A COMPARISON OF THE LISTENING ABILITIES OF GRADE NINE STUDENTS WITH THE LISTENING LEVEL REQUIRED OF THEM IN UNDERSTANDING THEIR PLASMA LESSON: HARAR SENIOR SECONDARY SCHOOL IN FOCUS

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Abstract

This study was meant to find out if there is a gap between the actual listening abilities of ninth grade students and the listening level required of them in understanding the plasma lesson. Based on this a null (H_o) and an alternate (H_a) hypothesis were made. The null hypothesis says there is no significant difference between the actual and the expected listening abilities of the students. The (H_a) stresses that the reverse is possible. Then these hypothesis were tested using a chi-squire (X^2) test. The result of the chi-squire (X^2) test rejects the (H_o).

The main research instrument was the listening ability test. To achieve the stated objectives three different teachers' lessons (Biology, Maths, and Physics) were recorded, transcribed and analyzed to determine the levels and type of language functions used. A modified form of Sinclair and Coulthard's, (1975) system of analysis was adopted for the analysis. This analysis revealed the type of language functions that has to be tested. Then, four types of tests were set. The first three were content based the fourth one was general listening ability test. The tests were used to assess the students abilities in the language functions and their strength and weakness in using strategies.

To substantiate the collected data, through listening ability tests, unstructured observation was also conducted. This data helps to find out some factors that affect the students listening comprehension.

The result showed that the actual listening ability of the students was below the level expected of them: The students are weak in:

- Understanding the gist
- Predicting the coming ideas
- Identifying specific functions of description, cause and effect, generalization, comparison and contrast, and purpose.

The findings led to the formulation of possible recommendations. It is hoped that the recommendations could possibly help to bridge the gap between the actual and the expected listening abilities of the students.

CHAPTER ONE

1. Introduction

1.1. Background

The dynamism in technology makes the need for effective communication inevitable. The best tool for exchanging information, opinions feelings, etc., is language. Therefore, today there is a high aspiration on the world to communicate in English. The major reason for this strong desire is that the latest advances in science and technology are available in materials written in English. This in turn gave rise to serious attention to the teaching-learning of the English language. As to this Brumfit- and Robert (1980:158) state that language is necessary part of educational system, and language teaching decisions need to be taken within a broader framework of the aims of education. Thus, the teaching of English language and education are two interacted concepts to the point that it is almost impossible to identify one without the other.

Today in Ethiopia, English is the medium of instruction starting from grade seven up to the tertiary level. It is also given as a subject starting from grade one. It seems that the language has been given due attention as compared to the previous curriculum, i.e. it used to start from grade three.

Despite this, our students' proficiency in English language, according to some subject teachers, is very much below their expectation.

1.2. Statement of the Problem

Listening is an important skill in which students need to gain adequate proficiency. It is a critical means of language learning and so is it the basis for other language skill (Vandergrift 1999, Rost 1990). Particularly, in an educational setting where a foreign language is used as a medium of instruction, as in the case of Ethiopia, listening ability has a paramount influence on the students' achievement in other disciplines. Many

research findings indicate that listening becomes decisive as students proceed to higher level of schooling. Taylor (1964 and Bayrnes 1984) in Scarcella and Oxford 1992:133), for example, assert that learners' failure at college/ university level is more attributed to deficiency in listening ability than other factors, such as reading skill or academic aptitude.

At the secondary senior or tertiary level, especially, the ability to listen is necessary as the students are expected to understand different types of lecture, discussions, presentation and other academic spoken discourse. Besides, academic listening requires learners' ability to distinguish relevant issues from irrelevant one's, ability in integrating the information being encoded with other relevant messages already known (Floweredw 1994).

However, when most Ethiopian students join senior secondary schools, their abilities to listen to their teachers' spoken language and take meaningful notes seem to be inadequate. For example, the researcher of this study teaching English in a high school for a long time has clearly observed this problem. Many high school teachers also claim that these students appear to be strange for listening and note taking practice.

Especially, grade nine students are bewildered and overwhelmed in their first experience of plasma lesson, as they are required to extract most out of the lesson delivered by foreign plasma screen teachers. And this is quite different from their junior secondary school experience. So the inspiration for the study arose mainly from the recognition of the problem.

And in light of this, the research attempts to find out the actual listening abilities of grade nine students in comparison with the listening level required of them in understanding plasma lesson.

Ample of local studies were conducted in the area of listening. The studies focus on the students' listening abilities (Tewolde 1988, Seime 1889), listening strategies

(Berhanu 1993) and the relevance of the content of the listening material (Adinew 2000), etc. However, the study on listening abilities were carried out before the English syllabus for the secondary level have been revised and the new junior and senior secondary English courses have been put into practice through out the secondary schools in Ethiopia.

1.3. Objectives

The general objectives of the research is to find out if there is a gap between the actual listening abilities of grade nine students and the expected listening level required of them in understanding their plasma lessons. To this end, it tries to answer the following specific question:

1. What language level and particular language functions are used by plasma teachers?
2. In which language functions are student weak?
3. In which language functions can students do well?
4. In which listening strategies are they weak or strong?

1.4. Hypothesis

In this study an attempt was made to test the following Null (Ho) and Alternate (Ha) hypothesis.

H_0 = There is no significant difference between the actual listening abilities of the ninth grade students and the expected level required of them in understand their plasma lessons.

Ha = There is a significant difference between the actual listening abilities of the ninth grade students and the expected level required of them in understand their plasma lessons.

1.5. Significance of the Study

The findings of this research are hopped to generate both theoretical and pedagogical insights into the effective teaching learning of listening skill.

Thus, the study might have the following contributions:

1. It may give some clues about the present listening abilities of the students to Ethiopian high school teachers.
2. It also offers some feed back on the implementation of plasma lesson to the curriculum Design and revision center.
3. It might help syllabus designers and material writers to make further improvements in the teaching materials
4. It may help students to develop their meta-cognitive awareness of listening comprehension activities.
5. It paves way for researchers, who are interested for further studies in the area.

1.6. The Scope of the Study

Listening skill encompasses various supra segmental elements such as recognition of intonation, stress, pitch etc. and other nonverbal clues like facial expressions, nodding etc. This study, however, was restricted to the students' listening abilities in understanding the general idea and the various functional uses of language. The test was not concerned with the specific decoding skill at the phonemic level.

1.7. Limitation of the Study

The target groups for the research are grade nine students (2005-2006 academic year) of Harar Senior Secondary Schools. Although this school consists of four-grade level (i.e. 9-12), and the grade nine specifically contains about 1043 students, only 84 students were sampled. This is because of time and money constraints. The students were not selected on the basis of their grade point average in their ministry examination. The sampling was based only on the subjects' age and sex.

Testing listening consists of assessing the students' ability in inferring the speakers' attitude by looking some non-verbal language, such as gesture and facial expressions, but this study didn't consider these parts.

CHAPTER TWO

2. Review of Related Literature

2.1. Listening Comprehension

Many people think that they are listening just because they hear. The two are very different, however. Hearing is simply recognition of sounds while listening implies some conscious attention to the massage of what is said (Rixon 1986:28, Underwood 1989:3, Sesnan, 1997:108) .

Traditionally, listening is also considered as a passive skill. This can be attributed to the following reasons (Abott 1981, Snow and Penknes 1979, Morely 1991):

- The performance in listening comprehension is not available for evaluation as those errors of speaking and writing. For example, many teachers may assume that their students understand what they teach from the point of view of the students' smile and nods as a genuine signs of understanding.
- It is believed that little effort is needed to listen and comprehend in L1 and so is for L2, thus there is no need of training students in it,
- In audio-lingual approach learners were expected to actively produce language forms in order to learn them. Since producing language forms is considered as an active skill listening comprehension, requiring no production, was considered as a passive skill.

However, viewing listening in such a narrow manner has been rejected by many scholars, such as (Underwood 1989, Anderson and Lynch 1988, Vandergrift 1999, Morley 1991) Anderson and Lynch (1988), for example, argue that conceptualization of listening as "a passive act" fails to consider the interpretations listeners make as they "hear" the spoken text according to their own purpose for listening, their expectations, and their own store of knowledge. Vandergrift (1999) also shares this view and asserts that

and complex process in which listeners focus on selected aspects of aural input, construct meaning and relate what they hear to existing knowledge.

2.2. Listening Comprehension Process

Although listening comprehension has held an important place in language teaching ever since the day of audio-lingualism, there has been little direct research on L2 listening. Much of the information we have about L2 listening comprehension is rooted in the work of first language (Richard 1985, Rixon 1983, Rost 1990, Anderson and Lynch 1988)

In recent years, listening to spoken language has been acknowledged in second language theory to consist of active and complex processes that determine the content and level of what is comprehended (Byrnes 1984, Celce- murcia 1995, O'mally etal 1989). Yet the fundamental question, which is vital to psycholinguistics and applied linguistics is how oral input converted to meaningful intake (Flowerdew 1994:8).

Thus, much research has been carried out concerning what processes are involved in listening comprehension and how this pertains to teaching. It is generally agreed that there are two distinct but complementary models that are used to characterize this intake process and to explain how listeners come to understand and recall complex texts. These are bottom-up and top-down processing (Morely 1991, Peterson 1991, O'mally etal 1989, Rost 1994, and Hansen and Jensen 1994). The first model, bottom-up processing refers to decoding the sounds of a language into words, clauses, sentences, etc., and using one's knowledge of grammatical or syntactic rules to interpret meaning. The processing of language information is initiated by external sources i.e. incoming language data, exclusively (Morely 1991, Rost 1994).Here a skill is supposed to be learned from a movement of micro-to macro-level and from controlled to automatic processing. Besides this, a central tent of bottom-up model, according to (Rost 1994: 94), is that listening is a sequential process initiated by incoming data.

The language processing model by clark and clark (1977:49) has been used as a representative of bottom-up processing model. It has the following stages:

1. Listener takes in raw speech and retains a phonological representation of it in working memory.
2. Listener immediately tries to organize phonological representation, identifying its content and function.
3. As listener identifies each constituent, listener uses it to construct underlying propositions.
4. Once listener has identified the proposition for a constituent, listener retains them in working memory and at some point purges memory of the phonological representation. (Based on clark and clark 1977:49).

Nevertheless this model is criticized by Rost (1990:8) for two reasons. Firstly, it sees the speech processing as a linear sequence. Secondly, it does not consider the context or situation in which language is used.

The second model, top-down processing, refers to using background knowledge or previous knowledge of the situation, context, and topic to experience anticipate, predict, and infer meaning. (Petrson 1991, Morely 1991). That is processing of language information emanates from an internal source. Proponents of top-down model say that processing of a spoken input is more complex than the assumption considered in the bottom up model. Choudron and Richards (1986 in Morley 1991:87), for instance, have noted "Top-down processing involves, prediction and inferring on the basis of hierarchies of facts, propositions, and expectations and it enables the listener to bypass some aspects of bottom-up processing".

A current view of listening comprehension process, however, emphasizes the complementary uses of both top-down and bottom-up processing. (Lynch 1994, Morley 1991, Rost 1994, Peterson 1991). The interdependent natures of two models are also highlighted by Harmer (2001). He says that:

> *It is most useful to see acts of listening and reading as interactions between top-down and bottom up processing. Sometimes it is the individual details that help its understanding the wholes sometimes in it is our overview that allows us to process the details.(Harmer 2001:201).*

In sum, listening is a process of an active integration of the incoming knowledge with the prior knowledge and experience. Anderson and Lynch (1988 in Lynch 1994:271) summarize listening comprehension process to be drawn on three main sources of information. Which are stated as follows:

Schematic knowledge

- Background knowledge (factual socio-cultural)
- Procedural knowledge (how language is used in discourse)

Context

- Knowledge of situation (physical setting, participants (listener, speaker etc.,)
- Knowledge of co-text (what has been/ will be said (written)

Systemic knowledge

- Knowledge of the language system (semantic, syntactic, phonological).

2.3. Potential Listening Problems of English as a Foreign Language (EFL) Learner

The fact that listening can not be observed and people can listen in their mother tongue with little effort, most of us take listening for granted (Underwood 1989). However, listening in a foreign language situation is the most demanding skill, as it requires considerable effort to co-ordinate one's knowledge of linguistics, socio-cultural and contextual elements in order to understand and interpret the meaning conveyed (Vandergrift, 1999). Various research findings indicate that listeners' difficulties may be influenced by a number of factors. Yagang (1994), for example, attributes the difficulty of listening comprehension to four sources: the message, the speaker, the listener and the physical setting. Similarly, Flowerdew and Miller (1997) studying learners' strategies and difficulties in listening to academic lectures have reported that students problems were speed of delivery, new terminology and concepts, difficulties in concentrating and problems related to physical environment.

Especially, the main problem L2 learners have, and which L1 learners don't, is the language itself. (Rixon 1986, Anderson and Lynhc 1988). Those foreign language

learners whose first language is based on a different linguistic system suffer from very poor listening skills when exposed to a foreign language.

The English language in particular has some features which cause listening problems for EFL learners. In this regard Rixon (1986:125) forwards four main sources of listening difficult for a learner of English:

- The English structures with the weak relationship between English sounds and the way they are spelt in the written language,
- Changes in sound when they occur in rapid connected speech,
- The rhythm patters of English speech,
- And different ways of pronouncing the same sound,

Another writer, Underwood (1989), considering various aspects of listening comprehension, organizes the major listening problems of EFT learners as follows.

- lack of control over the speed at which speakers speak
- not being able to get things repeated
- the listeners limited vocabulary
- failure to recognize the "signals"
- inability to concentrate, and
- lack of established learning habits.

She sees that these problems as being related to learners' different backgrounds, such as their culture and education. She further points out that learners whose native language possesses the stress and intonation feature similar to those of English are likely to have less trouble than the learners whose L1 is based on different rhythms and tones. Under these assumptions, the learners in the present study, of Ethiopian language background, appear to operate under the least-optimal English language learning circumstances.

2.4. Listening Strategies

As listening is an active and complex process, it requires the listener to employ varied enabling and enacting skills. We use different skills depending on the purpose of our listening (Harmer 2001). The skills used for academic listening, for example, are different form those used for conversational listening. In academic context, listening comprehension involves listening to lecture, oral presentations, seminars, tutorials and other, academic spoken discourse (Robinson 1991).

Richards (1985) has identified 18(eighteen) academic and 33 (thirty-three) conversational micro-skills of listening. Among the 18 academic micro-skills, the following are worth mentioning for they are relevant to the present study. The ability to:

- identify purpose and scope of lecture.
- identify topic of lecture and follow topic development
- identify relationships among units within discourse (e.g. major ideas, generalizations, hypothesis supporting ideas, examples…)
- identify role of discourse markers in signaling structures of lecture ((e.g. conjunctions, adverbs,)
- inter relationships (e.g. cause and effect, conclusion)
- recognize key lexical items related to subject/topic.
- follow different modes of lecture spoken, audio, audio-visual.
- recognize instructional learner tasks (warning, suggestions).

Harmer (1990:183) on his part says that when we are engaged in listening, our understanding of the content greatly depends on the various specialist skills (or strategies) we employ for an effective communication. These specialist skills or listening strategies are explained below.

2.4.1. Predictive Skill

Effective listening is characterized by prediction. If a listener makes a guess as to the sort of a thing that is to be said next, he is much more likely to perceive it and understand it well (Ur. 1984:16). The value of prediction is to constrain the listeners expectations, to set up a frame or context with in which he/she can place the coming massage (Anderson and Lyncy 1988, Rixon 1986).

2.4.2. Getting general picture

This refers to listening for the gist. It entails the listeners' ability to pick out the main points and disregard what is not essential such as repetitions, false starts, hesitations and any irrelevance which are often features of spoken language (Harmer 1990:183).

Regarding this skill Rixon (1988:90) suggests that gist listening should be taught as first stage so as to give students the frame work and make sure that they are not entirely misunderstanding the situation in the text. Getting the gist alone, nevertheless, is not enough. Helping students understand more than just the gist is important for their motivation, and it is appropriate to for many listing situations.

Rost (1990: 232) calls this skill 'global listening' or 'thematic input tasks'. and explains it as follows:

> *"Global listening exercises are aimed at helping students construct an overall sense, or gist of a text. Well constructed global listening exercises can be helpful in developing the ability to identify topics and transition points between topics" (1990:232)*

He further identifies the principles to the development of global listening exercises. These are the following:

- building expectation of the topic prior to listening.
- providing redundant cues to the same information in the text in order that listeners will have several chances to build inferences about the topic.
- providing minimal task structure and allowing for rather 'open' responses
- evaluating the outcome in terms of reasonable interpretations that the learners arrive at rather than on pre-ordained 'correct' response.

2.4.3. Extracting Specific Information.

This skill is applied when listeners are interested only in a particular item from a whole text. Rixon (1983:90) suggests that students need heavy guidance at the begining of their training as to what is the relevant information. This skill can also help them a lot when they are learning other subjects as they can identify the relevant and reject the irrelevant one.

2.4.4. Deducing Meaning from Context

When we listen to a lecture or news etc, we come across words or phrases which we don't know their meaning. We then use the context in which the words or phrases, occur to guess their meaning. Teachers need to train students in the same way as to guess meaning of unknown words (Harmer 1990)

2.4.5. Recognizing Functions and Discourse Markers

The markers are phrases that illustrate a concept in a text. When we listen to phrases like 'in general' or 'to sum up' , for example, we know that the speaker is trying to conclude his idea. According to (Harmer Ibid) recognizing such discourse markers help the listener understand how a text is constructed.

Although learners may fail to understand many of the words in a text, they should be trained to get the topic and central idea. This skill, in addition to helping understanding, is also a first step to practice in note- taking from lecture.

2.4.6. Inferring Speakers Attitude/ Intention

This skill refers to understanding implied meaning rather than the directly stated one. Understanding inferred information such as speakers attitude or intention is another sub-skill which listener should develop. As to this Rixon (1986:92) argues that, "so as to arrive at an inference a listener have to take two or more place of information that he/ she has understood from the words of a text, and combine them to reach a conclusion not actually given in so many words in the passage itself" .

This strategy is common to reading as well. Listeners, unlike readers, however, will have cues from non-verbal features like facial expressions and intonation, tones etc. (Atkin et al, 1996).

2.5. The Emerging Recognition of the Listening Comprehension Skill

Listening is the most frequently used language skill. Researchers (Morely 1991, Rivers 1981) estimate that we listen twice as much as we speak, four times as much as we read, and five times as much as we write. However, this important skill was neglected in the past. That is, it was not taught as a separate language course component on its own right. It was used only to provide the foundation for speaking skill. As Nunan (1988 in Rost 1990: 15) has noted, in terms of syllabus design, both the audio-lingual and the situational approaches emphasized learners' identification of language 'products' and the role of listening was only to reinforce recognition of those products in the syllabus.

In the mid1960, however, Modern day arguments for listening comprehension began to be voiced by various scholars (such as River 1966, New Mark and Diller 1964, in Morely 1991). These scholars underscore "the need for the systematic development of listening

comprehension not only as a foundation of speaking, but also as a skill in its- own" (Morely 1991:83)

Then, as a result of significant shifts in learning theory, linguistic theory and instructional models, since 1969, listening has begun to change from one of neglected to one of increasing importance (Ibid :81). Besides this, the advent of communicative language teaching overlapping with listening based language learning, has given special attention to listening comprehension (Rost 1990, Richards and Rogers 1986).

To day listening comprehension has become the keystone of many theories of second language acquisition and instruction with focuses on the beginning level of second language proficiency (Omelly et al 1989). Peterson (1991) also emphasizes the importance of listening in second language learning saying that

> *No other type of language input is as easy to process as spoken language received through listening. At the beginning stages of language study, before students have learned to read well, it is by listening that that they can have the most direct connection to the meaning. At the intermediate level, when students are refining the grammatical system of the language, listening can be used to stimulate awareness of detail and to promote accuracy. At advanced levels, when written language becomes a viable source of input, a regular program of listening can extend the limits of learners' vocabulary and use of idioms, and build their appreciation for cultural nuances. (1991:106-7)*

Regarding the emerging recognition of listening comprehension procedure, Morely (1991:83-85) has identified three perspectives. The first is listening to repeat. It focuses on imitation and memorization as, in audio-lingual and situational language teaching model of instruction. The second is listening to understanding which aims at helping learners develop listening as a skill in its own right. In other words, it lets learners to understand the meaning of spoken language quickly and accurately, comfortably and confidently, in a variety of settings. The third one, listening as the primary focus in the 'comprehension Approach' to second/foreign language learning, emphasizes early attention to listening comprehension and a delay in oral production.

2.6. The Teaching and Testing of Listening Comprehension

2.6.1. The Teaching of Listening Comprehension

Students do not have an innate understanding of what effective listeners do. In other words, the ability to listen and comprehend, as Brown and Yule (1983:55) have pointed out, is not acquired naturally, rather it should be taught. Therefore, it is the responsibility of teachers to share that knowledge.

Today, many scholars (Rost 1994, Ur 1994, Underwood 1989) stress the need for effective teaching of listening comprehension. And various course books in listening comprehension are available in the market. Classes on listening comprehension are introduced in the curicula. Still, the delivery of listening comprehension too often looks a series of listening tests than listening lesson (sheerin 1987, Brown 1991, and Anderson and Lynch 1988) .

Sheerin (1987:126) illaborates such type of teaching listening practice as follows: "Teachers read aloud or tapes are played, and comprehension questions are attempted by the students, and feed back given in the form of right answers". But in the class the focus should be on teaching rather than on testing. Students can also be rewarded for trying to come up with reasonable ideas rather than just the correct answer during listening activities. That is, students are not expected to produce hundred percent correct answers (Brown and Yule 1983:57-59).

The purpose of teaching listening in language classroom is fundamentally to help students function effectively in real life situation (Rixon 1986, Ur 1984). Thus students should be provided with "authentic" examples and tasks to do.

Besides this, all the listening materials should also be fully contextualized and listeners ought to be trained to fit what they hear into context. Seime (1989:25) citing Harmer (1983) says people usually listen to something because they have a desire to do so and a purpose to achieve. Moreover, they generally have the expectation or prediction about

Currently, task based listening comprehension tests are being recommended. According to Madson (1983:43) a listening comprehension test, now a days, is concerned more with the broader communication than language sub-skills. The broader communication in turn is concerned not with the bits and pieces of language but with the exchange of facts and ideas, as well as interpretation of the speakers intention.

Thus, there are varieties of ways of testing the listening comprehension. These include the following: fill in grids, labeling diagram, matching picture with statements.

All in all, although the task based approach to testing listening comprehension becomes familiar as Brown and Yule (1983) have noted, there is still problem of identifying the source of comprehension error. They have also said that the complex nature of the listening comprehension process it self can be one reason. Listening to and understanding speech involves a number of basic processes; some depend up on linguistic competence, some upon previous knowledge which is not necessarily of a purely linguistic nature, and some up on psychological variable that affect the mobilization of these competence and knowledge in the particular task situation. In addition, there is also an external factors such as the quality of the recorder used in testing listening comprehension (Heaton 1983).

Finally, in the construction of the listening comprehension tests for the present study all the above factors were considered.

2.7 Works on Listening Comprehension in Ethiopia

Many local studies have been conducted in the area of listening in Ethiopia. The studies, focused on: listening strategies (Berhanu 1993), motivation in listening classes (Mulugeta 1997), the relevance of the content of the listening materials (Adinew 2000), and listening comprehension teaching practice (Haregewoin 2003). However, none of the above mentioned research works or other were on listening ability.

The only two researches, conducted on the listening ability of Ethiopian students were that of Tewolde (1988) and Seime (1989).

Tewolde's work focuses on the listening ability of Junior school students. In his study he has reported that the actual listening ability of Junior school students is below the listening level expected of them in understanding their subject areas. Based on this finding, he recommended that the policy of teaching through the English medium in the Junior secondary school either be changed and substituted by Amharic or it should be enforced with appropriate training and remedial teaching. (Ibid: 63).

Seime's (1989) study, on the other hand, focuses on assessing the listening abilities of college students. On his finding, he has reported that there is a big gap between the students' actual listening abilities and the level expected of them in understanding their subject lecture (Ibid 90). On the basis of this finding he has recommend the following:

- Giving training in listening comprehension to all levels of students in general and to the college students in particular.
- Training students on those language functions and strategies which are difficult to them
- Relating the service courses offered at college to other subjects.

Generally, although these studies were conducted a decade ago, they have given strong basis for the change and improvement of the teaching/ learning process in the country.

2.8. What is Satellite TV?

In the past there was a tradition of employing technological devices for limited use only. However, towards the end of the 20thc, people stared employing many technological devices. Welder and Winders (2001) elaborate this further by stating that the convergence of many technological devices led to the creation of fields like

'informatics'. According to these scholars, satellite TV is the result of the convergence of various technologies.

Another scholar Oxford et.al (2001) remarked that:

> *The Technological wave is now driving major changes in the way education is produced and delivered. At the heart of this change is the convergence of the once distinct media of images, sounds, and computer networks into digital multimedia. This is making the world's knowledge base accessible anywhere on the plant through satellites, coaxial cable and conventional copper wire through new techniques to pump large amounts of information down the " last mile". Even the book is being rapidly transformed into electronic learning tool that utilizes sounds, images and motion in addition to printed text (2001:5).*

This means that technological innovations and betterments are also being used for classroom teaching. It also means that classroom teaching can be further facilitated as a result of the convergence of different technologies. The convergence of various technologies would also help create programmes that can be accessible to a large number of people simultaneously.

A number of scholars have underscored the advantages of using TV for classroom instruction. These included (Hambrook (1979) and Mohanty (1994). The latter scholar, Mohanty (1994:78), has enumerated the advantage of TV as follows:

> *No medium of communication has the versatility of television. The most inaccessible places of the world can be viewed live or through filmed program. The wonders of the world, natural or man made can be brought into classroom. Television can be suited to any age or grade level. Television programs may be produced on any topic in art, science, literature or any subject on the earth (1994:78).*

Thus, TV is advantageous in that it can help portray process and things of the past, present and future. TV displays complex and series of ideas, which many not be easily visualized.

In a similar way, Hendry (2001:55) says that," ... educational satellite TV broadcasting started in 1989 in the well developed countries. Forty years on, satellites are finally coming of age as the most extensive, advanced and versatile communication hardware in existence." According to him, satellite TV transmission which is one of the recent instructional technologies was found in the age of telemetric. And therefore, transmissions can help present various ideas together with picture and explanations for a large number of students.

However, using television for classroom instruction is not without problems. One of the problems of using television for classroom instruction is the absence of two way communication. Hambrook (1979) has pointed out that lessons that are broadcast may pass unobserved. In other words, students might not notice important points.

This appears to be the likely problems in out case because it is the plasma teacher that control the flow of information during the plasma lessons. In fact teaches' and students' guides accompany the broadcast programmes. For successful instructional television broad casting, both the television and classroom teaches need to work in collaboration. The collaboration of the two parties can only be real by using a television teacher's guide. The guide is used as a bridge between the plasma teacher and the classroom teacher.

lessons were recorded two times for 80 minutes (two periods). The first recorded lesson was used for analyzing the teacher's language while the second was used for testing the content of each subject. The test was constructed around the language functions used in the lesson. As stated above, this is because students were expected to understand the level and types of language used by the teachers. In other words, the level of structure, range of functions and the vocabulary of the teachers' language were expected to be according to the students' level of understanding. The students were then tested against the language levels they were expected to understand, i.e., the recorded teachers' language. That is why the test was based on both the plasma teacher's and the classroom teacher's language.

To avoid the diversion of the students' attention during the actual observations and recording, the researcher visitted the classes at other times pretending that she was observing and recording. At this time the students were told about the aim of the study so that they would not worry about the presence of the researcher and could proceed with their lessons as normal. By the time the actual recording was made, the class atmosphere was normal, as the students no longer worried about the researcher's presence.

3.3. Analyzing the Recorded Texts

The recorded material was transcribed and analyzed using a modification of Sinclair and coulthard's (1975) system of language analysis. The researcher chose their work because she could not find a more recent book which specifically deals with classroom discourse (English used by teachers and students). Below, first the 'Sinclair and Coulthard (1975) system' and, then, the researchers modified form of analysis will be presented.

3.3.1. Sinclair and Coulthard's System of Analysis

Sincliar and coulthard (1975) analyzed their text dividing the text in a five rank system. The ranks are: lessons, transactions, exchanges, moves and acts. According to them the ranks are defined and described as follows:

The Lesson- is the highest unit of classroom discourse consisting of one or more transaction. Lesson structure can however, vary from subject to subject, or from teacher to teacher (Ibid: 60).

The Transaction- is a unit of class room discourse above the exchange level. It is a combination of different exchanges. Moreover, it is related to a change in topic and marked by a boundary exchange.

The exchange - is defined as one or more utterances (utterance refers every thing said by one speaker before another began to speak).

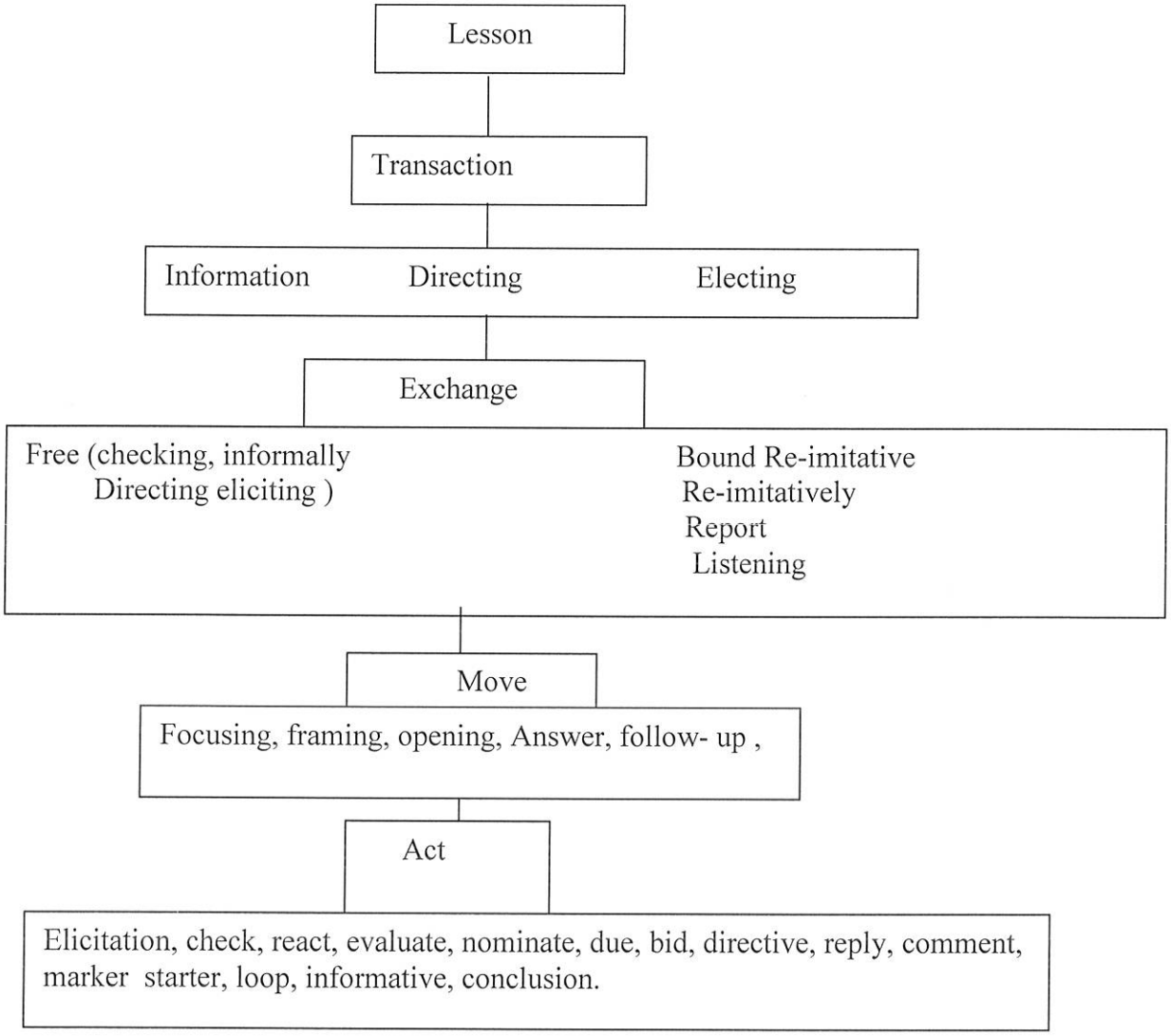
The moves- is defined as the smallest free unit above the level of act. There are five classes of moves. These are the framing, focusing, opening, answering and follow-up moves. The first two, realize the boundary exchange whereas, the others realize the teaching exchanges. (Ibid: 44).

The act- is the unit at the lowest rank of discourse although it corresponds mostly to the grammatical unit, the clause, and the concern in act is not with formal properties of the items, but rather with the functional properties. The four types of English sentences, namely, declarative, interrogative, imperative, and models realize twenty-one discourse acts (Ibid, 27-8). The major acts are elicitation, directive, and informative. The rests are listed as follows: starter, replay, real comment, acknowledge, check, prompt clue, bid, nominate, accept, evaluate, marker, meta- Statements, conclusion, loop, and silent stress.

Generally, the Sinclair and Coulthard's (1975) system of analysis followed an accepted rank system. In other words, one forms the unit above one level or more units of the rank below it except the last rank, the act.

The following figure shows the Sincliar and Coulthard's system of analysis:

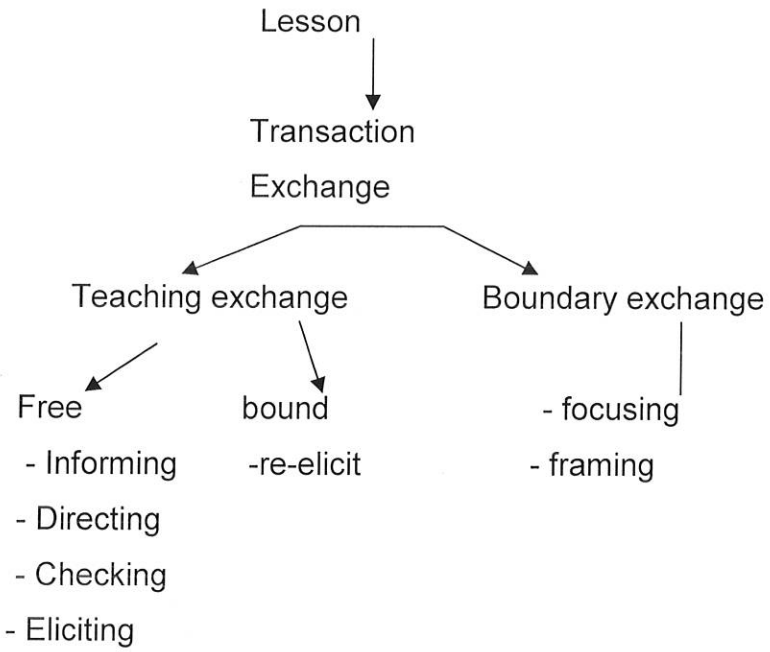
Figure 3.1: Sinclair and Coultard's (1975) system of analysis



3.3.2. System of Analysis used in the Study

In this study the sincliar and coulthards (1975) system of analysis has been adapted with slight modifications at the levels of "Exchange" and 'Act', and the rank 'move' has been omitted. The figure below illustrates the discourse rank used in this study.

Figure 3.2: Discourse Rank used in the Study



3.3.2.1. Modification Made in the Study

Except in the First two levels (lesson and transaction), changes were made in the other ranks. The rational for these changes and modifications is that most of the terms used in the Sinclar and Coulthard's (1975) works didn't fit to the analysis of the present plasma listening texts. Some terms in the level act, for example, tend to be more linguistic rather than communicative (functional). The details for the modification in each level will be given below accordingly.

a. **At the level of exchange**: the researcher has put 're-elicit' instead of 'repeat'. The reason is that plasma teachers do not repeat what they say but the question used by the plasma teachers were repeated by the class room teacher, so re-elicit was used instead of repeat.

b. **At the level of move**: as stated above the level 'move' was not used in this study. This is because the answering move is mainly concerned with the students' language, which is not required in the analysis. Besides this the follow up moves which has the 'inform' and 'comment' structures has been reduced to the 'opening' move in order to minimize the confusion that may arise due to the split.

c. **Modification at the level of acts**: At this level modification was made in 'comment' and 'inform'. Sincliar and Coulthard discussed the structure move in terms of act which are purely linguistic. In this study, since the concern is more with the function of the language than the linguistic structure the structures such as loop, starter, marker , silent stress were left out. In the researcher's analysis the functional nature of the inform act has been sub-divided into definition, illustration, generalization, cause and effect, comparison and contrast, exemplification. These functional acts are stated in Tewolde (1988) as follows:

Examples - Things or facts that can represent general rule
Purpose - is function that is employed or used for something
Definition- a statement or explanation of the meaning of a word.
Compare and contrast - A comparison made between two or more things in order to have the differences.
Description - describing the nature, character or property, etc, of something
Process Analysis - A description of a continuous stage involving many changes.
Cause and effect - that gives reason and produces an effect or result.
Generalization- coming to general conclusion from a number of particular instances.
Illustration - clarifying things by using usual aids.

The above stated terms are used in order to clearly see the functional nature of the teachers' language. It must be clear for students what the teachers mean. For example, teachers may define, describe, illustrate, contrast, summarize, etc. It is expected on the part of the students that they understand these points, i.e., that the teachers are defining, describing, contrasting, etc. These findings helped the researcher decide what to test. Part of the test is aimed at checking if students understand these language functions. This is the main reason why some alternations were made from that of Sinclair and Coulthard. Sinclair and coulthard's acts and that of the researcher are compared in the following table:

Table 3.1 A comparisons between Sinclair and Coulthard's and the Researcher's Act /Function.

Sinclair and Coulthard's act	Researcher's Act/ function
Elicitation	Elicitation - No change
Directive	Directive - No change
Check	Check - No change
Conclusion	Conclusion - No change
Reply	Reply - No change
Loop, marker, starter silent stress	Omitted as they are concerned with structure
Comment	Included under inform - because of the confusion between comment and inform
Inform and comment	Inform subdivided into :- Definition Purpose Process Contrast Cause Description Illustration Example Summary

The clarification of the above table is given in 3.5 above.

3.4. System of Text Analysis used in the Study

The following are conventions used in transcribing and analyzing the language in the recorded text: Generally, the lay out of the text follows the convention developed by

Sincliar and coulthard (1975, 61-2). But the researcher of this study adapted the modification used both by Seime (1989) and Tewolde (1988). This is done for simplification of the analysis. Here the major points to note are:

1) The page is divided into three columns: columns 1 type of exchange, column 2 acts /functions, and column 3 text.
2) Transaction boundaries are marked by a double line.(=)
3) A single line across the page signifies and exchange boundary(-)
4) CRT- represents class room teacher.
5) NV- represents non-verbal reaction of discourse
6) NR-represents no- response to an elicitation.
7) Pupil initiated exchanges are shown by prefixing the exchange label with (s-)
8) P-LT- represents plasma teacher.

3.5. Construction and administration of listening tests

After transcribing and analyzing the teacher's language, the listening ability test was constructed. The following points then were considered:

- The result of the analyzed text enabled the researcher to judge the language function used in the teacher's lesson and the level of language the students are expected to understand.
- The nature of the test was decided by this language function
- The test items reflected the language functions of the teachers and the strategies required of the students in understanding their teachers lesson. To achieve this objective, prior to the recording of the second lesson, each subject teacher was requested to specify the purpose and kind of the coming lesson. Based on the teachers objectives and the functions of the language used in the previous recorded lesson, questions were prepared (for each subject)

Further more, before the second recording took place, the plasma lesson notes were obtained from each subject teachers. This enabled the researcher to set the tests well in advance, and administer them immediately after the second lessons had been recorded.

This also made the test more reliable by avoiding the involvement of memory. Moreover, before administered, the tests were checked by the respective subject teacher.

The tests had four parts, namely maths, physics; biology and general questions for listening ability The first three parts were content based. They were related to the subject matter. They tested the students' abilities in functions (of language) and strategies while operating in academic English. That is they tested whether the students understand functions of definitions, descriptions cause and effects, purpose used by the teachers during the delivery of the lessons. The fourth part (Part IV) is general listening language test. It assessed the students' ability to use strategies while operating in general English. This test helps us to know if they can understand general ideas such as understanding instructions and discrimination of questions from statements, transferring information by matching pictures with statements, tracing maps etc.

All parts of the tests used multiple choice, true or false, short answer items, wh-questions, pictures, diagrams and girds to be filled. As has been said above, part I, II, III tests were administered on the same date that the lesson was recorded, whereas part IV was administered after a week time.

The tests on average took about 4 (four) hours. The table below shows the time take by each test

Table 3.2. Time Taken by the Tests

Subject	hour	minutes
Math	1	15
Physics	1	-
Biology	-	50
General listing ability questions	1	30

Finally, the raw score data of the test was analyzed using a statistical descriptive data analysis method.

3.6. Hypothesis Testing

The Null (H0) and the alternate (Ha) hypothesis which were stated in (1.4), Chapter one, were tested using a chi-square (x^2) test (see Appendix III-B for the detailed statistical computation of the X^2- test).

3.7. Observation

To substantiate the data collected through text analysis and testing, unstructured observation was conducted in the three classes, namely, math, physics and biology. The observation was conducted by the researcher and two co-observer During this time the following were observed: the classroom interaction, that is, student to student or teacher to student interactions, the role of the classroom teacher, the role of the plasma teachers, the students participation, the time given to the students to accomplish their activities or the teachers' way of delivery, accuracy of teachers language and the classroom atmosphere in general. Such data was very helpful to identify those factors which affect the students listening comprehension abilities. For instance, the noise outside the classroom, the eclectic power cut in the middle of the class e.t.c, disturbed them.

The data collected through unstructured observation was analyzed using qualitative method of analysis.

CHAPTER FOUR

4. Results of the classroom observation and the Analyzed text

In this chapter an attempt is made to discuss first the results of the classroom observation and then, the results of the analyzed text (see Appendix I)

4.1. Results of the Classroom Observation

In this study, three plasma classes were observed, namely maths, physics and biology class. The teachers of the first two subjects are foreigners (south Africans) whereas the biology teacher is an Ethiopian. There were also classroom teacher for all the respective subjects i.e., maths, physics and biology. Although these teachers have the role of facilitating and controlling the teaching/ learning process, they have been given only ten minutes of the period's time to summarize the days lesson rather than the classroom teachers.

4.1.1. Methodology Applied and the Class Room Atmosphere

The plasma teachers controls almost 75 percent of the instruction time. As a result, there is hardly any time left for the students' participation. In fact there were a lot of illustrations, diagrams, pictures formulas, and experiments which supported the plasma lesson. In biology class, for example, different types of bacteria with their use were displayed. In physics class, the various types of waves and how sound travel, the experiments made on a tuning fork in a resonance were displayed; in maths, various formulas for functions and relations and those graphs which help students to identify parabola etc, were presented.

In all the three observed classes, the classroom teachers were seen writing their summary notes on the black board while the plasma teachers were teaching. This hindered them from controlling the students' attention to the lesson. So it is better to give the short notes at the end of the lesson.

Student to student or teacher to student interaction was very rear. Only questions were forwarded by the plasma teachers. And the answers were expected from the students. Here the biggest problem was time constraints. The students were not given enough time to answer the questions. Most of the time, they were interrupted or stopped by the plasma teacher while they were trying to answer or even copy the questions.

The physics teacher, for instance, asked them questions and let them discuss the answer with their partners. He gave them 18 seconds. While some were trying to answer and others copying the question, the teacher said, "The time is up". Again in biology class as the students were starting to discuss the given questions with their classroom teacher, the plasma teacher interrupted' them.

As a result of this, almost all the questions raised by the plasma teachers were answered by themselves. Thus, enough time should be allotted for the activities performed by the students to bring a considerable change and improvement in the teaching/ learning process. As Rixon (1983:58) points out any fast delivery will place an extra strain on the learner.

Concerning the classroom atmosphere, the noise outside the class room was a barrier that affects the student's listening comprehension. The loud sound of the plasma TV in one class disturbed the other. By the time the researcher was observing the biology class, for instance, she could hear the maths lesson in the next class more clearly.

The satilite TV itself was also another problem. The TV turned off in the middle of the class lesson, for a minute or two, automatically and then continued functioning. Such disturbance was observed in biology and maths class. During this time the students seemed confused, as they were unable to cope with the normal flow of the lesson. They then, made much noise. Thus, to avoid such chaos a strict measure should be taken by the concerned body.

4.1.2. Accuracy of Language

Tewolde(1988:45) in his M.A thesis has reported that the teachers language in Junior schools was not accurate. And he identified a lot of structural errors made by the teachers. Seime (1989:57) on the, other hand, has remarked that there were very few teachers' language errors which hindered students' understanding.

In the present study, the researcher didn't come across any teacher's language errors which impended the students listening comprehension. There were no errors because they are natives. On the contrary, what she observed was the foreign plasma teachers' accent which was not familiar to Ethiopian student. In relation to the problem of differences in accent Rixon (1986:20) says "Every one feels that some accents are harder. It is probably truer to say that some are less familiar than others, and therefore cause problems for the learner."

In the physics class, for example one student asked the teacher saying "what does doctor's effect mean?" The class room physics teacher laughed and responded as "It is not the doctor's effect' but it is "the 'dopler's effect,' in fact it seems" This impelies that some words are totally odd to the students because of the strange accent of their teachers. Another instance was observed in maths class. One student asked, what is meant by ye!" The class room maths teacher replied saying "It is not 'ye' but 'its 'here' it is the way your plasma teacher pronounced it".

These were a few instances of the problems created by the different accents of the 'maths' and 'physics' plasma teachers on grade 9 students. In connection to this, Ur (1984:20) says, "Many foreign language learners who are used to the accent of their own teachers are surprised and dismayed when they find they have difficulty in understanding".

As the students have just come from their junior schools, listening to the plasma teachers' accent is very strange to them. So, it is advisable to give students experience

had in the text the more proportion it took in the listening test. For example, the number of the function generalization in maths is large. Thus, the item number of generalization took the largest part of maths test. Similarly there were a great number of definitions and descriptions in biology. Then several of the questions in biology test were based on these functions.

In the same way, the physics teachers used so many generalizations; the physics test also reflected this number (see Appendix I and II).

But 'purpose' was not used by maths teacher, so the researcher didn't include the function 'purpose' in maths test.

'Cause and effect', 'comparison' and contrasts were observed more in physics lesson than any other subjects. As a result, the physics test contained a reasonable number of these functions. The function 'illustration' was observed in all subjects though it was found, in greater proportion in physics and maths. Therefore, all the tests contained a reasonable number of 'illustrations'. In all subjects a fair distribution of functions was used, based on their frequency.

It has been stated in chapter two that students need to use different listening strategies (skills) to understand a given listening text. These skills are predictive skills, getting the gist, getting specific information, inferring meaning etc. In this study, some questions were set to check the students' ability in understanding these strategies. The following table shows the percentage of listening strategies used in the tests.

Table 4.6. Strategies and Test Items in Percentage

Listening Strategies	Subject							
	Physics		Maths		Biology		Gen. Listen Questions	
	item No	%	Item No	%	Item No	%	Item No	%
understanding general idea (gist)	I -1	11.1	VII- 4	0.1	II-7 IV-5	15.4	IV-1 V-5	10.5
Transfer of information	III-1-3	77.8	III-1-4 IV-1-3 VI	8	III-34 ,5,6 IV- 1-4	76.9	I-1-4 II-1-2 III-1-4	52.6
understanding –instructions - questions - statements	- - -	- - -	- - -	- - -	- - -	- - -	VI_A 1-2 VI_B 3-4 VI 3-4	0.6 10.5 10.5
predication	I-3	11.1	VII-5	1	V -5	7.7	I-5	5.3

In all the tests there were questions which ask the general idea of the lesson. For example, Item number I-1 in physics, item number VII- 4 in maths, item number II-7 in biology were used to check whether the students understand the gist of their lesson. There were also questions in all the tests which asked the students what they were going to learn in the following programme. This were item number I-3 in physics, item number VIII-5 in maths, and item number V-5 in biology. These were set to check the students' predictive skill.

Similarly some questions were set in the form of filling grids, or matching diagrams with statements. For example, item number III, and IV in maths, item number III, IV in biology

and item number I, II (1, 2) and III in general listening tests were of these type. Such items were used to check the students' skills in transfer of information. Thus, using varieties of test items was possible to check the students listening abilities in using these functions and strategies. The difference in item numbers of the tests depends on the emphasis given to the various functions or strategies to the tests.

CHAPTER FIVE

5. Analysis and Findings of the Results of the Test

In this chapter the analysis of the results of the tests for functions and for strategies will be presented first. Then, the over all results of the test items and the hypothesis testing, which was calculated using the chi-square (X^2) will be described.

The analysis is based on the sample size of 80 students. Of the 84 sampled students four of them could not take part in all listening comprehension tests, for personal reasons of their own.

5.1. Analysis of the Results of the Tests for Specific Language Functions

In the analysis of the teachers language (see Appendix I), we have observed different functions with in the inform exchange and the break down in these functions with their frequency and percentage were given in Table 4.3. To assess the students abilities in these language function, tests were set (see Appendix II – A, B and C). The item numbers for each subject and function were given in table 4.4.

In this section, the over all average results of the students in the various functions used in all subjects will be presented. The following table summarizes this.

Table 5.1 : Average Results in Function

Functions with in inform Exchange	Definition	Description	Process	Purpose	Exempl-ification	Cause and effect	General-ization	Illust ration	Comp. and contr.
Average results	60.3%	42.3%	58.3%	51.8%	61.6%	48.2%	45.0%	59.7	51.4%

From the table we can observe that the students got above the mean average (56.2%) in the following functions: definitions (60.3%), process (58.0%), exemplification (61.6%) and illustration (59.8%). The fact that students obtained above average results in these language functions could be attributed to the way they are taught in the plasma lesson. That means, every illustration, process and examples are supported by various displays diagrams, formulas, pictures, symbol etc in the plasma screen.

On the other hand their results were below mean average in description (42.3%), purpose (53.0%), cause and effect (48.2%) generalizations (45%) and comparison and contrast (51.4%) .

Therefore, our students need some assistance in subject specific listening activities, even in their junior school before they join the high school. This measure might reduce panicking or bewildering and getting lost at their first encounter to the plasma lesson.

Regarding the previous studies on listening, both Tewolde (1988) and Seime (1989) reported that junior and college students, respectively, were weak in illustrations, and process analysis. These results are different from the present one. The reason could be the way of teaching. That is, the present target groups learn using visual aids but the previous ones did not use such aids.

5.2 Analysis of the Results of the Test for Strategies

According to Omally et al (1989:418) "Listening comprehension is an active process in which individual focus on selected aspects of aural input, construct meaning from passages, and relate what they hear to existing knowledge." To do this, listeners need listening skills or strategies. Depending on what they are listening, learners need to apply different listening strategies or listening skills.

As they are high school students, the target groups need to take notes from their plasma lesson. They also need to listen for the gist, the details or the specific information or should be able to predict what their teachers will say next.

In this section, the test items used and the over all average results of the students in strategies will be discussed.

A. Understanding the Gist (general information).

As listed in chapter 4, the test items for understanding the gist are item number I-1 in physics, item number VII-4 in maths, item number II-7 in biology, and item number IV-5 in general listening questions . The students' average result for this strategy is 41.8% which is much below the average mean result (56.2). From this we can conclude that the students are very weak in understanding the general idea of what they have learnt.

B. Average Results related to Transfer of information

A good listener should be able to interpret or transfer the knowledge she/he got from the teacher (Harmer 2 001). G enerally, h igh s chool s tudents a re e xpected t o u nderstand what they learned and transfer their knowledge to other forms (such as pictures diagrams, table etc).

As has been stated in chapter 4, different questions (matching pictures, diagrams with statements, filling grids, etc) were set to test the students' ability to transfer information. Their average result was 56.1% which is almost the same as the mean average 56.2%.

This result indicates that they are better at transfer of information than understanding general ideas of the lesson. From our discussion of the previous section this might be attributed to the students' advantages from the various diagrams, pictures or experiments in the screen.

C. Average Results in Prediction

Predicting what the speaker is going to talk about is one of the enabling skills of a good listener (Willis 1981: in Yagang 1994:188). So learners should have the skill of guessing what is coming next based on the preceding lesson they have learnt.

In the study, the average result of the test items for testing prediction shows that the students were very poor in prediction. It was 43% which is much below mean average.

D. Average Results for Instructions, Questions and Statements

High school students are expected to understand and respond to instruction given to them during classroom interaction.

In this study tests were set (in general listening comprehension test) to check their understanding of instructions question and statements (see table 4.6). The average result of the students in understanding instruction was 52.8% which is below mean average.

However, on the test items set to check the ability of discriminating statements from questions, students got above average, that is, 57.3% for statement and 59% for questions. So we can deduct that they are good at discriminating statements from questions but poor in understanding instructions.

The following table summarizes the over all average results of the students for the strategies:

Table 5.2. Average result for strategies.

Strategies	Understanding the gist	Transferring information	Prediction	Understanding instruction	Discriminating statement	Discriminating questions
average results	41.5%	56.1%	43%	52.8%	57.3%	59%

In the previous studies, Tewolde (1988) reported that the students were good at understanding questions and statements but got lower results in understanding instructions. Seime (1989), in the contrary, said that college students were poor at discriminating questions from statements. One can observe from these results that the present study's conclusion matches with that of Tewolde.

5.3. The Findings of the Hypothesis Testing

In the previous sections (5.1and 5.2) of this chapter, the students' results with regard to functions and strategies were analyzed. The analysis revealed that the students' average score in using the different functions and strategies is below the mean average (56.2), This indicates that their listening abilities is below the level required of them in understanding their subjects. In this section, the findings of the hypothesis tests (see Appendix. III) and the over all test result will be presented. All the analysis is based on the raw score data (see Appendix III A)

The data shows that the highest mark is 85 and the lowest is 44 with the range being 41. When the students' raw score data is put in a frequency distribution, we get the following table:

Table-5.3. Frequency distribution of the row score data

Grades	No of students
40.5__45.5	2
45.5__50.5	18
50.5__55.5	21
55.5__60.5	13
60.5__65.5	15
65.5__70.5	3
70.5__75.5	3
75.5__80.5	2
80.5__85.5	3
	N = 80

Similarly, the mean score was estimated as 56.2. From this the standard deviation and the coefficient of variation, were calculated to be 5.64 and 0.1, respectively.

To test our hypothesis, which is stated in chapter 3, we use a chi-square(x^2) test. Regarding hypothesis testing statisticians (Pagano 1998, Hinkle D, et al 1994), have pointed out that rejecting a null or negative hypothesis provides a stronger test of logic that is, evidence that is inconsistent with a particular negative hypothesis provides a strong basis for its rejection. The test statistic for testing this null hypothesis (Ho) is the chi square (x^2). "A chi-square (x^2) is a data analysis procedure, which helps us address questions about relations between two nominal variable (Pagano, 1998:424).

In this procedure we compare the frequencies observed (fo) in a sample with some expected frequencies (fe) (See this in Appendix III A and B).

X^2 Goodness- of-Fit tests

The terminology "Goodness- of-Fit test" comes from the idea that the test indicates whether or not the observed frequencies are a good fit to the expected frequencies. The fit is good when the observed frequencies are with in a random fluctuation of the expected frequencies and the computed x^2 value is relatively small, or less than the critical value of (x^2) for the appropriate degrees of freedom (df). That is when

x^2 obtained > x2 critical, then Ho (null hypothesis) is rejected for $\alpha = 0.05$

X^2 ob= calculated chi-square

X^2 cri= critical value

df= degree of freedom calculated as df=(R-1) (c-1)

R= Raw

C- Column

(Adapted from Hinkle. D. et al 1994).

So in this study an attempt has been made to verify where the scores are normally distributed. The X^2 test has indicated that the distribution is not normal but skewed towards the lower scores (see figure, 5. 1) below. From the statistical computation we observed that the calculated value of x^2 obs, which is 172.11, exceeds the critical chi squar x^2cri (i.e., the table value of x^2 = 32.671). The difference between the observed and expected frequencies is significant.(see Appendix III for the details).

Figure-5.1 Observed and expected frequency

Therefore, the null hypothesis (H_0) which states that there is no significant difference between the actual listening abilities of grade nine students and the listening level expected of them in understanding plasma lesson is rejected. And the alternative hypothesis (H_a) which states that there is a significance difference between the observed and the expected listening abilities of the students to understand their plasma lesson is accepted. This also indicates that the sample is not drawn from a normally distributed population like the expected one. The histogram (on page 52, figure 5.1) also depicts this as it skewed towards the lower scores.

Similarly, if the actual mean average (56.2) of the raw score of the listening ability test is taken into account, 37.5% of the students have got above average and 62.5% below average. From this we can conclude that the overall listening ability of the students is unsatisfactory. These results were observed in the previous studies by Tewolde (1988) and Seime (1989) (see 2.7, in chapter two, for the results and recommendations of these studies on listening abilities of students).

CHAPTER SIX

6. Conclusions and Recommendations

In this chapter conclusions and recommendations will be given based on the data presented and the discussions made in the previous chapters.

6.1. Conclusions

6.1.1. There is a significant difference between the actual listening abilities of grade nine students and the listening level expected of them in understanding their plasma lesson.

6.1.2. The actual listening ability of the students is below the expected level required of them.

6.1.3. The students are weak in the following language functions: generalizations, purpose, cause and effect, description, comparison and contrast, but they are good at definitions, examples, illustrations, and process analysis.

6.1.4. Concerning strategies the students are weak in understanding the gist and prediction, but they are good at transferring information, and discriminating questions from statements.

6.1.5. Regarding the methodology applied and the classroom interaction, the following conclusions are drawn:

- Most of the period's time was used by the plasma teacher.
- The time allotment for activities is not done on the basis of the length of activities.
- The classroom teachers do not have sufficient time in which to comment on students' response or to help student answer some questions.

- The plasma teachers' language is accurate, but their accents are difficult for the students to understand the lesson.

6.2. Recommendations

In line with the conclusions stated above, the following recommendations have been forwarded:

6.2.1. As stated above there is a gap between the students' actual and the expected listening abilities in understanding the plasma listen. To bridge this gap the following suggestions are given:

- Students should be provided with an intensive course (-with special emphasize on listening comprehension) before they join the high school.
- Students ought to be exposed to different accents of foreign speakers through various listening texts.
- More listening task based courses, with special emphasis on helping students understand the various listening strategies and language functions, should be prepared.

6.2.2. The plasma teachers should be made aware of the listening level of their students.

6.2.3. The time allowed to the students to accomplish their task should be added.

6.2.4. More time should be given to the classroom teachers so that they could help the students with their listening difficulties.

Reference

Abbot, G. et al 1981. **The Teaching of English as an International Language**: **A Partial Guide.** Glassgow: Collins

Adinew. Tadess. (2000). "The Relevance and Adequacy of the Listening comprehension Texts presented in the new textbooks for grade 10". (Unpublished M.A. Thesis) . Addis Ababa: AAU.

Anderson, A and T Lynch (1985). **Listening.** Oxford: Oxford University Press.

Atkin, J. et al (1996). **Skills Development Methodology part I.** Addis Ababa: AAU

Aytaged Sisay (2001). "The effect of Placing Test Items in Different Positions in Listening Comprehension tests: the case of Unity College" (unpublished M.A Thesis) Addis Ababa: AAU.

Berhanu Bogale (1993). "Listen strategies in collaborative Discourse it AAU 4th year students." (Unpublished M.A. Thesis) Addis Ababa: AAU.

Brawn, G. and Y. Yule. (1983). **Teaching the Spoken Language**. Cambridge: Cambridge University Press.

Brown, G. (1991). **Listening to spoken English** (2nded) London: Longman.

Brumfit, J and Robert, J (1980). **An Introduction of Language and Language Teaching.** London: Hatsford Academic Educators Ltd.

Byrne. D (1984). **Teaching Oral English.** London: Longman.

Ceice. Murcia, M. (1995). 'Discourse Analysis and the Teaching of Listening'. In cook, G. and B. Seidlhozer (eds) **Principle and Practice in Applied Linguistics.** Oxford: oup.

Clark, H. and Clark. V (1977). **Psychology and Language: An Introduction to psycholinguistics**, New York: Harcourt Brace Jouanovia int.

Flawerdew, J. (1994). 'Research of Relevance to Second Language Lecture Comprehension an overview'. In Flawerdew, J (ed). **Academic Listening: Research Perspectives.** Cambridge: CPU.

Flawerdew, T. and Miller L (1997). 'The Teaching of Academic Listening and the Question of Authenticity'. **English for Special Purpose**. 16, 27-46.

Hambrook, J. (1979). BBC English by Television. **ELT Documents** 105 London: British Council Printing and Publishing Department

Hansen, C. and C. Jensen (1994). 'Evaluating Lecture Comprehension.' In Flaweredew J. (ed), **Academic Listening: Research Perspectives**. Cambridge: CUP.

Haregewoin Fantahun (2003). "An Investigation of Classroom Listening Comprehension Teaching Practices in Relation to the new English Course Books: Grade 11 in Focus." (Unpublished M.A Thesis) Addis Ababa : A.A.U.

Harmer, J. (1990). **The practice of English Language Teaching.** London: Longman.

Harmer, J. (2001). **The practice of English Language Teaching** (3rded). London: Longman.

Heaton, G.B. (1983). **Writing English Tests**. London: Longman.

Hendry, D.(2001). Instruction Television Changing Role in the classroom Technology Resource http://ts.miva.org/default.atp.

Hinkle, D.et al. 1994. **Applied Statistics in Behavioral Science** (3rded). Boston: Houghton Mizzilin Company

Lynch, T. (1994). 'Training Lecturers for International Audiences'. In Flawerdew J. (ed). **Academic Listening Research Perspectives**. Cambridge: CPU.

Madsen, H. (1983). **Techniques in Testing** Oxford: Oxford University Press.

Moges Abay (2003)."A study of Listening Strategy Training and Achievement: The case of Admas College." (Unpublished MA Thesis) Addis Ababa: AAU.

Mohanty, J. (1994) **Educational Broadcasting Radio and television in Education.** New Delhi: Terhing Publishers Private Ltd.

Morely, J. (1991). 'Listening Comprehension in Second on Foreign Language Instruction.' In Celce Murcia. M (ed). **Teaching English as a Second or Foreign Language**. Boston: Heinle and Heinle Publishers.

Mulugeta Teka. (1997). 'Motivation in Listening Classes of College English at Addis Ababa University. (unpublish M.A Thesis). Addis Ababa: AAU.

Omaley, J.M et. al (1989). Listening Comprehension Strategies in Second Language Acquisition '**Applied Linguistic** 10,419-437.

Oxford, R. et.al(2001) "Creative uses of Technology for learning a second Language" http://www.insa-lyon.fr/Department/CDRL/computers.html

Pagano, R. 1998. **Understanding Statistic in Behavioral Science (5th ed)**. London Brooks Publishing Company.

Peterson, P.W. (1991). 'A Synthesis of Methods for Interactive Listening.' In Celece-Mursia, M. (ed). **Teaching English As a foreign or second Language** (2nd ed). Bostan: Heinle and Heinle Publisher.

Richards J.C (1985). **The context of Language Teaching.** Cambridge: CUP.

Richards, J.C and T.S Rogers (1986). **Approaches and Methods in Language Teaching. A description and A nalysis.** Cambridge: Cambridge University Press.

Rivers, W. 1968. **Teaching Foreign Language Skills**. Chicago: University of Chicago Press.

Rivers, W. 1981. **Teaching Foreign Language Skills (2nd)**. Chicago: University of Chicago Press.

Rixon, S. (1986). **Developing Listening Skills**. London: Macmillian Publishers Ltd.

Robinson, P. (1991). **Esp to day: A practitioner's Guide.** New York: Prentice Hall.

Rost, M (1990). **Listening in Language Learning.** Cambridge: Cambridge: University Press.

_____ (1994). 'On L ine S ummaries a s R epresentations o f Lecture U nderstanding.' I n Fawerdew, J. (ed). **A cademic Listening Research Perspective**. Cambridge: CUP.

Scarcella, R.C and R.L Oxford. (1992). **The Tapestry of Language Learning: the individual in the communicative classroom**. Boston: Heinle and Heinle Publishers.

Seime kebede (1989). "An Investigation of the Listening Ablitics of Bahordar Teachers, College Students." (Unpublished M.A. Thesis). Addis Ababa: Addis Ababa University.

Sensnan, B. (1997). **How to Teach English**. Oxford: Oxford University Press.

Sheerin, S. (1987). 'Listening: Teaching or Testing'. **ELT Journal**, Vol. 41/2 126-31.

Sinclian,J.C and Coulthard, R.M. (1975). **To wards an Analysis of Disourse: The English used by Teachers and pupils.** London: Oxford University Press.

Snow, B, G and Perkins, K. (1979). 'The teaching of Listening Comprehension and Communicative Activities' **TESOL Quarterly**. Vol. 13 no. 1pp. 51-64.

Tewolde G/Yohannes. (1988). "A Comparison of the Listening Abilities of junior Secondary School Students with the Listening level Required of Them in Their subject Areas." (Unpublished M.A Thesis). Addis Ababa: Addis Ababa University,

Underwood, M (1989). **Teaching Listening.** London: Longman.

Ur, P. (1984). **Teaching Listening Comprehension.** Cambridge: Cambridge University Press.

____ (1996). **A course in Language Teaching.** Cambridge: Cambridge University Press.

Vallete, M.R. (1977). **Modern Language Testing**. New York: Harcourt Brace Jpvanovich Inc.

Vandergritt, R. (1999). 'Facilitating Second Language Listening Comprehension: Acquiring Successful Strategies.' **ELT Journal**, Vol. 53/3: 168-75

Wheeler, S.and Ray Winders 2001. **Distance Education and Convergent Technologies 3:** Digital Satellite TV and Data Transmission. University of Plymouth

Yagang, F. (1994). 'Listening: Problem and Solutions'. In Thomas Kral (ed). **Teacher Development: Making the Right Move**. Washington DC: programmes Division United States Information Agency.

Appendix –I

Transcription and Analysis of the Recorded Plasma Lesson.

I A-Transcription and Analysis of the Recorded Math plasma lesson.

Text	Function/ Act	Types of Exchange
Alright	Frame	Boundary
In unit one of this series you were introduced to the idea of the inverse of a relation. You also learned how to obtain the graph of inverse relation from the graph of the relation.	Description	Inform
In this section we shall investigate when a graph of a relation is a function and when not.	Focus	Boundary
Since we are dealing with functions only, let's recap what a function is.		
When is the inverse of a function also a function? (NR)	EL	Elicitation
Who can answer this question? (CRT)	EL	Re- Elicitation
Let's see it together.	D.	Direct
A function definition. When each specific first co-ordinate matched with one and exactly one second co-ordinate. In a function for every x we can find only and exactly one y. We can state this a little differently; no order pairs have the same first components with different. Second components. This means that if we have functions that have x values in two order pairs are equal. It is necessary that the y values are also the same.	Definition Description Generalization	Inform
Students please write this down on your books.	D.	Direct
Remember, we used these methods of checking our relation to see they were functions. We looked for duplicate x values and if they have different. Y values, then the relation was not a function.	Summary	Inform

Text	Function/ Act	Types of Exchange
Now, if a function has this additional characteristic, that is, if no order pairs have the same second component with different first component then its inverse is also a function.	Generalization	Inform
Students, please write this down on your book.	D.	Direct
Now,	Frame	Boundary
Let's look at an example to understand what the statement means.	Focus	
In a function f, whose inverse is also a function if (x, y) and (x_2, y) are in f then $X_1 = X_2$. In other words, In a function if we find two ordered pairs with equal y values, it must mean that the corresponding x values must be equal.	Exemplification Generalization	Inform,
Write down those statements, Let's compare the two statement Make sure that you understand the differences between the two statements.	D.	Direct
Remember that you find the inverse of f we have to interchange the co-ordinates of each order pair in the original function. This means that we interchange the first components to find the inverse.	Generalization	Inform
Thus, a function can't have two pairs with the same second components with different first components in order for its inverse to be a function. Now, to determine a relation has an inverse, which is also a function, both these relations must be made by f.	Purpose	Inform

Text	Function/ Act	Types of Exchange
What does this tell us about our function f? (N.R)	EL.	Elicitation
Since a different element in the domain of f has distinct images, it implies that our function has to be one to one in order for its inverses to be a function.	Cause and Effect	Inform
Well,	Frame	Boundary
Let's look at a few examples in order to understand this	Focus	
Look at this relation f.	D.	Direct
We find the inverse of f by just interchanging the first co-ordinate with the second co-ordinate in each order pairs. The set of the function has the pairs {(1 and 2) (3,2) (4,3)} Now, let's answer this question,	Exemplification	Inform
S. Is f a function? Yes Yes, it's a function since for every x we can find only and exactly one y.	E.L P-R- T-EV.	Elicitation
b) Is the inverse a function? No, it's not But it is a function	EL S.R (CRT) EV	Re-elicitation
So,	Frame	Boundary
In this example we notices that, since f was one to one, when we interchange the co-ordinate for every x-we can still find exactly one y, paired with it. This means that the resulting inverse relation was also a function.	Focus	

Text	Function/ Act	Types of Exchange
Let's look at the following example Answer the questions	D.	Direct
F = { (5,-2), (4,-2), (2,3)} a) Find f^{-1} (inverse of f) b) Is f a function? c) Is f one to one? d) Is f^{-1} a function?	EL.	Elicitation
What is your answer for this? (by CRT) (In audible)	EL. SR	RE-Elicitation
Yes __? Inaudible	E1 S.R	Re- elicitation
It is time for us to work together, Oke?	Check	Check
Now the inverse is simply set containing the order pairs (f = {(-5,2) (4, -2) (2,3)}. The original relation f is indeed a function. For every x we can find only and exactly one y?	Illustration (Process analysis)	Inform
The answer to C is no, since a function f is not one to one, and since two different x values are being traced to the same y value. The inverse is not a function since they are duplicate x value with different y values. That is they are two pairs with first co-ordinate with -2, but they have different y value.	Cause and Effect -Comparing and contrasting	Inform

Text	Function/ Act	Types of Exchange
Before we continue looking at the requirements of an inverse relation to be a function, we need to recap what the domain and range of an inverse function is	Focus	Boundary
What is the domain and range of the inverse of a function f? (NRϕ)	EL.	Elicitation
• The domain of the inverse is the range of the function f, and, • The range of the inverse is the domain of the function. i.e Domain of f^{-1} = Ranges f Range of f^{-1} = Domain of f Written on the board	Generalization	Inform
• Please write those down on your books.	D	Direct
Now, if f is a mapping from set A to set B. and f is one to one there the inverse of f maps set B to set A. By the definition of the inverse, the domain of its inverse must be the range of f. But they already deduced that for the inverse to be a function f had to be one-to-one	- Description - Exemplification Comparing and contrasting (Generalization)	Inform
So, that mean that the domain of the inverse must necessarily be equal to the range of f which must be equal to B. Now the range f is the Co-domain B. And this implies that the function must also be ONTO	Description	Inform

Text	Function/ Act	Types of Exchange
(Plasma teacher intermits –) That one has something strange, doesn't it	Check	Check
Let's check your solution.	D.	Direct
First we check what value f so called g is in (fog)(x) Now we first plug g of x in to f of x. We get 3(x+2/3)-2. Doing the algebra the 3 is cancelled out. After simplifying we get the result x. Now we substitute the expression for f of x which is 3x-2 into g of x.	Illustration (Process)	Inform
Simplifying we end up with 3x/3. Our result here is also x. That is proving that f and g are inverses of each	Process (Analysis)	Inform
Well,	Frame	Boundary
How did you do with that lesson. Here is the last exercise for today's lesson	Focus	
Determine whether f (x) = 3x-2 and g (x) = $\frac{1}{3x+2}$ are inverses of each other.	D	Direct

Text	Function/ Act	Types of Exchange
What is you solution, (CR-T) They are inverse Yes, they are	EL. SR= (CRT) EV	Elicitation
That one has something strange. Doesn't it?	Ch.	Check
Now to evaluate f so call g, we plug g of x in to f of x. So we insert 1/3x+2 in place of x in f. Now we have this f =3(1/3x+)-2. Simplifying this we get x + b –2 = x + 4 ≠ x. which is not equal to x.	Illustration Process (Analysis)	Inform
So we stop here. And f and g are not inverses of each other.	Conclusion	Inform
Do you have any question? Yes What does it mean by "ye?" It isn't 'ye'. it is 'here '	EL S.R S.EL T-R	Elicitation
Now,	Frame	Boundary
That brings us to the end of the lesson. Next time we will learn quadratic equestrian.	Focus	

Appendix I-B Transcription and Analysis of the Recorded Plasma Lesson-Biology

Text	Function/ Act	Types of Exchange
In the previous lesson we learned about micro –organisms. So, what is micro –organisms? (NR)	Focus	Boundary
Micro-organisms are very small organisms. They are sometimes called microbs. They can only be seen clearly with a microscope.	Definition.	Inform
Micro organisms include virus, bacteria, protosis and some fungi	Description	Inform
Well,	Frame	Boundary
Today, we will see the useful aspects of micro-organisms.	Focus	
There is a general tendency of associating micro-organisms with disease. However, of the large number of micro-organisms on earth, only a few are able to cause disease.	Comparison and contrast	Inform
We classify them as pathogenic and non-pathogenic micro-organisms.	Generalization	Inform
So, what is pathogenic micro-organisms? (N R)	EL.	Elicitation
OK, pathogenic micro –organisms are disease causing while non-pathogenic micro-organisms are non-disease causing.	Definition Comparison and Contrast.	Inform

Text	Function Act	Types of Exchange
Non-pathogenic micro –organisms are absolutely essential for the continuous recycling of organic material in nature.	Generalization	Inform
Let me illustrate this (there is a diagram on the screen). Students, study this drawing carefully.	D,	Direct
It represents leaving organisms in a chain. All organisms are build of chemical elements. This elements come from the environment in which the organisms live, That is from the soil, air, rock and water.	Illustration	Inform
For these nutrients to remain in a balanced state in the environment, there must be a constant recycling of such nutrients from the soil, air and water and brought the leaving organisms back again. This recycling takes place over and over again.	Purpose	Inform
All organisms are a store house of essential elements of nutrients. As long as the organisms live the nutrients are trapped in their bodies. When the organisms die, nutrients are returned to the environment.	Generalization Process	Inform
How are these nutrients return to the environment?	Focus	Boundary
Micro-organisms like bacteria and fungi return the organic material into the environment in a food wave and then make food recycling possible.	Cause and Effect	Inform.

Text	Function/ Act	Types of Exchange
Micro-organisms involved in breaking down dead bodies and releasing the trapped organic materials are called decomposers. Decomposers are the main agents of decaying.	Definition	Inform
Please copy down this.	D.	Direct
Why is decaying important?	Focus	Boundary
If decaying did not take place, the world will hide piled in dead bodies. Also all the nutrients from the soil will be exhausted and trapped in dead bodies if not decayed. When microbs get to work in a dead body, they break its complex substance in to simpler one.	Description	Inform
Carbohydrates, for instance, broken down into carbon dioxide and water.	Exemplification	Inform
Protein into simple nitrogen salts. These simple substances are daily absorbed by plants, which build them up again into complex materials.	Process	Inform
So decays put back chemicals in to the atmosphere, decay which plants took out.	Conclusion	Inform
Is that Oke?	Ch.	Check
Some m icrobs are a ble t o a bsorb n itrogen from the atmosphere and make available to plants Nitrogen fixing bacteria are an example of these.	Exemplifying	Inform
Earlier we discussed the role of micro- organisms in nutrient recycling.	Description	Inform

Text	Function/ Act	Types of Exchange
Now look at this picture (on the screen).	D.	Direct
The picture shows one example of the useful roles that bacteria plays.	Illustration	
The swelling on the roots of the legumes are called nodules. These nodules are filled with visorb bacteria.	Definition	Inform
Here the bacteria convert atmospheric nitrogen to inorganic nitrogen that the plant can use. This is that plants mostly need nitrogen fertilizers and they even make the soil more fertile for other plants growing later on the same soil	Cause and Effect. Purpose	Inform
The importance if nitrogen fixing bacteria and decomposer can be seen in this diagram (the picture displayed on the plasma serene).	Illustration	Inform
Now study it carefully.	D.	Direct
Have you observed well? (N R	EL.	Elicitation
Now, identify all the microbs represented in this diagram (NR)	D.	Direct.
• Now, let's do it together. The following microbs are represented in the cycle = d • Decomposers • Nitrifying bacteria • Denitrifying bacteria • Nitrogen fixing bacteria	Description.	Inform
Well,	Frame	Boundary
Now, let's see other microbs essential to our life	Focus	

Text	Function Act	Types of Exchange
Fermentation is the chemical breakdown of sugar by bacteria or yeast in the absence of oxygen. The product of this process are alcohol and carbon dioxide	Definition	Inform
I suggest you copy this	D.	Direct
The most common fermented foods are milk, and diary products such as butter, cheese and yoghurt.	Description	Inform
In the past fermentation were used as a means of milk preservation. Today, the primary purpose of this fermentation is not so much for preservation but for the production of milk, cheese and yoghurt with desirable and distinctive textures and flavours	Purpose Comparison and Contrast	Inform
What are some of the flavours of milk products? (N R)	EL	Elicitation
To answer this question study this picture carefully (the picture is displayed on the screen)	D. Illustration	Direct. Inform
Can you identify the different milk products? (N R)	EL	Direct
What kind of milk products can you see? (C R T), (N R.	EL	Re-elicitation
That is an easy question isn't it? (N R)	Ch.	Check
Now, see the answers.	D.	Direct
Your list include the following. - skimmed milk - fresh fat milk - condensed milk - evaporaled milk. - Fresh half fat milk	Description	Inform

Text	Function/ Act	Types of Exchange
* These distinctive flavour and different characteristics of the milk is due to the nature of micro –organisms used in the processing.	Cause and Effect Exemplification Purpose	Inform
The thin lacrosse in photographs are lacto bacilloce bulga vieus bacteria. This bacteria are used to make yoghurt		
Yoghurt is a fermented slightly accidid food made from milk.	Definition	Inform
Yoghurt is usually made from concentrated milk that is soured by they bacteria lacto bacillus buigaricus. This bacteria together with another micro-organisms, strepstococu thermophilus, which is added to produce the required acidity and flavour	Description (Purpose)	
Please copy this down (the note is written on the screen)	D.	Direct
Bacteria are also used to sour milk in cheese making. The different types of cheese produced then depend on the type of milk used and the bacteria used in the process, Usually lactocucus and lacto bacillus are used here. They produce acidity and flavourity components.	Purpose Generalization	Inform
Certain microorganisms such as yeast and some bacteria can exist in the absence of oxygen. Such organisms are called **anaerobs**. An anarob is an organism that obtains all the energy it needs from food with out the use of oxygen. What is involved there is called fermentation.	Definition	Inform

Text	Function/ Act	Types of Exchange
Fermentation by microbs in food and beverage industry can also, without desirable texture and flavour, be produced. This increase the nutritional quality and desirability of foods. Examples	Cause and Effect	Inform
Of these are bread and drinks such as beer and wine. The fermentation agent in bread is yeast.	Exemplification	
Yeast are the fungus that have important uses in both wine making and bread making. This single celled fingi are used to ferment sugar and in rice, wheat, barly and corn which are used to produce alcoholic drink. So Beer, wine, cheese and several other commercial product processes involve fermentation by different kinds of bacteria and fungi.	Definition Generalization	Inform Inform
In the past micro-organisms were used to ferment juices and cerials to make alcoholic beverages. Many of these products are today prepared in ways similar to those used years ago.	Comparison and contrast	Inform
Look this illustration for instance	D.	Direct
Produce the Juice containing sugar. The skin of grapes have yeast going on them. The yeast are mixed with the Juice when the grapes are crushed. The yeast then ferment the sugar on the Juice and this produces alcohol.	**Exemplification Purpose Illustration** (Process)	Inform
Culture is sometimes added to help fermentation. Vinegar is produced when the bacteria continued the fermentation process. Bacteria break down the alcohol produced from sugar when the fermentation to acitc acid or vinegar.	Purpose Illustration (Process)	Inform

Text	Function/ Act	Types of Exchange
Beer is produced in a similar way to one. The process is called brewing.	Comparison Definition	Inform
* Look this diagram. It shows steps in brewing.	D.	Direct
Can you identify the stages in brewing? (N R)	EL	Elicitation
Alcoholic drinks such as Tej' and 'Tella' are made in Ethiopia. These things are made fermentable substances using micro-organisms.	Exemplification	Inform
So any industrial beverages are produced using micro-organisms.	Generalization	Inform
Bread is also made using yeast. During fermentation carbon dioxide gas is given off. When doub is heated the bubles of carbon dioxide expands and the bread rises. Doub is made from a mixture of flour and water. Yeast is added to this. Yeast produces carbon dioxide that makes the doub rise. The result is while bread.	Illustration (Process)	
Student, it is time to leave you . Here is a short summary of what you have learnt so far.	Focus	Boundary
• Micro –organisms are extremely small and can only be seen with a microscope. • Micro –organisms include bacteria, viruses □rotests and fungi. • All microbs are not disease causing	Summary (Generation)	Inform
But they are very essential to human being, especially for food, beverage industry and diary production.	Compare and Contrast	Inform

Text	Function/ Act	Types of Exchange
So,	Frame	Boundary
This is all for tody's lesson. Next time see we'll classification	Focus	
Students I hope every thing is clear from your plasma lesson isn't it? (CRT) yes.	S.R	Check
In the lesson we have seen that micro-organisms are very small. And can be seen only by microscope. We also saw that all micro- organisms are not harmful. Some are very useful.	Summery	Inform
Now, do you have any question from what we learnt? (N R)	Nominator	Elicitation
So,	Frame	Boundary
If you don't have any, let me ask you some questions now. (C R T)	Focus	
We said that some micro organisms are important so what is the useful aspect of micro-organisms? N R)	EL	Elicitation
Can any one tell me this? (N R)	Nominate.	Re-Elicitation
There are different kinds of micro –organisms, which are beneficial for human being, they are non pathogenic micro-organisms. They are used in food, diary and beverage industry	Description	Inform
What is a pathogenic micro- organism? (N R)	EL.	Elicitation
Have you got my question?	SR-Yes	Re-Elicitation

Appendix I –C- Transcription and Analysis of the Recorded Plasma Lesson – Physics

Text	Function/ Act	Types of Exchange
Well,	Frame	Boundary
Students, to day we will learn about the notes and frequencies made by musical instruments. We'll also look at resounance.	Focus	
In the last lesson we looked at an- intensity level scale, which allows us to judge intensity level as our ears do.	Description	Inform
The intensity level is measured with a deaibel. The intcnsity level is equal to ten times the logarism 'I_o' divided by I not deable (= 10 Log I/I_o dB) $^{-w}$, (written on the screen). I is called the intensity I_o is the reference in intensity.	Definition generalization	Inform
Now,	Frame	Boundary
Let's try an example	Focus	
What is the intensity level of a sound that is equal to 10^{-10} w/m^2? (N R)	EL PR-NR (ϕ)	Elicitation
• Ok, let's calculate the intensity level • We have been given the (I_o = 10^{-2} w/m^2.) Then we have a formula to find the intensity level at zero (I_o) = 10 Log (I/I_o) dB. We substitute 10^{-12}w/m^2 for I. Then we get OdBcintensity level = 10 Log $\frac{(10^{-12}\ w/m^2)}{I_o}$ db Thus I_o is equal to 10^{-12} w/m^2. Therefore: I is 6X10 = 60DB(decibel)	Illustration (Process) Conclusion	Inform

Text	Function/ Act	Types of Exchange
Recall that we also learned the dopler effect. When a n o bject t hat i s m aking a s ound d oesn't move, the sound waves form circles. All the circles will have the same center. Anybody who is listening to the sound will hear the same sound at any distance from the sound source.	Generalization	Inform
• Look at the letters A,B, C in the circle, for example.	D.	Direct
A person standing at position 'A' will hear the same sound as the person standing at position B or C.	Exemplification	Inform
If the object that is making a sound is still moving, the sound wave is still making a circle but the circles will not have the same center.	Generalization	Inform
This means that in the direction in which the object is moving the sound waves are closer together but in the opposite direction with the object is moving from the sound waves are far apart.	Comparing and Contrast	Inform
As a result people listening at different direction would hear a different sound. Therefore, the frequency of the sound will depend on where the person is listening, But the speed of the sound will be the same for all the listeners.	Conclusion	Inform
Now	Frame	Boundary
Let's look at musical notes and frequency.	Focus	

Text	Function Act	Types of Exchange
Now	Frame	Boundary
We will see kinds of musical instruments.	Focus	
There are different kinds of musical instruments. And we divided them into three categories. The first group of the instrument is called string instrument. And this is because all the instruments in this group have strings. An example is the piano when the keys in a piano are pressed they cause the strings inside the piano to vibrate. The string instruments also include instruments like kirar, guitar as well as the	Description Definition Cause Exemplification	Inform
All string instruments use a vibrating string to make sound waves.	Generalization	Inform
The second group of instruments are called wind instruments. Some examples are flue to, which you can see here, the trumpet and the saxophone. All these instruments have an air filled pipe or clamp. And when the vibrations are set up in this air clamp, sound waves are made. The last group of instrument are called instrument. Percussion includes drums and kebero. Percussion instruments form sound waves constructed by something such as a drumstick or a palm of a hand.	Definition	Inform
Now,	Frame	Boundary
Let's answer the following question	Focus	
To which group of instruments do the following belong? • the trumpet • the violin • the bell	EL.	Elicitation

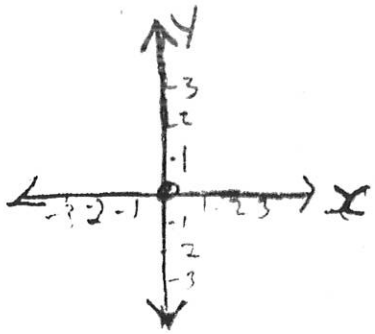
Text	Function Act	Types of Exchange
Have you understood the question? (C R T). Yes	EI. S.R-	Re-Elicitation
Now, who can answer the first? (N. R) The trumpet is music instrument. No, no,	EL. T. EV S-R	Re-elicitation
• Any other student, please? • It is wind • Yes, it is a wind instrument.	EI S-R T.EV	Re-elicitation
• What kind is the second instrument? • Wind No, • Try, try again	EL. S.R TE	Re-elicitation
Let's take a look at how you categorizes them (P.T-interrupts them)	D.	Direct
Now let's take a look at a trumpet.	D.	Direct
You play the trumpet by blowing air in pipe or an air column. This is how we know the trumpet is a wind instrument.	Description	Inform
The next instrument, the violin has strings. When we strike the strings with an instrument called a bow it causes them to vibrate because the violin is a string instrument.	Definition Cause and Effect	Inform
The next instrument is the bell. A bell makes a noise with a little ball inside the bell hits the shell of the bell. So the bell is a percussion instruments	Description	Inform
Well,	Frame	Boundary
The next topic we are going to learn about is the resonant	Focus	

Text	Function Act	Types of Exchange
Objects such as a glass has a natural frequency S. When we run a finger across the top of a glass, a sound is made. The frequency of the finger is the same as the natural frequency of the glass. We can also use a tuning fork that is vibrating at the	Exemplification	Inform
And when the glass is vibrating we actually mean that it is resonating The frequency of the tuning fork is the same as the natural frequency of the glass. So the tuning fork will cause sound wave to be made in the air with this frequency. This sound wave will then hit the glass and cause it to vibrate.	Definition Cause and Effect	Inform
And the glass will also cause sound waves to be released. The vibrations in the glass start off small and then become bigger until they are the same as the tuning fork's vibrations. So the noise, made by the tuning fork's vibration, sounds louder than it did before. This is because the tuning fork and the glass are making the same sound together. The tuning fork is the source of the vibration or impulses and the glass is the system to which the vibrations or impulses are applied	Comparing and Contrast Cause and Effect Comparing Contrast Description	Inform

Text	Function Act	Types of Exchange
Therefore, we get resonance when oscillation or waves with a certain frequency causes oscillations to be made in as system. This occurs when the natural frequency of the system is the same as the oscillations applied to the system.	Generalization	Inform
Clear?	Ch.	Check
We can also see resonance's occurs in other system which are oscillating or vibrating. For example, resonance occurs in pendulum.	Exemplification	Inform
Let's look at a resonance in pendulum in more details.	D.	Direct
Here we can see two pendulums swinging back and forth hanging from the same string. Now, if we let one of the pendulum swings, where the second pendulum will remain still, we see after awhile the second pendulum beginning to swing. This is another example of resonance. The first to set up in the second to set up in the second pendulum. This vibrations travel from one pendulum to the other through stings that connects the two so the second pendulum will resonate and also starts to swing.	Illustration Process	Inform
Let's try an example,	D.	direct
If one set up a pendulums as shown (on the screen) which pendulum will swing the most if pendulum A is made to swing and the other are at rest here A, B and C on the screen drawing. Give a reason why?	EL	Elicitation

Text	Function Act	Types of Exchange
• You understand the question, didn't you? (C R T) (N V)	Ch. S. R	Check
* Ok! Recall your previous knowledge about frequency	D.	Direct
How did you do? (P.T) (N.R)	EL	Re-elicitation
• Pendulum C was swing the most because the string of the pendulum is the same length as pendulum A.	Cause and effect	Inform
Let's look at why?	D.	Direct
Recall the period T is two times pie times the square root of the length of the pendulum divided by the acceleration due to gravity. (T = 2ll $\sqrt{\frac{l}{g}}$ m (written)	Illustration	Inform

Text	Function Act	Types of Exchange
We saw that they are three kinds of musical instrument what are they? Grtary, kirar, dram	EL S.R	Elicitation
Try again, come on, I said, what are the three kinds of musical instruments? (N R)	T.E V EL	Re-elicitation
The three groups of musical instruments are string instrument, wind instrument and percussion instrument.	Description	Inform
Do you have any question, class? (N.V)	EL (N V)	Elicitation
It every thing clear?	EL S. R yes	Re-elicitation
What is the doctor's effect? It is not the doctor's "effect," It is the Doppler effect.	S. EL T. R	Elicitation
Ok,	Frame	Boundary
This is all for today	Focus	
Good bye, a see you next time	D.	Direct



PART-VI

1. Look at the graph on your answer sheet.

And show the graph of $f(x) = 2x^2$ on the xy co-ordinate plane.

PART VII

A. Listen to the following questions and give the correct answers

1. Give two examples of a parabolic function.
2. What is the vertex of a parabola.?
3. What is the domain of a parabolic function.?
4. What did we learn today.?
5. What do you think the next topic you will learn about l.

Answer sheet for Maths listening comprehension tests.

General Direction: you will listen to some questions and answers based on the 'maths' plasma lesson you have just learned. The questions are not found in your answer sheet, so listen carefully and give your answer in your answer sheet.

Part I. Choose the correct answer and put a tick (✓) under the letters A, B, C, or D of your choice.

	A	B	C	D
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____

Part II. Listen to the following statement if it is 'true' put a tick (✓) and if it is false put a cross (x) on the space provided below.

1. _____ 4. _____
2. _____ 5. _____
3. _____ 6. _____

Part III. Listen to the tape and fill in the gird below by putting a tick (✓) in one of the column to show your answer.

	The function	opens up ward parabola	opens down ward parabola
1			
2			
3			
4			

Appendix II-B Listening Comprehension Test (Based on the Plasma-Lesson Physics), entitled wave motion

- General Directions:- Listen to the following questions which are based on the plasma lesson you have just learned. Then, write the answer on the space provided in your answer sheets, The questions are not printed in your answer sheet, so listen very carefully.

PART – I

Complete the following sentences

1. The topic of the lesson is _____.
2. The lesson begin by defining the overlapping of two wave called _____
3. At the end of the lesson, the teacher has introduced you to _____ that you are going to learn –in the next programme.

PART –II

Choose the correct answers and put a tick /√ / below the given letters A, B, C, D, (in your answers sheet)

1. The distance between the two successive crest is called _____
   - A. amplitude
   - B. pendulem
   - C. wave length
   - D. frequency
2. The speed of sound increases when the temperature _____
   - A. Increases
   - B. Decreases
   - C. remains the same
   - D. is at O^0_C,
3. Frequency is inversely proportional to _____
   - A. B. T
   - C. V
   - D. f
4. Compression areas are _____
   - A. High pressure area
   - B. Low pressure area
   - C. densed with molecules
   - D. not detected.
5. Sound wave can travel through _____
   - A. gas
   - B. liquid
   - C. solid
   - D. all

6. Radio and TV are examples of ____ wave.

A. sound
B. light
C. electromagntic
D. All

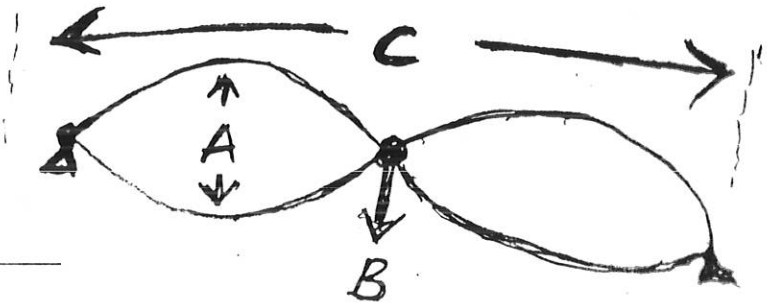
7. The process of making an object vibrate because of the other object's vibration is called___.

A. resounance
B. Frequancy
C. standing wave
D. oscillation

PART –III

I- A. Match the letters A, B and C on he diagram of the standing wave below. with the words you hear

1. **Wave** _____
2. **Node** _____
3. **Antinode** _____



B. 4. The name of the diagram is _____

PART-IV

A. Listen to the following statement and put a tick /√ / if the statement is 'true' and a cross /x/ if it is 'false'

1. Electro magnetic wave travel through a vaccume.
2. Longitudinal wave rarefacts but transversal wave propagates
3. Both transveral waves and longitudinal waves have wave length.
4. Sound produced at a high altitude is as strong as the sound produced at the low altitude.
5. The bigger sound wave is formed in a medium where the molecules are less dense.

PART-V

Listen to the following specific features and fill in the grids by putting a tick /√/ in one of the columns to show your answer.

No	Specific features	Light wave	Sound wave
1	Travel through a vaccum		
2	Travel through a speed of 3 x 10^8m/s		
3	Is a longitudinal wave		
4	Is transversal		

PART –VI. Put a tick below if your answer is 'yes' and put a tick below 'no' if your answer is 'no'

1. Can a sound travel through water?
2. Does a standing wave cause. Both longitudinal and transversal wave?
3. Does the cold temperature cause the molecules to compress?
4. Is anti node formed by expansion of molecules?

Part-VII. Listen to the following questions and Instructions and write your answers.

1. What is the frequency of a sound wave which travel in 20 seconds?
2. Give two examples of a medium through which sound waves can travel.
3. How is standing wave to happen?

Answer sheet for physics listening test

General Directions : Listen to the following questions which are based on the 'physics' plasma lesson which you have just learned. Then write your answers on the space provided below.

- The question are not found in your answer sheet, so listen very carefully,

Part I. A complete the following sentence

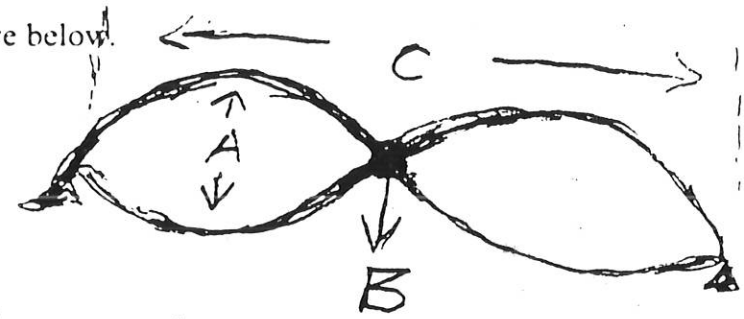
1. _____
2. _____
3. _____

Part II. Listen the questions and choices then put a tick under one of the letters A, B, C or D below.

	A	B	C	D
1.				
2.				
3.				
4.				
5.				
6.				
7.				

Part III. A listen to the descriptions 1-3 and match them with the letters A, B, and C on the diagram of a standing wave below.

1. _____
2. _____
3. _____



B.4. The name of the above diagram is _____.

Part IV. Listen to the following statements and put a tick (✓) if the statement is 'true' and put a cross (x) if it is 'false'

1. _____
2. _____
3. _____
4. _____
5. _____

Part V. Listen to the following specific features and fill in the grids by putting a tick (✓) in one of the columns to show our answers.

	specific features	light wave	sound wave
1			
2			
3			
4			

Part VI. Listen the following questions and Put a tick (✓) if your answer is yes and a cross (x) if your answer is 'no'

1. _____
2. _____
3. _____
4. _____

Part VII. Listen to the following questions and instructions and write your answers.

1. _____
2. _____
3. _____

Appendix II- D General Listening Comprehension Test

General Directions:-You are going to listen to different conversations and passages. You are allowed to listen only ones. So, listen very carefully in order to understand the recordings and answer the questions that follow. You can take notes while listening, which might help you to refer to when you give the answers.

Part I

A. I. Listen to the paragraph about the Weather **Forcast** and the questions that follows. Then fill in the grid by putting a tick (√) in one of the columns to show your answer.

No	The whether	In mid-land	London and The south East	South West	Scotland
1	By mid-morning heavy rain is expected.				
2	All the afternoon will be clear and sunny.				
3	Rain and snow on high ground.				
4	Rain will start from early-morning				

B.5. What do you think will happen in the afternoon in the south west?

PART-II

Tracing a route on a map

Asking and giving directions

1) Listen to the following dialog and mark the route to the shopping center using the arrows on the map given below, like this (→ → ↑ → ↓ (etc)
2) Then identify the letter that represents the shopping center in the map.

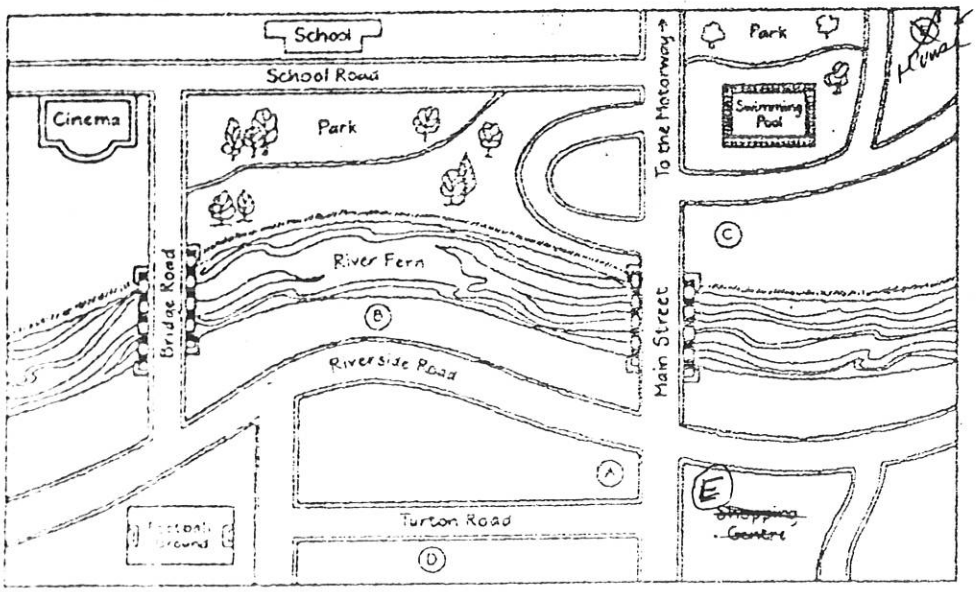
Here is the recorded dialog, , but look at the map on your answer sheet. First

Now, listen to the dialog between Abel and Asseffa.

Abel = Excuse me, would you tell me how to get to the shopping center from the bus stop?

The house.

Assefa = Sure. Take this map, and you can mark on it where you have to go. When you come out of the house, turns left and go down to the junction. Turn right, go past the swimming pool and you will come to the Main Street. There you turn left and go along the main street, over the bridge. On the other side of the bridge there is a crossroad. If you go straight a cross it you will find you'll the shopping center on your left.



Adapted from IJV (1984=61)

PART –III

Look at the pictures (on your answer sheet) below, Then listen to the four sentences describing the pictures, and match the appropriate sentence with the picture it describes. You can have more than one answer.

Here is the recording

1. Both car doors are open.
2. It's daylight but both headlamps are on
3. The man who's repairing the car is lying underneath it.
4. Although the girl sees the man working hard, she doesn't help him.

Here is the picture.



Adopted from Heaton(1988, 64)

B. You will hear some instructions and statements followed by answers

- Choose the most appropriate answer and put a tick (√) below A, B, C, D on the space provided on the answer sheet.

1) Lock to the door before you leave.

B. The lock is new
C. No, he can't
C. Ok, madam
D. yes, you do.

2) Make sure that you got your pass part.

B. What for?
C. When?
C. At the air pot
D. Ok! she will

3) Abeba is pretty.

A. But her sister is prettier
B. And she is ugly
C. Hanna is a student.
D. But her sister is beautiful.

4. Alemu is an outstanding student

A. Despite this, he got straight A's
B. Consequently, he stood first in class
C. why do you go there?
D. His uncle is a merchant

The tape script

Weather Forecast (Tape script one)

Today it will be very rainy in most areas so take your **umbrella** with you when you go out! In **London** and the **South East** it will **start sunny**, but clouds will begin to **appear**, and by **mid- morning** you can expect some heavy rain In the **South west**, rain will start from early morning, and will continue all day. Moving up to the mid lands, the story is a little brighter: rain at first, but sunny intervals are possible later and all the afternoon should be clear and sunny. Further north. Rain all day, I'm afraid, and it will be cold and windy in most areas, Finally Scotland rain and snow on high ground. Further outlook. Continuing as today, cold and rainy.

Adapted from Ur (1984, 61)

Life cycle of Farmer During Cultivation Period (Tape script two)

In the country people are occupied mainly in two kinds of different, but related works. These are breeding animals and cultivating the land. People who practice these are called farmers. Some farmers only cultivate the land.

A farmer's life is the busiest during the time of cultivation, which is twice, or three times a year. First, he has to plough the land, usually with the help of oxen; second, he sows the seeds, wherever they may be. Third, he weeds his farm. Because as the seeds germinate and sprouts come out, with them come weeds which choke them. Fourthly, he harvests the crop when it is ripe and ready. At harvest time, and all members of the family take part, and even neighbors collaborate. Once the once the reaping is over, shaves are made and piled. Finally, when the crop is dried, he threshes it by using oxen. The cycle or rhythm of country life occurs two or three times a year.

Adopted From Ur, (`1984:61)

Dialog (Tape script three)

Janet = Peter I haven't seen you since we finished college. How's things? Where are you living? What are you doing?

Peter = Janet I hardly recognized you? You have let your hair grow. It Makes you look older.

Janet = Come on! I'm not that much older! Look older.

Peter = you must be twenty-seven.

Janet = and you are two years younger and you look exactly the same as Ever. What are you doing?

Peter = Teaching what else?

Janet = How is it going – where?

Peter = I still live in London, teach in comprehensive school there. Are You teaching too?

Janet = No, I got married last year and had a baby recently.

Peter = Congratulations!

Janet = Thanks – so I'm taking the year off to look after the baby and do Some studying. My husband got a Jab in Cardiff, so we have Moved there

Peter : Not yet.

Janet : I'm surprised. We always used to say you'd get married first of all Of us you're so good looking. Talking of good looking, do you remember Tammy? The beautiful girl from Bristol? She was in the same class as me at school.

Peter : Yes, she got married at the end of course, didn't she?
Janet : Yes, and had two children, a boy and a girl.
Peter : what's she doing looking after the children, being a housewife?

Janet: Who Tammy? Never. That's a super feminist family. He looks After the children. And she works full-time; she edits a magazine, Writes articles for the newspapers, very successful. She's been on Television once or twice.

Peter : have you seen any of the others?
Janet : One or two-let's got a cup of coffee somewhere, and I will tell you About them.

Adapted from Ur (1984, 61)

Answer sheet for the General Listening Comprehension test

General Direction: you are going to listen different conversations and passages. Listen carefully and answer the questions that follow.

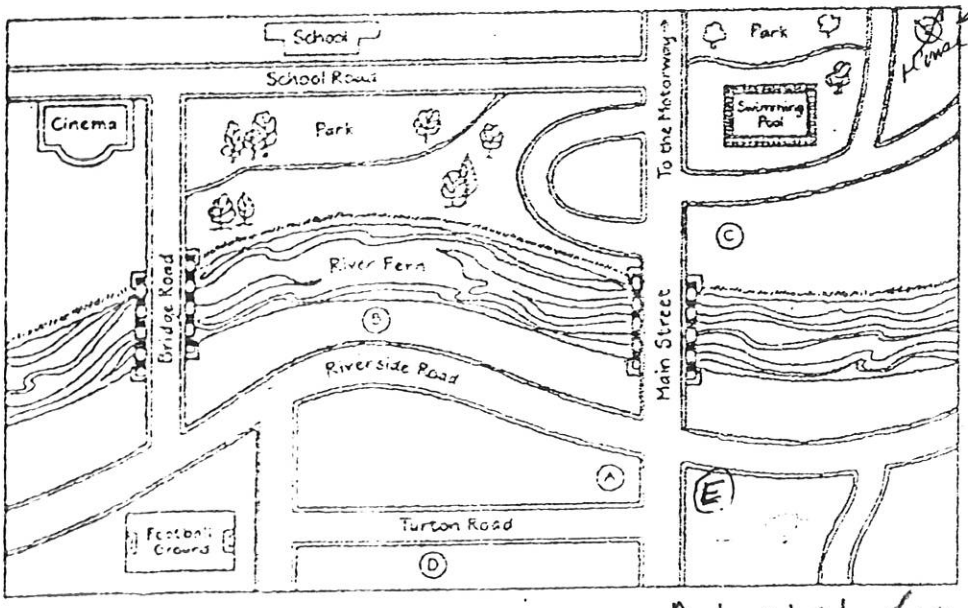
Part I. A. Listen to the paragraph about the weather for cast and the questions that follow. Then fill in the grid by putting a tick (✓) in one of the columns to show your answer.

	weather condition	Places			
No		In mid land	In London south east	In south west	In Scotland
1					
2					
3					
4					

B.5. _____.

Part II. Listen to the following dialog and answer the question looking at the map given below

1. _____
2. _____

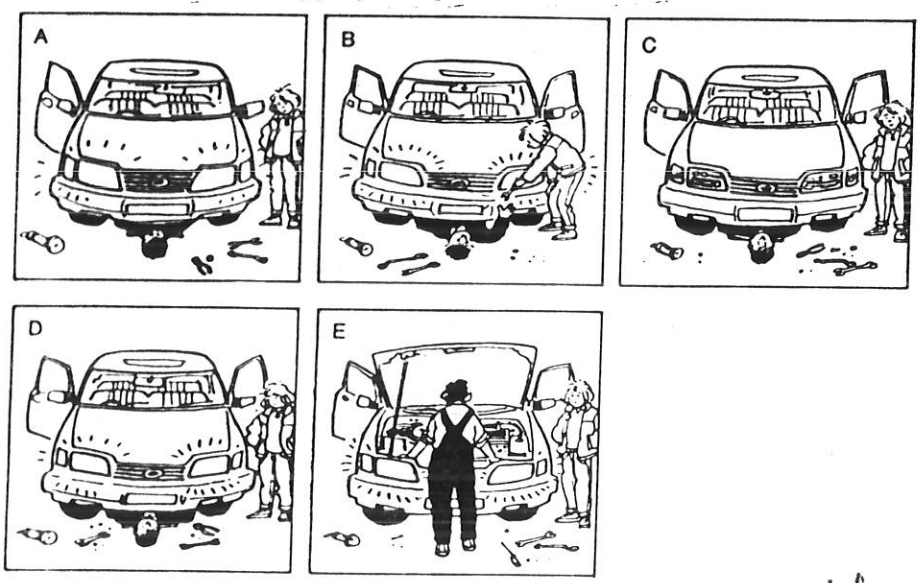


Adapted from UR (1984:61)

Part III. Look at to the pictures below and listen to the sentences described them. Then, match the sentence with the picture it describes. You can have more than one answer

1. _____ 3._____

2._____ 4._____



Adapted from Heaton(1988, 64)

Part IV. Listen to the passage about the life cycle of a farmer during cultivation period and choose the right sequence then write the letter of your choice . _____.

Part V. Listen to the following dialog and fill in the guild below with appropriate words.

No	Nme	Janet	Pter	Jammy
1	age	27	___	not known
2	occupation	___	teacher	Bri
3	town	___	London	Briton
4	family	married one child	Unmarried	___

B. 5

Part VI. Listen to the following questions and put a tick (✓) under the correct letter of your choice A, B, C or D.

	A	B	C	D
1.	____	_____	_____	_____
2.	____	_____	_____	_____

B. Listen to the following instructions and statements and put a tick (✓) under appropriate letter (A, B, C or D) of your choice

	A	B	C	D
1.	____	_____	_____	_____
2.	____	_____	_____	_____
3.	____	_____	_____	_____

Content of the physics lesson

Outline of the physics Test

- Definition of wave motion
- transverse wave
- longitudinal wave
- The difference between node and anti node.
- Explanation of a standing wave
- Sound wave
  - Medium of sound wave
- Light wave and electro magnetic wave.
  - Medium of light waves and electro-magnetic wave
- Temperature and sound wave motion.
- Time frequency and light of a sound wave.
- Symbols (^) for wave length and
- The symbol (T) for time.
- The symbol (F) for frequency

Appendix – II-C **Listening Comprehension Test for Grade 9 Based on the Biology Lesson-entitled Parasitism.**

General Direction: - You will listen some questions based on the Lesson entitled 'parasitism', which you have just learned.

PART - I. You will hear the questions only once, so listen carefully.

I. Listen to the following statements and make a tick (√) if the statement is '**True**' and a cross (x) if it is '**False**'.

1) A full-grown beef tapeworm has as many as 2,000 segments.
2) The larva of tapeworm lives in a cow but the adult in human intestine.
3) The life cycle of all schistosomes is the same.
4) Necator Americanus is a disease of hot and humid climate, but it doesn't occur in hot and dry land.
5) Ancylostoma duodenal is an example of hookworm.
6) The symptom of biliharzia infection is blood in urine

PART –II

Choose the correct answer and put a tick (√) under the correct letter A,B,C or D your of choice on your answer sheet.

1) The fertilized eggs contained in the mature segments of tapeworm are called ___.

A. onchospheres C. scolex
B. tealasegnanta D. round worm

2) Cysticerci means ____of tapeworm

A. cyst C. larva
B. adult D. egg

3) The matured segment of a tape worm _____

A. Passed with the feaces
B. escape through the anus independent
C. stay in the rectum for ever
D. A and B.

4) Scolex attaches itself to the intestinal wall in order to_____

A. suck digested food C. hide it self from drugs
B. get blood D. separate itself from the other segments.

5. Bilharzia is caused by _____

C. blood flukes
C. snail
D. schistosoma
D. B and C

6) Schistosomiasis is commonly known this days as _____.

E. Sistosoma
C. blood fluke
F. Biliharzia
D. A and B

7) Today we learned about _____?

A. Schistosoma
C. parasites
B. Tapeworm
D. Blood fluke

8) Schistosyoma is an example of _____.

A. Blood flukes
C. biliharzia
B. Tape worm
D. scolex

9)The symptom of ___differs with the nutritional state of the patient.

A. tapeworm
C. hook worm
B. blood fluke
D. Round worm.

PART-III

A. Listen to the explanation and fill in the grid by putting a tick (√) in one of the column to show your answer.

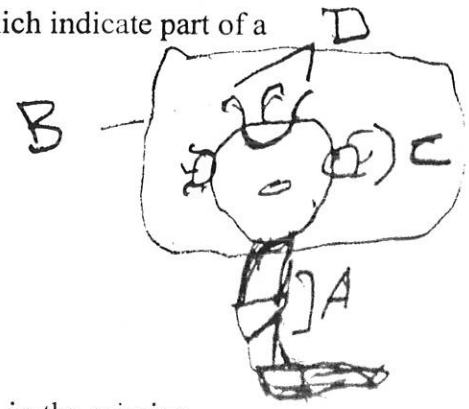
		Hymenolepsis nana	Taenia-saginata	T solium
1	Needs no intermediate host			
2	Uses cattle as its intermediate host			
3	Use pig as its intermediate host			
4	Is also called dwarf tapeworm			

B. Listen and write the missing words in the grids.

	Parasite	host	
		Primary	intermediate
5	Fapeworm	Man	__
6	Blood fluke	__	snail
7	Hook worm	man	__

PART – IV

A. Match the list of words you have listened with the letters, which indicate part of a tapeworm in the diagram in you answer sheet.



1.Scolex _____

2- Hooks _____

3- Suckers _____

4- Segments _____

B. Listen to the statement in the life cycle of blood fluke and fill in the missing names.

5. Miracidia develops in to ___ in a snail and then in to _____.

PART –V

Give the correct answer

1. What is used in the treatment of tapeworm?
2. Give two preventive measure for tape worm disease

   _____

   _____

3. Why are tapeworm diseases widely distributed in Ethiopia

   _____

4. Where does the adult schistosoma live?
5. What do you think the topic of the next class will be?

PART –VI

Listen to the following questions. And answer. Then, If your answer is 'yes' put a tick (√) below 'yes' and if it is no put a cross (x) below 'No'

1. Can we use drugs to prevent tapeworm disease? _____
2. Is the primary host of schistosoma man? _____
3. Is cesstodes another name for roundworm?

Biology Test Answer Sheet

PART – I. Listen to the following statements and make a tick (✓) if the statement is true and a cross (x) if it is false.

1. _____ 4. _____
2. _____ 5. _____
3. _____ 6. _____

PART –II. Choose the correct answer and put a tick (✓) under correct letter A, B, C, or D.

	A	B	C	D
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____
7.	_____	_____	_____	_____
8.	_____	_____	_____	_____
9.	_____	_____	_____	_____

PART – III. Listen to the explanations and fill in the grade by putting a tick (✓) in one of he column to show your answer.

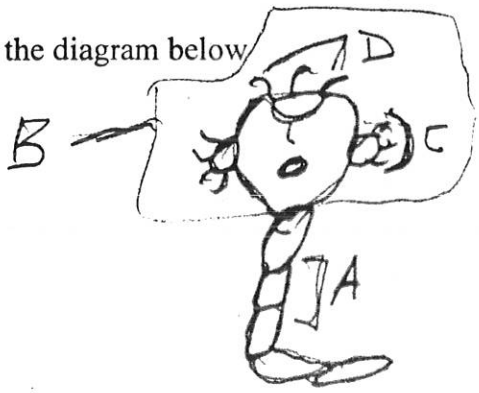
A.

	Hymenolopsis nana	Taenia seginata	T.Solium
1			
2			
3			
4			

B. Listen to the parasite mane and write the appropriate words to fill the grids below

	Parasite	Host	
		primary	Intermediate
5		man	—
6		—	snail
7		man	—

PART-IV. Match the list of words you listen with the litters on the diagram below that indicate part of a tape worm.



1. _____
2. _____
3. _____
4. _____

B. Listen to the statement and fill in the missing names. s_____, _____

PART -V. Listen to the following and give the correct answer.

1. _____
2. _____, _____
3. _____, _____, _____
4. _____ . _____ , _____
5. _____.

Part VI . Listen to the following questions. Then if your answer is 'yes' put a tick under 'yes' and if it is no put a cross (x) under 'no'

Yes	No
1. _____	_____
2. _____	_____
3. _____	_____

Content of the Biology Lesson

Outline of the Test

Parasitic worms

Parasitism: is an association between two organisms in which the parasites permanently or temporarily live in or on the living host.

The three classes of worms:

- The three classes of warms parasitize human beings.
- They include : nematodes or round worms, cestodes or tape worms and the matured or flukes.

1. Tape worm:-

  - Parts of tape worm: scolex or head. Segments, matured segments.

- In scolex : hook and suckers.

  Once the scolex has become fixed on to the wall of the intestine, segments continue to grow from it.

  Types of tape worms:

- Mymenolegsis nana or dowar of tape worm
- Taenia saginata
- Taenia solium,

  - Hosts of tape worm : Cattle and pig as intermediate host and human being as primary host.
  - Prevention
  - Life cycle of tape worms
  - Syptonms of tape worm infection.

2. Blood fluke

types:

- Schistosoma
- Disease : Schistosomiasis/ Bilhariza/

- Primary host
- Intermediate host
- Life cycle of blood fluke
- Prevention of blood flukes

3 .Hook worms

- Types of hook worms
- Ancyclostoma duodenale and
- Necator Americans
- Symptom of hook worm inflection
- Prevention of hook worms

Appendix III

Raw scores of the tests and statistical computation

Appendix III-A. Raw Scores of the Tests

Table 1 Rows score

S.N	Sex	Age	Math's	Physics	Biology	G. listening Questions	Total	Average
1	M	18	72	50	53	77	252	63
2	M	15	61	48	51	54	214	54
3	M	16	87	77	60	78	302	76
4	F	14	57	68	59	68	252	63
5	M	16	64	54	42	58	218	55
6	M	15	59	65	52	62	238	60
7	M	17	56	85	43	40	224	56
8	F	16	64	51	43	56	214	54
9	M	14	53	46	45	46	190	48
10	F	15	67	52	48	65	232	58
11	F	14	63	57	42	63	221	55
12	F	14	54	50	41	62	207	52
13	M	14	75	76	80	72	303	76
14	F	15	41	46	69	53	209	52
15	M	15	53	55	41	45	194	49
16	F	15	61	48	43	44	196	49
17	F	14	55	48	41	40	184	46
18	M	18	57	49	42	43	191	48
19	M	16	61	67	57	49	234	59
20	M	15	58	41	41	40	180	45
21	F	13	48	42	53	49	192	48
22	F	14	61	41	49	55	206	52
23	M	16	56	52	47	57	212	53
24	M	13	61	43	42	48	194	49
25	M	17	59	41	46	40	186	47
26	M	14	60	54	53	74	241	60
27	M	17	48	45	42	54	189	47
28	M	15	66	65	56	59	246	62
29	M	13	59	54	40	45	198	50
30	M	17	55	52	42	60	209	52
31	M	16	62	58	47	57	224	56

S.N	Sex	Age	Maths	Physics	Biology	G.Questions listening ability	Total	Average
32	M	15	85	68	42	59	254	64
33	M	16	92	81	81	84	338	85
34	M	14	90	82	87	78	337	85
35	M	15	55	61	41	40	197	49
36	F	14	43	58	55	64	220	55
37	F	18	62	57	43	47	209	52
38	F	15	70	61	50	62	246	62
39	M	18	72	58	65	62	257	65
40	F	14	63	66	42	43	214	54
41	M	14	59	62	52	65	238	60
42	M	17	68	69	45	63	245	61
43	M	14	66	63	55	63	247	62
44	M	16	62	58	42	52	214	54
45	F	15	63	70	58	60	251	63
46	M	14	67	61	43	56	227	57
47	M	16	60	52	55	50	217	54
48	M	17	71	65	65	69	270	68
49	M	14	68	53	47	47	215	54
50	M	14	80	90	63	47	260	65
51	F	17	61	78	66	61	277	70
52	F	20	41	56	61	42	200	50
53	M	17	70	75	68	75	288	72
54	M	14	54	50	43	45	192	48
55	M	16	73	73	72	67	285	71
56	M	15	60	56	53	69	238	60
57	M	15	61	56	52	68	239	60
58	M	15	66	44	47	53	210	53
59	M	17	40	41	58	48	187	47
60	M	15	79	74	80	91	324	81
61	M	15	68	62	70	43	243	61
62	F	15	68	40	41	74	223	56
63	F	15	54	41	42	40	177	44

S.N	Sex	Age	Maths	Physics	Biology	G.Quest-ions	Total	Average
64	M	15	82	72	71	75	300	75
65	M	14	52	41	44	75	212	53
66	F	17	53	68	62	60	243	61
67	M	15	55	49	42	40	186	47
68	F	16	64	54	43	58	219	55
69	M	13	58	57	57	71	219	55
70	M	15	70	64	68	78	280	70
71	F	16	60	40	45	40	193	48
72	M	13	67	57	66	70	260	65
73	M	15	73	52	63	68	256	64
74	M	13	63	57	66	53	239	60
75	F	16	62	41	53	60	216	54
76	M	17	56	40	54	45	195	49
77	M	14	52	52	62	56	222	56
78	F	15	56	55	45	41	197	49
79	F	15	68	49	52	75	244	44
80	M	17	50	46	59	47	202	51

Table 2 Observed Frequency (Frequency Distribution organized from the Raw data)

/class intervals. /	Students/f/
40.5 _____ 45.5	2
45.5 _____ 50.5	18
50.5 _____ 55.5	21
55.5 _____ 60.5	13
60.5 _____ 65.5	15
65.5 _____ 70.5	3
70.5 _____ 75.5	3
75.5 _____ 80.5	2
80.5 _____ 85.5	3
	N = 80

- highest score is 85
- The lowest score is 44
- The range R = 85 – 44

  R = 41

Appendix-III-B

Statistical computations of the mean (x), Standard Deviation (SD), and coefficient of variation.

1. According to the raw score we need to calculate the sample mean using the formula:-

$$\bar{X} = \frac{\Sigma X_i}{N} = \frac{X_1 + X_2 + ---- X_n}{N}$$

Where $\bar{X}$ ⟶ mean of the sample

$\sum X_i$ ⟶ the sum of each score.

N ⟶ population size.

Therefore

$$\bar{X} = \frac{4497}{80} = 56.2$$

2. To determine the estimated standard deviation (δ) we use the formula.

$$\delta = \sqrt{\frac{\sum (X_i - \bar{X})^{-2}}{N-1}}$$

X_i ⟶ raw score

$\bar{X}$ ⟶ mean of the sample

N ⟶ population size

δ ⟶ estimated standard deviation.

$$\delta = \sqrt{\frac{\sum X_i^2 - N(\bar{X})^2}{N-1}}$$

Hence , to calculate the quantities part by part, tabulating middle values of the interval is essential

Table 3 Calculation of the deviation score about the mean.

X	$X - \bar{X}$	$(X - \bar{X})^2$
40.5	-15.7	245.49
45.5	-10.7	114.49
50.5	-5.7	32.49
55.5	-0.7	0.49
60.5	4.3	18.49
65.5	9.3	86.49
70.5	14.3	204.49
75.5	19.3	372.49
80.5	24.3	590.49
85.5	29.3	858.49

$\bar{X} = 56.2$ $\qquad$ $\sum (X - \bar{X})^2 = \underline{2514.90}$

N = 80

$$\delta = \sqrt{\frac{\sum (X - \bar{X})^2}{N - 1}} = \sqrt{\frac{2514.90}{80 - 1}} = \sqrt{\frac{2514.90}{79}} = \sqrt{31.834}$$

$\therefore$ $\underline{\delta = 5.64}$

Table – Estimated standard deviation score about the mean

3. To determine the coefficient of variance '(CV)

$$CV = \frac{\delta}{\bar{X}} \times 100\%$$

$$CV = \frac{5.64}{56.2} \times 100\%$$

$\therefore$ $\underline{CV = 10\%}$

Statistician pointed out that rejecting a null or negative hypothesis provides a stronger test of logic. Evidence that is inconsistent with a particular negative hypothesis provides a strong basis for its rejection. The test statistic for testing this null hypothesis (H_o) is the chi-square (x^2).

Chi – Square (x^2)

The chi-square (x^2) is a data analysis procedure, which helps us address questions about relation's b/n two nominal variable. In this procedure we compare the frequencies observed (o_f) in a sample with some expected frequencies (f_e.)

X^2 Goodness – of – Fit Test.

The terminology " Goodness-of Fit test" comes from the idea that the test indicates whether or not the observed frequencies are a good fit to the expected frequencies. The fit is good when the observed frequencies are with in random fluctuation of the expected frequencies and the computed X^2 value is relatively small, or less than the critical value of (x^2) for the appropriate degrees of freedom (df). That is , when

X^2 obtained > X^2 critical, then

H_o (null hypothesis) is rejected for $\alpha = 0.05$

X^2_{ob} = Calculated chi –square

X^2_{cri} = Critical value

df = degree of freedom calculated

as df = (R-1) (c-1)

where:

R = Raw

C = column

Table 4 Calculation of Z.score and Expected frequency

Values in series up to U	$Z = \frac{U - \bar{x}}{\delta}$	Proportion of area b/n U and x	Proportion of area below the normal curve for x < u	Proportion of area in class interval	Expected frequency (PxN)
40.5	-2.78	0.4973	0.0027	0.0027	0.216
45.5	-1.90	0.4713	.0.0287	0.0260	0.208
50.5	1.01	0.3438	0.1562	0.1275	10.2
55.5	-0.12	0.0478	0.4522	0.2960	23.68
60.5	-0.76	0.2764	0.7764	0.3242	25.94
65.5	-1.65	0.4505	0.9505	0.1745	13.93
70.5	-2.54	0.4945	0.9945	0.0440	3.52
75.5	-3.42	0.4997	0.9997	0.0052	0.416
80.54& Above			1.0000	0.0003	0.024

Where:

N = total number of population

P = proportion of area in class interval

Declaration

This thesis is my original work and has not been presented for degree in any other university and that all sources of materials used for the thesis have been duly acknowledged.

Name Hiwot Tefera

Signature

Place Addis Ababa University

Date of submission July 18/06.

This thesis has been submitted for examination under my approval as a research advisor.

Name Seime Kebede

Signature

Date of submission July 18/06.