dock	/dɒk/	moth	/mɒθ/
mock	/mɒk/	shot	/ʃɒt/	holiday	/'hɒlɪdeɪ/
knot	/nɒt/	gone	/gɒn/	dot	/dɒt/
lorry	/'lɒri/	not	/nɒt/	sorry	/'sɒrɪ/
tonic	/'tɒnɪk/	top	/tɒp/	box	/bɒks/
boss	/bɒs/	bother	/'bɒðə/	plot	/plɒt/
bronze	/brɒnz/	solid	/'sɒlɪd/	loss	/lɒs/
fond	/fɒnd/	cost	/kɒst/	lost	/lɒst/
gong	/gɒŋ/	shone	/ʃɒn/	flock	/flɒk/

a as in:

was	/wɒz/	wander	/'wɒndə/	swallow	/'swɒləu/

watch	/wɒʧ/	wrath	/rɒθ/	fiance	/fi'ɒnseɪ/
quality	/'kwɒlɪti/	squat	/skwɒt/	swat	/swɒt/
what	/wɒt/	squad	/skwɒd/	wan	/wɒn/
swan	/swɒn/	squalid	/'skwɒlɪd/	wand	/wɒnd/
yacht	/jɒt/	squash	/skwɒʃ/	wanton	/'wɒntən/
wasp	/wɒsp/	wallet	/wɒlɪt/	swap	/swɒp/
want	/wɒnt/	swab	/swɒb/	swamp	/swɒmp/

ow as in:

knowledge	/'nɒlɪʤ/	acknowledge	/ək'nɒlɪʤ/

ou as in:

cough	/kɒf/	trough	/trɒf/

au as in:

because	/bɪ'kɒz/	Austria	/'ɒstrɪə/
sausage	/'sɒsɪʤ/	Australia	/ɒ'streɪlɪə/
laurel	/'lɒrel/	cauliflower	/'kɒlɪflaʊə/

e as in

entourage	/'ɒntʊrɑ:ʒ/	entrepreneur	/ɒntrəprə'n3:(r)/
ensuite	/õ 'swi:t/	enmasse	/õ 'mæs/
en core	/'õŋkɔ:(r)/	enroute	/õ 'ru:t/
enbloc	/õ 'blɒk/	entente	/õ 'tɒnt/

VOWEL 8 /ɔ:/ pronounced oor 🎧 Listen to the tape:

This is a long vowel sound and its articulation is similar to that of the short /ɒ/ sound. However, the tongue is raised higher in the latter than in the former as well as medium lip rounding. There is also no contact between the tongue and the upper molars. The following are used to realize the sound.

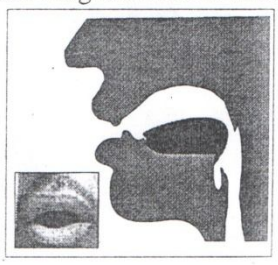


fig 11: diagram showing shape of lips and position of tongue in vowel /ɔ:/

o as in

thorax	/'θɔ:rəks/	story	/'stɔ:ri/
glory	/'glɔ:ri/	oral	/'ɔ:rəl/
choral	/'kɔ:rəl/		

ore as in:

before	/bɪ'f ɔ:/	fore	/fɔ:/	folklore	/'fɔ:klɔ:/
forecast	/'fɔ:kɑ:st/	shore	/ʃɔ:/	tore	/tɔ:/
core	/kɔ:/	chore	/ʧɔ:/	whore	/hɔ:/
more	/mɔ:/	ignore	/ɪg'nɔ:/	galore	/gə'lɔ:/

oa/oar as in:

board	/bɔ:d/	hoarse	/hɔ:s/	broad	/brɔ:d/
hoard	/hɔ:d/	coarse	/kɔ:s/	abroad	/ə'brɔ:d/
hoary	/'hɔ:ri/	soar	/sɔ:/	oar	/ɔ:/
roaring	/'rɔ:rɪŋ/	boar	/bɔ:(r)/	boarder	/'bɔ:də/

oor as in:

floor	/flɔ:/
door	/dɔ:/

awe/awer

awe	/ɔ:/
drawer	/drɔ:(r)/

our as in:

court	/kɔ:t/	four	/fɔ:/	course	/kɔ:s/
source	/sɔ:s/	pour	/pɔ:/	mourn	/mɔ:n/
your	/jɔ:/	yours	/jɔ:z/		

Step iii: The students are then led into step iii where vowel sounds 9 to 12 (/□/,/U:/,/□:/,/ə/) are introduced. Now the audio production is played so that the students listen very well as they read the written texts. The student are asked to practice the oral drilsl that follow. Thus:-

VOWEL 9 / ʊ/ pronounced uh Listen to the tape:

This short vowel sound is produced with the tongue nearer to the centre of the oral cavity. The tongue is laxed while the lips are closely but loosely rounded. The following are used to realize the sound.

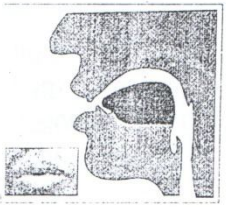


fig 12: diagram showing shape of lips and position of tongue in vowel / ʊ/

u as in:

put	/pʊt/	pull	/pʊl/
full	/fʊl/	bush	/bʊʃ/
sugar	/'ʃʊgə/	push	/pʊʃ /
cushion	/'kʊʃən/	pudding	/'pʊdɪŋ/
butcher	/'bʊtʃə/	bull	/bʊl/

o as in :

wolf	/wʊlf/	woman	/'wʊmən/
bosom	/'bʊzəm/		

oo as in:

wood	/wʊd/	books	/bʊks/
brook	/brʊk/	cooks	/kʊks/
good	/gʊd/	hook	/hʊk/
wool	/wʊl/	foot	/fʊt/
soot	/sʊt/	took	/tʊk/
stood	/stʊd/	look	/lʊk/
hood	/hʊd/	shook	/ʃʊk/

ou as in:

would	/wʊd/	should	/ʃʊd/
could	/kʊd/	courier	/'kʊrɪə/

VOWEL 10 /U:/ pronounced uuh Listen to the tape:

This is a long sound and its articulation is similar to that of the /ʊ/sound. However, the position of the tongue is higher and the tongue is more tensed than in the former. The lips are also closely rounded. The following are used to realize the sound.

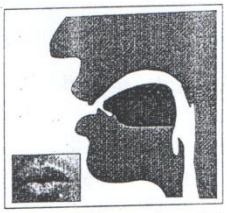


fig 13: diagram showing shape of lips and position of tongue in vowel /U:/

oo as in:

food	/fu:d/	hoot	/hu:t/	pool	/pu:l/
fool	/fu:l/	hooves	/hu:vz/	room	/ru:m/
sooner	/'su:nə/	hoodlum	/'hu:dləm/	roost	/ru:st/
moon	/mu:n/	hoof	/hu:f/	shoot	/ʃu:t/
spoon	/spu:n/	loom	/lu:m/	tooth	/tu:θ/
school	/sku:l/	boost	/bu:st/	loose	/lu:s/
stooge	/stu:dʒ/	cool	/ku:l/	loot	/lu:t/
snook	/snu:k/	roof	/ru:f/	proof	/pru:f/
brood	/bru:d/	stoop	/stu:p/	mood	/mu:d/
boom	/bu:m/	doom	/du:m/	stool	/stu:l/
broom	/bru:m/	tool	/tu:l/	moot	/mu:t/

o as in:

who	/hu:/	move	/mu:v/	prove	/pru:v/
do	/du:/	lose	/lu:z/	womb	/wu:m/
whom	/hu:m/	whose	/hu:z/	tomb	/tu:m/

ou as in:

group	/gru:p/	soup	/su:p/	you	/ju:/
troupe	/tru:p/	coup	/ku:/	louver	/'lu:və/
wound	/wu:nd/	through	/θru:/	youth	/ju:θ/
coupon	/'ku:pɒn/	boutique	/bu:'ti:k/	rouge	/ru:dʒ/
ghoul	/gu:l/	coupe	/'ku:peɪ/	souvenir	/su:və'nɪə(r)/
trouper	/'tru:pə/	route	/ru:t/	uncouth	/ʌn'ku:θ/

ew as in:

chew	/ʧu:/	few	/fju:/	grew	/gru:/
brew	/bru:/	news	/nju:z/	crew	/kru:/
dew	/dju:/	threw	/θru:/	stew	/stju:/
jewel	/'dʒu:əl/	Jew	/dʒu:/	mew	/mju:/

ui as in:

juice	/dʒu:s/	fruit	/fru:t/	sluice	/slu:s/
cruise	/kru:z/	bruise	/bru:z/	suit	/su:t/

ewe as in		iew as in		eau as in	
ewe	/ju:/	view	/vju:/	beauty	/'bju:ti/

oe as in:
shoe /ʃu:/ canoe /kə'nu:/ ough as in through /θru:/

eu/ueue as in
feud /fju:d/ queue /kju:/ neutral /'nju:trəl/

ue as in:
due /dju:/ argue /'ɑ:gju:/ blue /blu:/
cue /kju:/ rue /ru:/ glue /glu:/
sue/ /su://sju:/ virtue /'vɜ:ʧu:/ venue /'venju/
value /'vælju:/ revenue/'revənju:/ continue/kən'tɪnju:/

oeu as in wo as in
manoeuvre /mə'nu:və/ two /tu:/

oo/oon at the end of words:

woo	/wu:/	coo	/ku:/
moo	/mu:/	too	/tu:/
taboo	/tə'bu:/	buffoon	/bə'fu:n/
bamboo	/bəm'bu:/	typhoon	/taɪ'fu:n/
cartoon	/kə'tu:n/	lagoon	/lə'gu:n/
hulabaloo	/hʌləbə'lu:/	saloon	/sə'lu:n/
afternoon	/ɑ:ftə'nu:n/	shampoo	/ʃæm'pu:/
boo	/bu:/	maroon	/sə'lu:n/

u as in:

June	/ʤu:n/	crude	/kru:d/	rude	/ru:d/
intrude	/ɪn'tru:d/	dune	/dju:n/	refuge	/'refju:ʤ/
abuse	/ə'bju:z/	brutal	/'bru:təl/	conclude	/kəŋ'klu:d/
nude	/nju:d/	rule	/ru:l/	salute	/sə'lju:t/
Susan	/'su:zən/	duty	/'dju:ti/	refuse	/rɪ'fju:z//'refju:s/

Note: student should note that the semi-vowel /j/ usually occurs before eu, ui, ew, ue or u in the following situations.

1. after /t/ as in:

tune	/tju:n/	stew	/stju:/
costume	/'kɒstju:m/	attitude	/'ætɪtju:d/

SPI
/æ/
cat
bat
cad
stac
bacl

2. after /d/ as in:

dune	/dju:n/	due	/dju:/
dew	/dju:/	duty	/'dju:ti/

3. after /g/ as in:

argue	/'ɑ:gju:/

4. after /p/ as in:

opulent	/'ɒpju:lənt/	pew	/pju:/
pupil	/'pju:pəl/	pupa	/'pju:pə/

5. after /n/ as in:

news	/nju:z/	nuisance	/'nju:sns/
nude	/nju:d/	nuclear	/'nju:klɪə/
numerous	/'nju:mərəs/	denude	/dɪ'nju:d/

6. after/m/ as in:

music	/'mju:zɪk/	muse	/mju:z/
museum	/mju:'zɪəm/	municipal	/mju:'nɪsɪpl/
mute	/mju:t/	mutilate	/'mju:tɪleɪt/
mew	/mju:/	commute	/kə'mju:t/
mutiny	/'mju:tɪni/	commune	/kə'mju:n/

7. after /h/ as in:

huge	/hju:dʒ/	human	/'hju:mən/
humour	/'hju:mə/	humus	/'hju:məs/
hue	/hju:/	humid	/'hju:mɪd/

8. after /k/ as in:

calculate	/'kælkju:leɪt/	cube	/kju:b/
cute	/kju:t/	cubicle	/'kju:bɪkl/

SPEECH DRILL

/æ/	/ʌ/	/ɒ/	/ɔ:/	/ɑ:/
cat	cut	cot	court	cart
bat	but	robot	bought	bart
cad	cud	cod	chord	card
stack	stuck	stock	stalk	stark
backs	bucks	box	balks	barks

EXERCISE 2

Identify the sound underlined in the following sets of words.

1.	said	1.	sad	1.	sud	1.	sued
2.	mess	2.	miss	2.	mass	2.	mars
3.	limp	3.	lamp	3.	lump	3.	loop
4.	farm	4.	film	4.	form	4.	fume
5.	fool	5.	full	5.	fall	5.	fell
6.	put	6.	port	6.	part	6.	pot
7.	cord	7.	cod	7.	could	7.	card
8.	don	8.	dawn	8.	done	8.	den
9.	bull	9.	bell	9.	ball	9.	bill
10.	cut	10.	court	10.	cat	10.	cot

VOWEL 11 /3:/ pronounced ehr Listen to the tape:

This is a long sound which is articulated with the central part of the tongue raised. The lips are neutrally spread and no firm contact is made between the tongue and the upper molars. The following are used to realize the sound.

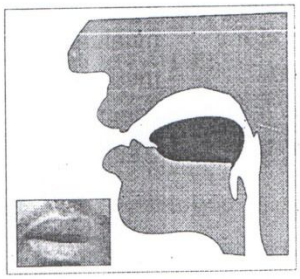


fig 14: diagram showing shape of lips and position of tongue in vowel / 3:/

ir as in:

girl	/gɜ:l/	bird	/bɜ:d/	third	/θɜ:d/
firm	/fɜ:m/	birthday	/'bɜ:θdeɪ/	fir	/fɜ:/
dirt	/dɜ:t/	stir	/stɜ:/	shirk	/ʃɜ:k/
shirt	/ʃɜ:t/	whirl	/wɜ:l/	smirk	/smɜ:k/

er as in:

serve	/sɜ:v/	term	/tɜ:m/	her	/hɜ:/
deserve	/dɪ'zɜ:v/	refer	/rɪfɜ:/	germ	/ʤɜ:m/
herd	/hɜ:d/	determine	/dɪ'tɜ:mɪn/	perm	/pɜ:m/
perverse	/pə'vɜ:s/	stern	/stɜ:n/	concerted	/kən'sɜ:tɪd/
concern	/kən'sɜ:n/	reserve	/rɪ'zɜ:v/	confer	/kən'fɜ:/
dessert	/dɪ'zɜ:t/	desert(v)	/dɪ'zɜ:t/	defer	/dɪ'fɜ:/

ear as in:

heard	/hɜ:d/	earn	/ɜ:n/	early	/'ɜ:li/
earth	/ɜ:θ/	pearl	/pɜ:l/	rehearse	/rɪ'hɜ:s/
hearse	/hɜ:s/	search	/sɜ:ʧ/	dearth	/dɜ:θ/

ur as in:

nurse	/nɜ:s/	church	/ʧɜ:ʧ/	lurk	/lɜ:k/
turn	/tɜ:n/	churn	/ʧɜ:n/	occur	/ə'kɜ:/
burn	/bɜ:n/	spur	/spɜ:/	turkey	/'tɜ:ki/
return	/rɪ'tɜ:n/	further	/'fɜ:ðə/	urn	/ɜ:n/

err/urr as in:

purr	/pɜ:/	err	/ɜ:/

:ue
:he

w + or as in:

word	/wɜ:d/	work	/wɜ:k/	worthy	/'wɜ:ði/
world	/wɜ:ld/	worse	/wɜ:s/	worship	/'wɜ:ʃɪp/
worm	/wɜ:m/	worth	/wɜ:θ/	worst	/wɜ:st/

our as in:

journey	/'ʤɜ:ni/	scourge	/skɜ:ʤ/
courtesy	/'kɜ:təsi/	adjourn	/ə'ʤɜ:n/

eur as in:

connoiseur	/kɒnə'sɜ:(r)/
sabateur	/sæbə'tɜ:(r)/

olo as in

colonel	/'kɜ:nl/

or as in:

attorney	/ə'tɜ:ni/

ieu as in

millieu	/'mi:ljɜ://-ju:/

ewe as in:

were	/wɜ:/

SPEECH DRILL

/ɜ:/	/ɔ:/	/ɜ:/	/ɔ:/
world	walled	curt	court
heard	hoard	curse	course
shirt	short	burn	born

VOWEL 12 /ə/ pronounced eh ↘ **Listen to the tape:**

This is a weak vowel sound that usually occurs and is used to represent unaccented (unstressed) syllables. It is referred as the schwa sound . In articulating the sound, the tongue is in a central position and the lip in neutral position. The following are used to realize the sound.

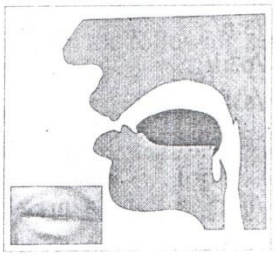


fig 15: diagram showing shape of lips and position of tongue in vowel /ə/

er as in:

mother /'mʌðə/	wonder /'wʌndə/	neither /'naɪðə/
leather /'leðə/	manager /'mænɪʤə/	weather/'weðə/
founder/'faʊndə/	latter /'lætə/	lather /'lɑ:ðə/
starter /'stɑ:tə/	perhaps /pə'hæps/	superman /'su:pəmæn/

or as in:

doctor /'dɒktə/	rector /'rektə/	supervisor/'su:pəvaɪzə(r)/
calculator/'kælkjʊleɪtə/	director/daɪ'rektə//dɪ-/	monitor/'mɒnɪtə/
governor/'gʌvənə/	minor /'maɪnə	forget /fə'get/
factor /'fæktə/	stupor /'stju:pə(r)/	author /'ɔ:θə/

ou/our as in:

famous /'feɪməs/	glamour /'glæmə/	glamorous /'glæmərəs/
generous /'ʤenərəs/	clamour /'klæmə/	honour /'ɒnə/
rumour /'ru:mə/	tumour /'tju:mə/	colour /'kʌlə/
callous /'kæləs/	favour /'feɪvə/	rigour /'rɪgə/
odour /'əʊdə/	valour /'vælə/	labour /'leɪbə/

iou as in:

conscious	/'kɒnʃəs/	gracious	/'greɪʃəs/
precious	/'preɪʃəs/	delicious	/dɪ'lɪʃəs/

eou as in:

righteous	/'raɪʧəs/	oar as in:	
		cupboard	/'kʌbəd/

ure as in:

figure /'fɪgə/	structure /'strʌkʧə/	nature /'neɪʧə/
furniture /'fɜ:nɪʧə/	architecture /'ɑ:kɪtekʧə/	culture /'kʌlʧə/
pressure /'preʃə/	seizure /'si:ʒə/	injure /'ɪnʤə/

e as in

open /'əʊpən/	sharpen /'ʃɑ:pən/	happen /'hæpən/
ripen /'rɑɪpən/	dampen /'dæmpən/	deepen /'di:pən/

ar as in

particular /pɑ:'tɪkjələ/	collar /'kɒlə/	monarchy /'mɒnəki/
grammar /'ɡræmə/	onward /'ɒnwəd/	cellar /'selə/
steward /'stju:əd/	bursar /'bɜ:sə/	beggar /'begə/
mortar /'mɔ:tə/	forward /'fɔ:wəd/	sugar ɪ/'ʃʊgə/

el

ough as in

thorough /'θʌrə/	borough /'bʌrə/

a as in:

about /ə'baʊt/	around /ə'raʊnd/	ago /ə'gəʊ/
among /ə'mʌŋ/	sofa /'səʊfə/	china /'ʧaɪnə/
fatigue /fə'ti:g/	above /ə'bʌv/	machete /mə'ʃeti//-eɪti/
cutlass /'kʌtləs/	organ /'ɔ:gən/	moveable /'mu:vəbl/
visa /'vi:zə/	woman /'wʊmən/	urban /'ɜ:bən/
vila /'vɪlə/	miracle /'mɪrəkl/	madam /'mædəm/

o as in:

photography /fə'tɒgrəfi/	tomorrow /tə'mɒrəʊ/	decorative /'dekərətɪv/
collate /kə'leɪt/	obey /ə'beɪ/	polite /pə'laɪt/
second /'sekənd/	wisdom /'wɪzdəm/	occur /ə'k3:/
pilot /'paɪlət/	contain /kən'teɪn/	commit /kə'mɪt/
correct /kə'rekt/	ballot /'bælət/	carrot /'kærət/

oi/oir as in

senior /'si:njə/	junior /'ʤu:njə/	zephyr /'zefə(r)/
tortoise /'tɔ:təs/	porpoise /'pɔ:pəs/	martyr /'mɑ:tə(r)/

ye as in

eur as in

amateur /'æmətə(r)//'ʧə/	chauffeur /'ʃəʊfə/	grandeur /'ɡrændʒə/

eo/ei as in

luncheon	/'lʌnʧən/	foreigner	/'fɒrənə//-rɪnə/
surgeon	/'s3:ʤən/	pigeon	/'pɪʤən/

u as in

litmus /'lɪtməs/	minus /'maɪnəs/	autumn /'ɔ:təm/
support /'səpɔ:t/	suspect(v) /sə'spekt/	subdue /səb'dju:/
column /'kɒləm/	sustain /sə'steɪn/	campus /'kæmpəs/
gerund /'ʤerənd/	suppose /sə'pəʊz	bonus /'bəʊnəs/
submit /səb'mɪt/	supply /sə'plaɪ/	suspicion/sə'spɪʃn/

i as in:

possible /'pɒsəbl/	terrible /'terəbl/	accessible /ək'sesəbl/
invisible/ɪn'vɪzəbl/	permissible /pə'mɪsəbl/	divisible /dɪ'vɪzəbl/

re as in:

metre /'mi:tə/	acre /'eɪkə/	goitre /'gɔɪtə/
meagre /'mi:gə/	calibre /'kælɪbə/	theatre /'θɪətə/
centre /'sentə/	macabre /mə'kɑ:brə/	manoeuvre /mə'nu:və/

ur as in:

survive(v)/sə'vaɪv/	surprise/sə'praɪs/	surround /sə'raʊnd/
augur /'ɔ:gə/	surmount /sə'maʊnt/	pursue /pə'sju:/

Note: students should note that the sound /ə/ occurs in the weak form of the following words:

	Weak		Strong
a	/ə/	or	/æ/
and	/ənd/	or	/ænd/
are	/ə/	or	/ɑ:/
as	/əz/	or	/æz/
at	/ət/	or	/æt/
can	/kən/	or	/kæn/
could	/kəd/	or	/kʊd/
does	/dəz/	or	/dʌz/
for	/fə/	or	/fɔ:/
from	/frəm/	or	/frɒm/
must	/məst/	or	/mʌst/
of	/əv/	or	/ɒv/
shall	/ʃəl/	or	/ʃæl/
some	/səm/	or	/sʌm/

Evaluation : The teacher evaluates the lesson by asking the students to differentiate the vowel sounds in the following pairs of words:-

Bed and bird; cot and cut; bought and boat; matron and metro; gull and girl; mate and met; gate and get; no and nor; pull and pool etc.; and asks them to produce other pairs that may contain some difficulties in their articulation.

Conclusion : The teacher concludes the lesson by asking the students to produce as many words that contain vowel sounds as possible and practice transcribing the sounds.