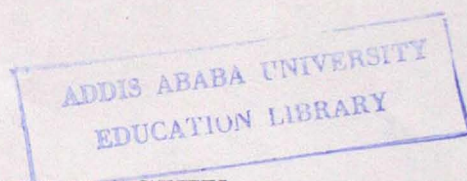


**AN ASSESSMENT OF AWIGNI LANGUAGE  
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CYCLE PRIMARY SCHOOLS OF AWI ZONE**

**BY:  
DESALEGN ASFAW**

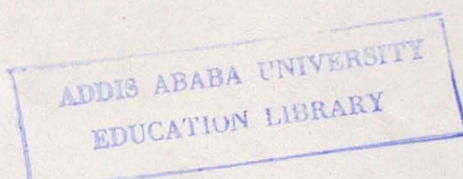


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SCHOOL OF GRADUATE STUDIES***

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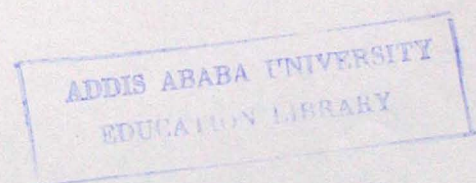
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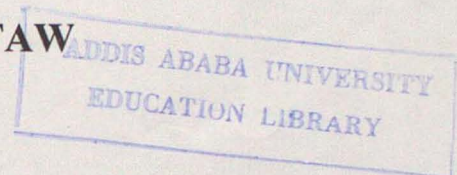
**THESIS SUBMITTED TO SCHOOL OF GRADUATE  
STUDIES ADDIS ABABA UNIVERSITY FOR MASTER OF  
ARTS DEGREE IN MULTICULTURAL AND  
MULTILINGUAL EDUCATION**



**AUGUST, 2007  
ADDIS ABABA UNIVERSITY**

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**Approved by Board of Examiners**

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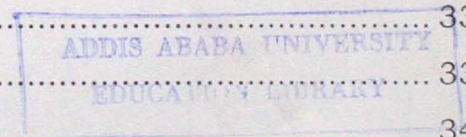
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## ABSTRACT

Improvement in the provision of quality of Awigni Language Radio instruction is emphasized as one of the desired outcome of the study. As language is fundamental to all learning, it is imperative that the great concern of this research is assessing of Awigni Language Radio instruction in the first cycle primary schools of Awi zone. To conduct the study, descriptive survey research methodology was used. Both qualitative and quantitative research methods were employed. The instruments used to collect data were questionnaire, class room observation and interview guide. By using these three data collecting instruments, data were collected from 200 grade 3 and 4 students, 20 teachers 5 school directors and 5 zone Education Department Awigni Language Radio program producers (Media experts). Since the population of the study is too large, simple random sampling Technique was employed. One school was selected from each woreda, thus a total of 5 schools were sampled randomly. Simple random method sampling (lottery) was employed in the selection of students. Besides this, by considering total population as a source of data, all grade 3 and 4 teachers (i.e. 20 teachers) ,5 school directors of the sampled schools and media experts (Awigni Language Radio program producers) in the zone Education Department were included. The obtained data were analyzed using percentages and the summated score technique.

The findings of the study indicated that the attitude of the students and teachers towards Awigni Language radio instruction is favorable (positive). Moreover, the quality, appropriateness of the program content and presentation to the age level and interest of the students is also accepted by most of the students and teachers.

However, there are problems which affect the effective implementation of the program. These are the absence of radio teacher's guide and radio lesson manuals, the absence of teacher training courses which helps teachers how to implement radio lesson, lack of in-service training and less qualified teachers (teachers without pre-service training), problem of radio functioning, poor radio maintenance services from the center, absence of supervision, poor sound clarity. Besides this, inadequate supply of radio sets, high teaching load, large class size, clashes of class scheduling. The findings of the study also showed that the activities which should be performed by the class room teachers and students before, during and after broadcast are not performed in the majority of the observation classes. In Awigni Language Educational Radio program production and transmission, only few teachers participated. Finally, in the light of the findings, conclusions have been drawn and recommendations have been forwarded to address the problems.

## **Abbreviation and Acronyms**

AWLRB	Awigin Language Radio Broadcast
AWLRI	Awigin Language Radio Instruction
EMMA	Educational Mass Media Agency
ICDR	Institute of curriculum Development and Research
MOI	Medium of Instruction
NETP	New Education and Training policy
TGE	Transitional Government of Ethiopia
TV	Television
UNESCO	United Nation Education, Science and Culture Organization

# CHAPTER ONE

## INTRODUCTION

### 1.1. Background of the Study

The main concern of this study was assessing Awigni language Educational radio broadcast in the first cycle primary schools of Awi Zone. In many countries with a high rate of illiteracy, in adequate school facilities and resources for the fast growing number of school age children, it has been shown in practice that instructional radio can produce formal and non-formal education and thereby contribute to the national development, provide that instructional radio is effectively utilized and planned (Hawkeridge, 1982:136). Education is the corner stone of development. It is recognized as the essential foundation for modern technology. Education is expected to make contribution on addressing suitable human development, peace and security, and the quality of life at individual, family, societal and global levels to reflect commitment to human rights. Education as viewed by the government of the countries concerned is vital instrument in the creation of a modern economy. It is supposed to generate educated and skilled man power to increase their scientific and technological development. Education is also a powerful means to preserve cultural values and heritages, to maintain or improve national cohesion (Grisay, 1991:17).

To meet different social, political and economic goals of primary education and to produce good and self-relied citizens there are different measures to be taken by the governments of nations and their citizens.

These include, preparing a relevant policy of education, availability of well-qualified and committed teachers, adequate facilities, relevant curriculum, conducive work environment etc (Agrawal, 1985:100) Tanner, 1967:214-215). In Ethiopian, the government has brought about a reform through the new education and training policy (NETP) (ICDR, 1994:242). One of the fundamental reforms introduced as a result of the NETP is the use of local languages as medium of instruction (MOI) in primary schools. (TGE, 1994:23-24). It was

based on this policy document that Awigni was made a medium of instruction (MOI) for the lower primary schools of Awi zone.

Awigni is a Cushitic language spoken by the Awigni people. Awi zone is found isolated having been split from the ones continuous and natively spoken Agaw language in the Northern half of the country (Heltrozron, 1996:22; Bender, 1976: 40-41).

Starting from 1994 Awi has been organized as a Zone on the basis of minority ethnic identity. Awi zone is located at the south western part of the Amharia Regional state. The zone is divided into five woredas namely Dangila, Fagitalekoma, Banja Shikudad, Ankesha Guagusa and Guangua. Based on the census of 2003, by 2005 the projected population size would be 1,029,000. About 49.5% are males and 50.5% are females. Out of the total population 10.8% are urban and 89.3 are rural dwellers. In the zone Amharic, Awigni, Gumez and Shinasha are spoken. However the majority of the populations in the zone speak Amharic and Awigni. In the zone there are about 164 primary schools among which 85 of them provide education in Awigni language (Desalegn, 2004:1-5).

In Ethiopia, instructional radio broadcast to primary schools started in 1969/70 [E.M.M.A. 1990:8]. The main objectives of the radio instruction during that time were "to improve, develop and implement the school curriculum and to introduce new and modern teaching methods to schools (E.M.M.A. 1989:9). New instructional radio programs have been broadcast starting from the year 1995/96 to enrich the new primary school curriculum in different regional states of the country using the respective nationality languages. However, Awigni as a language of instruction started in 1996 and radio instruction in this language was started in 2004, eight years after the language started as a medium of instruction. The radio instruction in Awigni language has been given for environmental science subject from grade 1-4. And this is the central concern of this study.

To my knowledge no research has been conducted regarding Awigni language radio instruction. Not much is known about the state of Awigni instructional radio broadcast that designed to support and enrich the curriculum of primary schools of Awi zone. In other words, no research has been conducted assessing whether the programme is properly implemented at classroom level in the zone.

## **1.2. Statement of the Problem**

To meet the goals of mother tongue instruction effectively, the suitability of the particular language has to be insured before it is put in to use. Regarding education, the Ethiopian education and training policy document (TGE, 1994) states that regions and zones could produce, distribute and implement educational technology by their own. It is also stated that “educational management will be decentralized to create the necessary conditions to expand, enrich and improve the relevancy quality, accessibility and equity of education and training” (p. 230, sub article 3.8.2). Moreover, in the same document the choice of language in education is stated as “.....Nations and nationalities can either learn in their own languages or can choose among those selected on the basis of national and country wide distribution” [p23 Art.3.5.3].

Accordingly, Awi Zone Educational Department has been broadcasted ~~and~~ its Awigni language educational radio programs to the first cycle primary schools since 2004.

Educational radio is considered as a good assistance when the system of the education has problems such as shortage of qualified teachers, lack of textbook etc. Accordingly, educational radio instructions is prepared to help the class room teacher, to enhance the teaching learning process and to be used as a learning resource so as to overcome some deficiencies of the education system.

However, no research has been conducted to assess the effectiveness of Awigni language radio instruction produced and broadcast by the zone. Thus, it is

important that a study is made to assess the state of Awigni radio instruction to fill the existing knowledge gap about the radio instruction, and the circumstances of implementation .

### **1.3 Objectives of the Study**

The main objective of this study is to assess Awigni language educational radio broadcast in the first cycle primary schools of Awi zone and to identify the effects and problems encountered in implementing it. More specifically the study aim at:-

- A) Assessing the extent to which the intended Awigni Language Educational radio programme is put in to practice.
- B) Investigating the quality, content and presentation of the program.
- C) Identifying whether the necessary supportive materials [teacher's guide, radio sets etc.] are adequately available?
- D) Identifying the students' activities during Awigni Language Educational Radio Instruction.
- E) Examining the classroom teachers' activities before, during and after Awigni Language Radio Instruction.
- F) Assessing the attitude of students and teachers towards Awigni Language Educational Radio Instruction.

### **1.4. Basic Questions**

The general objective of this study was to assess Awigni language educational radio broadcast in the first cycle primary schools of Awi Administrative zone. Under this broad objective, the present research tried to answer the following research questions.

- A. Have the teachers taken the necessary training to implement Educational Radio broadcast in Awigni language?

- B. What is the attitude of students and teachers towards Awigni Language Educational Radio Broadcast?
- C. Are the quality, presentation and contents of Awigni Language Radio programme appropriate to Awigni language learners?
- D. Are the necessary supportive materials (teacher's guide, radio sets, etc) adequately available for effective implementation of Awigin Language Radio Instruction?
- E. Do the classroom Awigni language teachers perform the activities which should be performed before, during and after broadcast?
- F. Are Awigni language learners actively participate in activities during and after broadcast?

### **1.5. Significance of the Study**

This research gives information on the strengths and weakness of Awigni language educational radio broadcasted to primary schools of Awi zone.

So it is expected that the findings of this research will serve as a feedback to classroom teachers in Awigni language, school directors, the zone education department media experts and other concerned bodies in the zone regarding their respective strengths and weakness and the problems faced in the process of implementation of the programme. Furthermore, the findings of this research may initiate other researchers to conduct study on other dimensions of the area.

### **1.6. Delimitation of the Study**

Among the many problems that might exist, the study is delimited in relation to the radio program implementation, i.e. the training of teachers, availability of supportive instructional materials for the radio the quality content and presentation of the programme, the activity of the students and teachers before,

during, and after the broadcast, attitude of teachers and students the towards the broad cast.

### **1.7 Organization of the Study**

The study consists of five chapters. The first deals with the problem. The second chapter treats the review of the related literature. The third chapter contains the research design and methods. The fourth chapter contains analysis and presentation of the data. The summary of the findings, conclusion and recommendations of the stud are presented in the fifth chapter. Finally, bibliography, sample questionnaires and other relevant documents are attached to the last part of the thesis.

## CHAPTER TWO

### REVIEW OF RELATED LITERATURE

#### 2.1. Mother Tongue Education

Many scholars in the field of education and language argue that a child's primary education should be in his/her mother tongue (Lepage, 1964:2), Shuy and Fasold 1973:25). These scholars also argue that there should not be any discrepancy between home language and school language for children who start their education. This view is supported by Spolsky (1975:2-4) who argues that using mother tongue as a medium of instruction in the first years of a child's education to help him acquire knowledge and to adjust himself with the new school environment easily.

However regarding the languages and problems attached to mother tongue education there are proponents and opponents of the use of mother tongue as a medium of instruction.

##### 2.1.1. Proponents of Mother Tongue Education

The use of mother tongue as a medium of instruction was mainly drawn from UNESCO 1953 even though it is criticized by many opponents. Proponents of mother tongue instruction commented the following. These are pedagogical, psychological benefit socio-cultural and political benefits.

##### 2.1.1.1. Pedagogical Benefits

The first advocate of mother tongue instruction is UNESCO. UNESCO in (Fasold, 1984:292) explains the pedagogical importance of mother tongue as a medium of instruction as follows: ". . . a student learns more quickly through his mother tongue than unfamiliar linguistic medium." Supporting this idea Padilla, Feirchild and Valadez (1990:223) argue that the use of the students' first language as a medium of instruction improves their academic achievement.

Similarly Unchedu (1993:33) described that while learning in the classroom the existing correspondence between the cultural environment and the language which describe that environment simplifies and gives child to understand the classroom instruction. More over, many scholars in the field of education (Fasold, 1973, Pedilla, Fierchild and Valdez, 1990) confirm that the initial problem that the child faces while entering a school is the alien language implemented in that school as a medium of instruction that enables the pupil to master neither the subject matter nor the language itself. Therefore preventing children from being instructed using their mother tongue particular in the lower primary schools is adversely affecting their academic success (Fafunwa No 216).

Amare (2000) assess the importance of students' participation by arguing that a student can learn better when he/she actively participate in the teaching learning activities. The more a student participates in learning activities, the more he learners. The learner could participate actively in learning activities when he is proficient in the language and this is possible when the language of instruction is his mother tongue.

Therefore, the use of mother tongue as a medium of instruction particularly in the primary schools simplifies the classroom communication for a child and helps to easily understand and grasp lessons. Thus using the mother tongue as a medium of instruction enables to ease in expression and subject matter grasp as well as in retention and facilitate the teaching process.

#### **2.1.1.2 The Psychological Benefit**

Using unfamiliar language to speak, read and writes and listen as a medium of instruction places a child in a psychological problem. This problem could be reflected in lack of self expression and poor communicative abilities which further result confusion and lack of confidence. All these bring about frustration and tension among learners that gradually drives a wedge between

the school and the child (Bowers, 1968:383-384). This idea is supported by Ahuja (1979:157-159) in the way that carrying out an education through a language which is not a child's mother tongue causes the child a feeling of psychic shock.

When a child begins his/her schooling, the school environment and its activities become new and strange for him. However, if there is no difference between home language and school language, he/she might not feel and isolated (Ramos et. al. 1967:74). Modiano (1963) as cited in (Egle, 1975:188-189) states that a child in the mother tongue class does not have any problem concerning language to communicate freely and briefly with his/her teachers. This creates good friendship and confidence on the side of the child.

### **2.1.1.3 Socio-Cultural Benefit**

Another advantage of the use of mother tongue is the socio-cultural benefit. This socio-cultural benefit of learning is obtained more when a child is instructed by the language in which society uses to explain its culture. This idea is strongly argued by Unchedu (1993:131) Who argues that the use of mother tongue enables the easy understanding of traditional folklore, literature and poetry. Every language expresses and symbolizes its culture better than any other language. Thus a child is proud of using his language as language of instruction. Education makes the children understand their society and culture. This can be achieved using the mother tongue that expresses the societal and cultural values of the learner (Makulu, 1989 in Solomon, 1995:35).

Using mother tongue as a medium of instruction argues to include the attitudes, values norms, cultures and how education has to be perceived as an agent part of social and cultural development which enables students to take part in the active life of the people (Poth 1988:13). Language is not only a tool for communication and knowledge but also fundamental attribute of cultural identity and empowerment (Williams and Snipper 199:50 in Thondhalana, 2003: 234).

Shortly, unless education uses the mother tongue particularly in the primary schools, it may have a weakness in making oneself proud of himself, his society and his culture at large.

#### **2.1.1.4. Political Benefit**

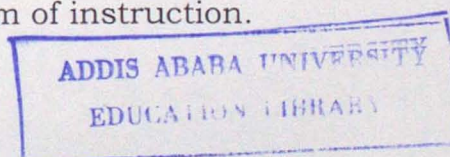
The introduction of mother tongue as a medium of instruction in primary schools is one major step in respecting the basic human rights. The self confidence and the national pride gained by using mother tongue as medium of instruction brings an empowerment of ethnic minority groups. This implies a political benefit for the minorities (Fasold, 1990:293).

The use of human rights systems according to which linguistic rights are considered as major parts of human rights has also a great value in this regard. In terms of this fact all human beings seek or deserve their rights of using the language that they prefer for their day to day communication.

#### **2.1.2. Opponents of Mother Tongue Education**

Although many scholars agree that mother tongue is the best medium for teaching a child in primary level, there are still scholars who argue against the use of mother tongue as medium of instruction. The following are some of the views of opponents of mother tongue as a medium of instruction.

##### **2.1.2.1 Political Problem**



Weinstein, (1983:139) argues that taking mother tongue as a medium of instruction in schools creates a problem of socio-political unity. He further argues that efforts to use each and every language for the political and economic functioning creates a problem to build and maintain national unity and solidarity. According to this author a multiplicity of official languages results in a communication barrier over a large area, waste of resources, and finally weakening integrating efforts in a nation.

The arguments of scholars against mother tongue as a medium of instruction also hold true even on leaders who have achieved world wide fame and glory like Ghandi (great leader of India) who entertains the idea that discouraging the use of the mother tongue as a medium of instruction protects isolation and national disintegration of a nation (Dakin, Teffen, and Widdowson, 1968:61). The use of the mother tongue as a medium of instruction is a problem for national unity and finally generates a feeling of tribalism on and disintegrating of a nation (Keleman 1972:198). This idea was supported by Corson (1990:2) who states “. . . the anticipated result of such multi lingual language polices in developing countries may be the expansion of ethnic tension as well as the establishment of formal constraints that impede national integration.”

However, from Multicultural and Multi lingual point of view, this idea is criticized because it implies the neglect of linguistic rights of minorities. This is not the encouragement of people and recognizing their rights, rather it is the instance of only one language that could cause minorities to resent their national government and refuse to accept national identity. This ideas is supported by Emenajo (1990:65) who argues in favour of the core principle of multiculturalism and multilingualism “unity in diversify”. He states that multilingualism and pluralism can be taken as a source for national building by acting as a national resource for developing mutual understanding, respect and dignify for an individual.

#### **2.1.2.2 Economic Problem**

It is true that the economic and the education systems of any country are closely interrelated. Although mother tongue is advantageous for children as a medium of instruction in primary level, for those countries that are linguistically heterogeneous the cost of introducing a new language as a medium of instruction is very high. This is because to introduce a new language it requires material and personal training in different languages of the nation. (Nelson and Cumming 1997:7, Psachropoules and Wodhall, 1995:1-9).

Summarily UNESCO report (in Fasold 1990:295) underlies the economic problems of implementing mother tongue as a medium of instruction in multilingual countries as "The difficulty is to find or train competent authors or translators, to obtain supplies of materials. . . in days general shortage to distribute the finished product under conditions of great distance and poor communication and above all to find the money."

Furthermore, Fishman (1968:480) says that linguistically diverse countries are under developed, have low per capital income, low enrollment of students, short life span, and are highly ruralized while monolingual countries are highly developed, highly urbanized, have high per capital income, high student enrollments, long life span and better living condition. According to Fishman, therefore attempting to implement mother tongue as a medium of instruction is interrelated with economic problems which required a strong and developed socio-economic basis.

On the other hand, opponents of mother tongue as a medium of instruction have also argued that implementing mother tongue as medium of instruction for the different ethnic groups is difficult and impossible because of shortage of trained teachers, shortage of teaching and reading materials, lack of technical technology, choice of script, attitude of the community etc.

Despite all the challenges discussed above, some Ethiopian scholars also recommend using mother tongue as a medium of instruction in primary schools. For instance with the objective of investigating the attitude of community towards the mother tongue as a medium of instruction, Melaku, (2004) in Awigni language, Muluneh(2001) in Kambata language and Solomon (1995) in Walaita language came up with some recommendations to use mother tongue for the medium of instruction.

Since the main objective of this research is to assess radio instruction in Awigni language, the mother tongue of the Awi people, the following with literature tries to discuss some scholarly views about media and education, particular emphasis on radio instruction.

## 2.2. What is Educational Media?

Different scholars have given different names for educational media. For instance the term educational media is termed as audiovisual materials (Dale, 1969:1). Heinich and others (1989:5) described the term as instructional media. Other scholars like Wittich and Schuller (1979:73) have given the name instructional technology for Educational Media. Some also call it educational technology (Sampath, 1984:1).

Although it is given different names, Educational Media is used to represent "all of the various physical means by which an instructional message is communicated" including printed text, correspondence tuitions radio, TV, telex, audio and video cassette (Reiser and Gagn 1983:14).

Various classifications have been given – by taking into consideration such as size involvement of the human sense, sensory channel etc. Davies(1981:112) considering the sensory organs divided educational media into audio media and visual media. According to him those devices which demand hearing during instruction is termed as audio while those devices which needs seeing during instruction as visual media.

On the basis of size Schramm (1977:10) divided into "Big media" and "little media". According to him TV, sound films, and computer assisted instruction are referred to big media while slide films, radio, projected transparencies are said to be little media.

Taking into account the involvement of our sense, educational media can be divided into "hot media" and "cool media" (Mcuhan,1968:18). In this categorization TV is considered cool media because it involves more than one sense (the audio and the visual sense) while radio is considered a hot media because it involves only one sense i.e. audio or hearing.

## 2.3 The Meaning of Educational Media

It is unquestionable that educational media plays a great role in the process of instruction. For instance educational media is used to simplify instruction (teaching). They are also used to compile and retain learners' attention (Heinich, 1989:5).

The following are some of the pedagogical advantages of educational media taken from Dale (1969: 46). They

1. Encourage students' active participation during instruction.
2. Encourage creative thinking
3. Break away the physical limits of time and space
4. Enhance and up grade the instructional role of the class room teacher.

It is true that one of the benefits of schools can exploit from using media in education is the multi dimensional experiences it renders to the sense of the students. The inclusion of media enhances the possibilities of students to retain information since by their very nature such instructional aids arouse the interest, curiosity and motivation of students. In addition to such pedagogical merits another very good reason why educational media should be encouraged in formal education is the fact that these tools are effective means of coping with mounting enrolments. Had it not been for the inclusion of electronic educational media particularly for developing countries, educating mass as of pupils and bridging the rural urban gap could have been more difficult than it is now.

The provision of electronic educational media is regarded as the means of making

- (a) Instructional more productive (b) instruction more scientific (c) education more individual (d) Instruction more powerful (e) Learning more immediate and (f) access to education more equal (Rieser and Gagne 1983:144).

However this does not mean that any random and unplanned use of educational media or the replacement of the classroom teacher by the educational media will result in such positive outcomes. Although there are times when electronic educational media are integrated into the instructional program in more fundamental ways (totally substitute the classroom teacher), many researchers strongly argue that media should not be used in such a manner since there are lots of pedagogical advantages students could benefit from the active role of the teacher. Thorndile (1912) as cited in Reiser and Gagne (1982:93) insisted that the teacher and other media are supplements of each other than are complements. He expressed his view about the importance of educational media as follows "A human being should not be wasted in doing what forty sheets of papers or two phonographs can do. Just because personal teaching is precious and can do what books and apparatus can not, it should be saved for its peculiar work." Chu and Schamm (1979) as cited in (Burmester, 1983:30-32) also mentioned that in order for pupil to learn from any educational media that are now available, teachers should be capable of creating favorable atmosphere and utilizing the media more intelligently. Hancock (1971:68) as cited in (Getachew, 2003:40) emphasizes that educational media that are delivered in isolation from the regular teaching learning environment (the continues encouragement and support of classroom teacher) will be no more than semi- efficient. All the above ideas confirm the presence of the classroom teacher during electronic educational media.

Generally educational media give a number of advantages. Since radio is one of educational media, it can enhance learning if it is designed systematically. Radio can support both formal (in school education) and nonformal, out of school learning. When we say formal (in school), it does not mean that radio replaces the classroom teacher, but it could be integrated with the school programmes and hence facilitate the classroom teaching task in the learning teaching process.

## **2.4 Media and Education**

Education with its correlated activities of teaching and learning involves communication as well as reciprocal interaction between the teacher and students, the teacher and media, and the students and media, Due to this reason there exists inseparable connection between educational and media.

Basically, when media are used for the purpose of instruction, they tend to take the students from a state of not knowing to one of knowing (Locates and Atkinson, 1984:13). In this regard scholars such as Heinch and Others (1989:5) Clark and Starr, 1988:400) remarked educational media as a decisive factor for effective learning. In connection to this, Amare (1999:9) strongly argued that no teaching learning activities takes place without media. He also remarked media as one of the most important tool that brings maximum student learning.

Lockwood and Others (1994) argued that media should be critical ingredients in learning; otherwise, the intended curriculum can not be easily implemented. Because of this, reason media currently finds its self in the position of being assigned as integral part in the instructional process.

From the above discussion, it is clear that media involves remarkable and meaningful contribution to the process of education. Therefore, media should be considered as an indispensable part in the process of education.

## **2.5. Characteristics of Radio Instruction**

The introduction of educational media is a recent phenomena. The growth of instructional Radio and TV systems flourished gradually with the growth of science and technology. Many scholars have confirmed that educational radio rose to prominence in the years before the Second World War particularly in America and Western Europe. Wittich and Schuller have confirmed that the use of educational media before 1900 was only too little. The authors have the following to say:-

*In the year 1900 communication was largely by word of mouth. This was in the day before the advent of radio, during the easy development of the motion picture and before TV, since 1900 communication patterns have changed dramatically in all most social situations (Wittich and Schuller, 1953:1).*

Instructional radio helps to intensify or enhance formal and non formal education. Through the formal and non-formal education, instructional radio may have several kinds of effects in the individuals' achievement.

One of the cheapest and most universal aids in the class room is that provided by radio broadcast to schools. Among the developing nations of the world, radio is bringing education to boys and girls in areas where teachers do almost not exist. This shows that distance education can be promoted with the use of radio.

Comparatively with other media equipment radio is inexpensive, easily handled tool. If it is used properly by the teacher, radio will give him considerable assistance. Radio, because of its encouragement and the use of imagination among listeners encourages active participation. The involvement of radio in the broad casting of education will help a lot. Radio can make education lively with locality. Emile, has asserted this in his words as follows:

*Radio relatively inexpensive medium compared with TV which allows for creating local stations that serve a relatively limited area with homogeneous language, culture and interests programming may not only educate but reinforce local values that may be treated by dominant groups anxious to develop a marginal area or group. Local stations broadcasting in local languages can contribute to the solutions of local problem and provides a voice of their audience through a more appropriate feedback mechanism (Emile Merriam, 1973:2).*

Therefore the importance of radio especially for the underdeveloped countries, regions and disadvantaged cultural and ethnic groups can be understood from the above listed notion.

At present radio is used in developed and underdeveloped countries for educational purposes. Among the many educational media used to disseminate education, radio is one of the most inexpensive. This is asserted by Peter (1977:30) as follows: "among the various technologies of instruction now being used around the a world, ranging from programmed instruction to booklets to colour TV and computer, radio emerged as one of the most economical." Mendelsohn (1980) as cited in (Snow 1983:123) stated that with radio communication directed at a specific audience at a specific place, listeners can personalize the experience in a manner similar to face to face in encounters. Radio functions as a distributor to multiply the classroom and brings lessons to the students. In other words, radio reaches every school village, town, city, and region with its message (lesson) at the same time.

The other key characteristic of radio is its interactivity. Since Radio is a one way broadcast medium, the programmes are not truly interactive when compared with a two-way-communication. But short pauses provided through out the lesson allow teacher and learners (students) to stop and react to questions and exercises through verbal and physical responses- to radio characters, group work, experiment and other physical and intellectual activities while the program is on the air. The short pauses provided through the lesson after questions and during exercises can ensure that students have time to think and to respond adequately.

Radio programmes are designed to be a part of comprehensive multi channel learning systems that generally includes written materials, teacher orientation and other instructional activities (Lock Hood, Marian and Erichanushek, 1988:184) In most cases Radio does not alter existing education system, rather acts as a tool for changing the quality of interaction and learning that takes place within them (Tilson 1991:143). In other words, Radio works to integrate the elements of teaching and learning by building on resources that are already available (broad cast capability radios, teachers, students, activities, locally

available materials etc) in a specific way that had been associated with good teaching and learning practice. According to Tillson, however, Radio, is also being introduced as means for creating learning system where the educational system is either dysfunctional or nonexistent. As an add on to improve quality or as a fundamental means of generating the basic interactions of teaching and learning.

## **2.6. Factors that Affect Implementation of Radio Instruction**

Like other instructional media, radio is subject to different factors, which hinder its effective implementation. Some of the factors which affect the effective implementation of radio instruction are quality production, comments of programmer producer, commitment of the classroom teacher, commitments of the head teacher, training of teachers, involvement of teachers in media planning and supportive materials. With out meeting these requirements, educational radio programs could not be effectively implemented.

### **2.6.1. Quality of Program Production**

Regarding program quality Mcleish (2000:259-260) suggests the following.

A) Appropriate- this is to meet the needs of the learner and can be achieved by considering his background B) creative–this is to indicate that how much the production is new (newness) and its logical arrangement C) Accuracy i.e. truthfulness and honest of the program D) Holistic– this is understand ability to the sense of reason and appeal to other senses (pictorial imaginative) personal enhancement-enrich the experience for the learner and E) Technical advancement-innovative production method.

King (1971:25) and Roberts (1973:215) asserted that to maintain the quality of the program it is better to think the script. They argued that the heat of the program is the script. Poorly designed and written script may have an impact on production.

Tenkir (1998:41) stressed the importance of radio instruction formats for the effective implementation of radio lesson. Formats refer to the methods of radio presentation. There are different formats. These are:

A) Radio talk- that is equivalent to lecture method,

B) Dialogue            C) discussion            D) drama            E) drill-using combined radio format in the program is also paramount importance to improve the quality of radio programs. Keye and Propperwell (492:58) recommend the variety of radio formats in radio program refresh the ear of the learner. Similarly Tilson (1994:2886) argued that a variety of radio programming formats is one of the good qualities of a good program.

The script of the program should be a logical development of the ideas. The script should have beginning, middle and an end. When script writers write their radio script they have to use words which will be spoken and have to use short sentences (Mcleish 1996:68).

### **2.6.2. Commitment of Program Producer**

Committed program producers recognize the needs and desires of their listeners. A committed program producer uses his full potential and creativity when he writes quality radio programs which may capture and attract the learner's ears. The programme producer expands and brings novel ideas to the syllabus and curriculum (Bethel, 1971:80).

He also comments that directly taking the statements from student's textbooks and broadcasting it makes the learners reject the program. Therefore the program producer should be a committed to know his audience, his medium and he should be near and close observer of the effect of his work and further he should know his roles.

(Tenkir, 1992:37, Assiress, 1988:75) mentioned the following roles of the radio program producers.

1. Producing quality educational radio programs.
2. Preparing radio teachers' guide
3. Writing casting scripts
4. Selecting presenters and actors who take part in the presentation process of educational radio programs.

Furthermore, Bethel (1971:99) mentioned that involving in consultation, voicing, editing, fixing, follow up arrangements, on his program, training teachers in radio techniques etc are some the roles of program producer.

### **2.6.3. Commitment of the Teacher**

Teaching with any medium requires careful planning. If radio programming is to be used effectively, the teacher's role must be spelt out clearly. Proper implementation of radio programs in the class room involves many things. A few of these requirements are based on teachers 'attitude and others depend on the class room environment, weather condition, the number of students in the class and the availability of media resources. To make effective implementation of radio programs, teachers, need to encourage the students by motivating them to learn effectively from radio programs. They need to help students to benefit from listening to radio broadcasts.

The quality of the program also contributes as to the effectiveness in meeting the learning needs of the students. Anzolena (1988:347) suggest the following regarding the role of the teacher during radio instruction. Teachers have to be encouraged to:-

1. Have a class time table indicating radio program.
2. Appoint ones' students to be in charge of collecting the radio set from the store office.

3. To remind the students about the coming program by writing the program title on the blackboard in advance.
4. To prepare for the programmes and to improve materials where necessary.
5. To take part the listening exercise with the students.

The presence of the teacher in the class during broadcasts is also important. Taking part in the listening process with the students motivates them. For instance it enables the teacher to identify those with hearing difficulties so as to sit them near the radio. The teacher can also encourage the students to respond to the radio presenters. Being in the class with the students helps to maintain classroom discipline during broad cast (Anzolena 1988:281). Generally commitment of teachers in radio pogram implementation starts from switching on the radio and extends to accomplish his role before, during and after broad casting activities at will. The following are the activities of the teacher before, during and after broadcast taken from Tomaline.

Before the broadcast a teachers prepare certain questions related to the day's broadcast. The questions can be those which students can easily understand and which they are able to answer and learn at the end of the radio lesson. The pr- radio activity will prepare the students for the situation and the lesson that is to be presented on the radio. Where necessary the classroom teacher prepares some pictorial aids or charts that he can use during the radio lessons.

He may also revise the previous radio lesson to refresh the students' memory and also check if students can still do the drills if any. Besides he can also explain briefly the oncoming programmes that are to be raised in the day's lesson.

During the radio lesson, the classroom teacher has certain activities to accomplish. That is while listening to the program with the students; he has to encourage the students to follow the instructions given by the radio teacher, for

instance, in guiding them to drill after the radio teacher and in answering questions asked by the radio teacher. Further, while listening to the lesson broadcast the teacher can list down some important points of the lesson that are to be revised and discussed after the radio lesson.

After the radio lesson, for the feedback, the classroom teacher has to revise the radio lesson. For example, repeating the drill or exercise taught to make sure that they are well fixed in the students mind (Tomaline, 1986:34).

Hence, by end of the radio lesson including the before, during and after radio activities it is assumed that the students will have learned or gained something from the radio lesson that would not have been available without that lesson.

#### **2.6.4. Commitment of the Head Teacher**

The scope and mode of using radio in the school also relies heavily on the head teacher. The part played by the head teacher in the whole exercise helps to determine the effectiveness, efficiency and shapes the manner in which radio broadcasts are used in the school. The head teacher in the primary schools is the one responsible for providing teachers with media responsibilities. According to Feimich (1997:81), head teachers have been advised to insure that:-

1. There are working radios in the school
2. There is a school radio time table
3. Every teacher whose subjects are covered by radio has a time table indicating programmes.
4. There is a school time table indicating the entire radio programme.
5. All teachers guide notes are available and given to the teacher concerned
6. Teachers incorporate radio programmes in their lesson preparation.
7. The necessary assistance and supervisory work are provided.
8. Teacher has been appointed to be in charge of all media materials and broadcast program in the school.

Therefore what we conclude from the above is that the head teachers have been encouraged to try to assist the teacher by providing the necessary facilities for effective implementation of resources.

### **2.6.5. Training of Teachers**

To days teachers need to know how to use the tools of their profession. Many are complement to do so when they begin to teach, but many are prepared poorly or not at all. A course in media implementation for teachers is of paramount importance. Many teachers are entering the market job with out adequate orientation but the current states of instructional technology. So to promote and develop the quality of educational radio, the training of staff (teachers) is important. This has been asserted in the following way.

*The importance of having sufficient well trained personnel to carry out in such clerical and technical functions cannot be over emphasized particularly in the case of expanding programs which have to regenerate additional budgetary, support, recruit new personnel and supervise their training either before they begin working or on the job (Brown, 1973:63).*

Similarly, in order to implement radio programmes successfully Parraton (1978:8) argued that trained teachers must be used. As it has been indicated in the aforementioned ideas, the need for training teachers must be stressed up on to implement effectively radio instruction. This could be accomplished by giving training for teachers before they start a job i.e. pre-service training or on job training that is in service training.

### **2.6.6. The Involvement of Teachers in Media Planning**

The participation of teachers in media planning is also an important factor which enhances the implementation of radio instruction. Therefore teachers need to participate in media planning. This helps to identify the problems in radio instruction and to ascertain radios' suitability for teaching. Supporting

this idea Boedino (1997:256) said “. . . to improve quality of instruction at the class room level, teachers need information and teachers are themselves a source of information about what they are expected to achieve with their students”. This indicates that radio script writers before they write their radio scripts should discuss and consult classroom teachers. Doing this helps to minimize the encountered problems in the process of instruction and brings effective implementation of radio instruction. Therefore teachers need to participate in topic selection and other activities.

### **2.6.7. Provision of Supportive Materials**

When we say supporting materials for radio lessons usually consists of radio distribution, radio manuals, teacher's guide and students' materials. These materials are usually prepared with active participation of local teachers considering students in mind. As Wittich and Schuler (1979:295-297) noted such materials describe the content of the programs outline what students are expected to do and list the materials that should be on hand when the radio begins. The same authors further mentioned that these materials are basically prepared and distributed before the radio lesson. However, Havelock and Robinson (1982:25) after reviewing many case studies concluded that all the case studies report either teachers guide or work books for students are being vital part of the service they provide.

The main function of teachers guide is to help and guide the teacher in using the program. Teachers guide is the direct means of communication between the programme producer and the teacher. It provides information for class preparation and organization pre and post broadcast activities (Mohanty 1984). Therefore to have effective implementation of radio instruction, preparation and distribution of supportive materials like teachers guide for user schools is vital. Moreover Havelock and Huberman (1982:134) confirmed that unless radio is used in combination with other media particularly with printed media it is not effective.

On the other hand insufficient and less quality radio receivers in the schools are among the serious problems in using radio instruction in many countries (Tilson 1994:24). This shows that effective implementation of radio instruction could be affected by the distribution of radio in the primary schools. In general the distribution of radio is the first issue to implement radio instruction at primary schools.

Assress (298:86) noted that with out good receivers to receive the signals that are broadcasted the broadcasts are simply wasting their time.

To sum up, supporting materials like radio distribution teachers guide, students materials, radio lesson manuals are vital in effective implementation of radio instruction. All the above discussed materials should not be neglected in the development of radio curriculum.

## **2.7. The Effectiveness of Radio in Instruction**

Radio instruction has emerged as a good option for improving the quality of education in primary school classrooms in developing countries of the world. Researches, conducted in many countries in the last 20 years have indicated that the use of Radio has led to significant improvements in learning achievement. The students have also known that Radio has helped to overcome equity gaps between urban and rural children and between girls and boys (Bosch and Cecillia,1995:294).

By virtue of its generality, low cost and wide availability, radio is often assigned the second place in importance behind print as a delivery medium for distance education Radio is most often used as a supplement, in conjunction with other instructional delivery modes (Peris, 1984:287). Research studies show the heaviest reliance on radio in Africa, where 75% of the institutions survey used radio. In Asia 38% and Latin America surprisingly low 24% respond affirmatively to the use of radio (Peris, 1984:295).

After almost three decades of experience, the ability of radio to improve the quality of education is established and well documented. Evaluations have yielded consistent and significant evidence that radio can increase learning (Murphy et.al. 2002:204). Changing in educational quality have been measured through controlled studies of learning gains, conducted by external evaluation and through assessments of classroom activity in projects around the world. These results have indicated that increase in achievement across subject matter, students' age and gender, and rural and urban locations of the project, students in radio class on average outperform students in control groups with an effect size of 0.5 standard deviations (Tilson et.al 1991; Leigh and Cash 1999:276). This is consistent and notable gain in learning.

Since the mid 1990s, a number of radio initiatives have been launched in different countries of Africa and are now reporting results. In Guinea; where radio is part of USAID funded education program that concentrates on reducing equity gaps, enrollment figures and external evaluation results indicate that improvements in educational quality are coupled with increase enrollment, attendance, and achievement for both girls and boys in urban and rural settings (Creative Association International 2002: 237). To assess Nigeria's grade 3-5 literacy and mathematics radio program, evaluators compared student performance in control and radio class rooms a significant positive influence of radio on student achievement was found in the third grade but not in the fourth (Royer 2003:84-85)

Generally, the above research studies indicate the effectiveness of radio in instruction. On the other hand Fiemich (1997:49) suggested the following advantages and disadvantages of radio in instruction.

***Advantages:***

1. The use of radio lesson provides equal opportunities for schools access to learning resources so as to increase students' performance in schoolwork.

2. Through the use of music drama and special techniques, radio brings more interest and if a through up follow up is made more learning is made
3. Radio lesson helps to bring, monotony of the regular class room teachers voice.
4. Radio helps to overcome the shortage or lack of reference books, textbooks and other conventional instructional materials.

However all of these instructional radio advantages are possible only if the programmes are professionally prepared and presented at all levels to ensure that they achieve the goals of teaching and learning. Radio broadcast lessons are well research, planned and presented effectively hence interesting and incorporating update thinking in the field of education. This acts as a catalyst for learning among students at the same time helps to stimulate education to reconsider methods of learning (Fiemich, 1997:50).

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### ***Disadvantages***

Though radio as a tool is relatively cheap and affordable for many schools and broadcasts are transmitted to all parts of the country, it has some short comings which hinder its full potential as an effective medium of instruction in the school. These disadvantages are:

1. Radio can not offer personal contact unlike the classroom teacher.
2. Some teachers who are not keen often leave the students to listen to the program on their own.
3. Radio lessons can not account for the presence of the listeners (as books) or whether they listening or not. It does not even cater for individual difference in the class (eg. the hearing impaired).

4. Lack of immediate feed back which is normally enjoyed in a classroom where there is a face to face to discussion.

Regarding the disadvantage of radio, Zelmer has also said the following:

“The disadvantage of radio of course are the lack of visual materials and the difficulty having information repeated . . . to . . . tune the end of an interesting program and in broadcast then is usually gone for ever” (Zelmer 1979:74).

Nevertheless the collection of literature about radio ascertained that the advantage out weight by far and the application of it in the field of education is said to be paramount importance.

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODS**

#### **3.1. Research Methodology**

The two broad categories of research design are qualitative and quantitative research. Unlike the qualitative research, the quantitative research comprises of those studies in which the data concerned can be analyzed in terms of numbers.

This study followed both qualitative and quantitative research design. Regarding this, there are no hard and fast rules that are stated to use the one and reject the other. Instead, prevailing trends favour the use of both designs in a single data. Aronson and Others (1990) described that each data collection instrument has its own weakness and strengths. Regardless of this, the same authors suggested using each instrument accordingly as long as it is appropriate to the purpose, size and situation under which the researcher is conducted. Moreover over, Best and Khan (1986) stated that the use of multiple data collection instruments as a rule because each reveals different aspects of empirical reality.

#### **3.2. Data Sources**

The collection of information was carried out through primary and secondary sources. In the secondary data, relevant books and journals were reviewed in the literature part, to support the findings of the study.

Primary data was collected from classroom observation, interview (held with school directors and media experts) and through questionnaire for grade 3 and 4 students and teachers.

### **3.3 Sample Procedure and Sample Size**

Currently the total number of second cycle primary school functioning in Awi administrative zone are 164 out of which 85 are schools where the medium of instruction is Awigni. The limited resources has forced the researcher to focus on some selected primary schools in the zone.

#### **3.3.1 Sampling Procedure for Sample Schools Selection**

The selection of 5 schools from 85 primary schools population depends on the following steps. The first step was identifying the distribution of primary schools in each woreda. In the zone there are 5 woredas and all the 5 woredas are included in the study. The population of the study area comprised of a total of 18 primary schools from Ankasha Guagusa 15, Dangila, woreda 17 Banja Shikudad 18 Gungua woreda 16 Fegita Lekoma woreda. i.e. each woreda has nearly equal number of schools.

The second step was to select a sample school from each woreda. since each woreda has nearly equal number of schools, one school was selected from each woreda using the sample random sampling technique (lottery) i.e. Bate from Banja Shikudad woreda Sigadi from Gungua woreda Singuri from Dangile woreda, Agew Gemjabet from Ankasha Guagusa and Nechela from Fegita Lekoma woreda.

Once the selection of the sample schools is completed then for the sampling of students, teachers school directors and media experts in the zone education department, the following steps have been employed.

#### **3.3.2 Sample Procedure and Sample Size**

The first step was to closely examine the educational characteristics of the study area. the total number of available sections for grade 3 and 4 of the selected schools were 20 (i.e. 10 section for grade 3 and 10 section for grade 4). Besides this the total number of students attending in all sections in grade 3 and 4 were 2000. (1050 male and 950 female).

The second step was selecting the sections from each grade level in each school. In the sampled schools each grade level has two sections. And the two sections were included in the sample.

The third step was to selected sample students from each section. 10% of the students fro m grade 3 and 4 were selected from the study through simple random (lottery) method. In the selection process, to insure that female students were proportionally represented to their male counter parts in the sample, 50% of both grade levels were considered to be females. At the end 100 (50 male and 50 female) grade 3 and 100 (50 male and 50 female) grade 4 students in the selected sample schools were selected to participate infilling the students' questionnaires.

### **3.3.3 Sampling Procedure and Sample Size for Teachers**

The process that has been involved in the selection of 20 teachers from sampled schools were the following.

The first step was to identify the total number of grade 3 and 4 teachers in the sample schools. Accordingly, 20 teachers were teaching grade 3 and 4.

The second step was the selection of sample teachers for the study. The larger the sample size, the smaller is the magnitude of sampling error (Best, et . al, 1993:20). viewed in this context, the whole 20 grade 3 and 4 teachers in the sample schools were involved in filing the questionnaire.

### **3.3.4 Sampling Procedures and Sample Size for School Directors and Media Experts**

Educational researchers recommended that the ideal sample have to be large enough to serve in adequate representation of population (Best et. al., 1993:18) in line with, all school directors (5) in the sampled schools and all media experts (5) in the zone Education Department were involved in the study.

### **3.4. Data Collecting Instruments**

In order to get adequate information for the study, the following 3 types of data collection instrument were used.

#### **3.4.1. Questionnaire**

Two types of questionnaire were prepared. The first was for grade 3 and 4 students and the second for grade 3 and 4 teachers. The questionnaires were first designed in English and then translated into Amharic. The students' questionnaires were translated into Awigni in order to help respondents fill them out with out difficulty. In the translation of the questionnaire into Awigni, one post graduate student and two media experts in the zone education department participated in order to make the necessary changes.

The questionnaires were pre-tested in one primary school (Bate primary school) which had four grade 3 and 4 teachers and 20 grade 3 and 4 students. After collecting the piloted questionnaires, each item was examined to change unnecessary items. The internal consistencies of the attitude questionnaires were also computed. Accordingly, amendments were made for some of the items and development of the attitude scale was found to be reliable having a coefficient of alpha chon Bach of 0.82 for the students' questionnaires and 0.83 for the teachers' questionnaires [see Appendix G and F]. The questionnaires were then administered to grade 3 and 4 students and teachers. In order to collect the necessary data, 200 questionnaires for students and 20 questionnaires for teachers, totally 220 questionnaires were administered. Since the questionnaires were examined carefully during the pilot test, the return was hundred percent from both students and teachers.

The questionnaire for students contained 3 parts. The first part dealt with the background of the respondents (sex, age, grade etc.) The second part contained 6 favorable and 6 unfavorable statements which assessed the attitude of

students towards Awigni language radio broadcast. In this case, the students were asked to rate on a series of a five-point Likert type scale ranging from strongly agree to strongly disagree and the third section contained 11 questions which asked students to respond regarding implementation factors, the quality of presentation and contents of the program. The questionnaires had 3 open-ended items. And the questionnaire for class room teachers had five sections. The first one dealt with the background of the respondents. The second section consisted of seven questions which asked teachers regarding availability and use of supportive materials (radio sets, radio teacher's guide, radio lesson manual etc). The third part consisted of ten questions which asked teachers about their training on radio instruction implementation and other implementation factors.

The fourth section consisted of seven questions. The questions asked teachers regarding the quality, presentation and content of the program. And the fifth section consisted of six favorable and six unfavorable statements which assessed the attitude of grade 3 and 4 teachers' towards Awigni language radio instruction. Like students, the teachers were asked to rate items on a series of five-point Likert type scale ranging from strongly agree to strongly disagree.

### **3.4.2. Interview**

In order to collect data from zonal education department media experts and school directors', two types of unstructured interview were prepared. (See appendix D and F) specifically the interview guides focused on issues of the support service provided for the teacher in effective implementation of Awigni language radio broadcasts, the major problems faced during the implementation stage, the measures to be taken to overcome these problems etc. The information obtained using the interview was used to support the teachers' and students' responses.

### **3.4.3. Classroom Observation**

A classroom observation checklist was used to observe the actual teaching learning process during the broadcasting session (see appendix C). The classroom observation was employed mainly to check whether the activities which should be performed by the classroom teachers and students before, during and after broadcast were accomplished. The format of the checklists was based on the relevant literature. The first draft of the checklist was pre tested in the school selected for pilot testing. Accordingly, certain items were refined, changed, and prepared for final use.

The observation checklist contained a total of 14 items. Out of the 14 items, nine items, dealt with the classroom teacher's instructional activities while the rest five were related to the students' participation and the condition of discipline before, during and after broadcasts.

The classroom observation was employed by the student researcher himself in 20 randomly selected classes (in 10 grades three and in 10 grade four) of the sampled schools.

### **3.5 Data Analysis**

The data collected on the basis of the purpose of the study through the aforementioned instruments were tailed and organized properly. The organization of data was followed by tables which give detailed background information about the participant. The data analyzed involved the analyses of information gathered through observation and responses to the question items in the questionnaire and interview. The collected data was presented by employing frequency tables and descriptive phrases. Frequencies, percentages and qualitative descriptions were used to analysis and discuss the collected data.

To analyze the attitudinal responses of teachers and students, the summated score technique was employed. Moreover the information obtained through interview consolidated the information obtained through questionnaire.

## CHAPTER FOUR

### DATA PRESENTATION AND ANALYSIS

In this section, the data collected using questionnaire, classroom observation and interview were analyzed presented using frequency tables, percentages and the summated technique.

#### 4.1. Description of the Respondents

In this study, 200 students of grade 3 and 4, 20 grade 3 and 4 teachers and 5 media experts in the zone education department, 5 school directs and 20 grade three and four classes during broadcasting sessions were used as a source of data. All the above classrooms were observed using an observation checklist, all students filled questionnaires and all school directors and media experts were interviewed. Out of a total of 20 self-contained teachers, 11(55%) were female; and 9 (45%) were male. 13 (65%) were TTI (12+1), 2 (10%) TTI (10+1) while 5 (25%) 12<sup>th</sup> complete. Out of a total of 5 school directors 4(80%) of them were males while 1(20%) was female. 3 (70%) of directors were TTI (12+1) while 2 (70%) of them were 12+2, diploma holders. In the length of service category most of the teachers 7(35%) of them had a teaching experience that ranges from 16-20 years while most of the school directors (60%) reported to have directorship that ranges from 11-15 years.

Moreover, the Awigni language radio program producers at the Zonal Education Department had a Bachelor of Arts plus Certificate in radio program production and less than 5 years of experience as media experts. From a total of 200 students, 50% were males while the rest 50% were females.

#### 4.2 Background Characteristics of Respondents

Based on the information obtained from grade 3 and 4 teachers and school directors, they are examined in terms of sex, age qualification and years of service as indicated in the table below.

**Table 1: Characteristics of Teachers and School Director Respondents by Their Sex.**

Sex	Respondents			
	Teacher		Directors	
	No	%	No	%
Female	11	55	1	20
Male	9	45	4	80
<b>Total</b>	<b>20</b>	<b>100</b>	<b>5</b>	<b>100</b>

As it is indicated in table 1 above, 11 (55%) and 1 (20%) of teachers and school directors are females respectively. While 9(45%) and 4 (80%) of the teachers and school director `respectively are males`.

**Table 2: Characteristics of Teacher and Director Respondents by years Service**

Years of Services	Respondents			
	Teachers		Directors	
	No	%	No	%
Below 1 year	-	-	-	-
From 2-5	4	20	1	20
From 6-10	4	20	1	20
From 11-15	2	10	3	60
From 16-20	7	35	-	-
Above 20 years	3	15	-	-
<b>Total</b>	<b>20</b>	<b>100</b>	<b>5</b>	<b>100</b>

In the length of service category, as the figure indicates most of the teachers (35%) have a teaching experience that ranges from 16-20 years while most of the school directors (60%) have an experience as director that ranges from 11-15 years. This long experience of the respondents implies that they have detail information about the issue under study.

**Table 3: Educational Level of Teachers and Directors**

Educational Level	Respondents			
	Teachers		Directors	
	No	%	No	%
10 + 2	-	-	-	-
10 + 1 (TTI)	2	10	-	-
12 + 2 (diploma)	-	-	2	30
12 + 1 (TTI)	13	65	3	70
12 <sup>th</sup> complete	5	25	-	-
10 <sup>th</sup> complete	-	-	-	-
<b>Total</b>	<b>20</b>	<b>100</b>	<b>5</b>	<b>100</b>

As depicted in the table 3, 13(65%) and 2 (10%) of the teacher respondents are graduates from teacher training institutes (12+TTI and 10+TTI) respectively. However, 5(25%) of teacher respondents are 12<sup>th</sup> complete. This implies that there are some teachers who joined the teaching profession without any qualification. On the other hand, the great majority (70%) of school directors have a qualification of 12+ 1 (TTI) while very few (30%) of them have 12 +2 (diploma) in school administration.

**Table 4: Characteristics of Teachers and Directors by their Age**

Age Range	Respondents			
	Teacher		Directors	
	No	%	No	%
20-25	1	5	-	-
26-30	8	40	3	60
31-35	-	-	1	20
36-40	6	30	1	20
41-45	5	25	-	-
<b>Total</b>	<b>20</b>	<b>100</b>	<b>5</b>	<b>100</b>

As it is shown in the above table, most of the respondents, 40% and 60% of the teacher and school directors respectively fall in the age range between 26-30 years having this long age means they have enough experience in teaching and this long teaching experience helps them to know ore about the programe. This indicates that most of the respondents have detail information about the issue under study.

**Table 5. Characteristics of Media Experts in the Zone Education Department in their age, level of education and years of experience**

Characteristics		No	%
Age range	30-36	5	100
	37-42		
	43-48		
	Above 48		
	<b>Total</b>	<b>5</b>	<b>100</b>
Level of education	TTI (12+1, 10+1)		
	Diploma (12 +2)		
	BA/BC+ Certificate	5	100
	<b>Total</b>	<b>5</b>	<b>100</b>
Years of experience	In teaching	1-5	
		6-10	5
		11-15	
		<b>Total</b>	<b>5</b>
	As media experts	1-4	5
		5-9	
		10-14	
		<b>Total</b>	<b>5</b>

Besides this, the Awigni language radio producers at the zonal educational department have a Bachelor of Arts and certificate in radio program production, 5-10 years of experience in teaching and less than 5 years of experience as media experts. Table 6 shows this.

**Table 6. Characteristics of Student Respondents in their Sex and Age**

Characteristics		Sex	No	%
Sex	Grade 3	Male	50	50
		Female	50	50
		<b>Total</b>	<b>100</b>	<b>100</b>
	Grade 4	Male	50	50
		Female	50	50
		<b>Total</b>	<b>100</b>	<b>100</b>
Age	Grade 3	<b>Age range</b>		
		5-6		
		7-8	100	100
		9-10		
		11-12		
		<b>Total</b>	<b>100</b>	<b>100</b>
	Grade 4	5-6		
		7-8		
		9-10	100	100
		11-12		
		<b>Total</b>	<b>100</b>	<b>100</b>

Of 200 grade 3 and 4 student respondents (100 from each grade level), 100 (50%) are males while the rest 100 (50%) are females i.e. equal chance have given for both sex. Regarding the age of the student respondents, they fall between the age range of 9-10 years and 7-8 years for grade 4 and grade 3 respectively.

### **4.3 Teaching Load of Teachers**

Teachers were asked to rate the teaching load per week. This is to assess whether or not teaching load affects the implementation of Awingi language radio instruction. The obtained results are summarized in table 7

**Table 7: Frequency and Percentage Distribution of Teaching Load by Teacher Respondents.**

Teaching load per week	Teachers respondents	
	Frequency	Percentage
10 -15	1	5
16-20	3	15
21- 25	14	70
Above 26	2	10
<b>Total</b>	<b>20</b>	<b>100</b>

Based on the information above, out of 20 teachers 1 (5%) of teacher respondents reported a teaching load 10- 15 period; 3 (15%) of teachers reported a teaching load between 16 -20 period. Besides 14 (70%) of the teachers reported a weekly teaching load between 21 -25. And 2 (12%) of them responded a teaching load of above 26 periods per week.

From this it can be deduced that the majority of teachers 14 (70%) have a large teaching load i.e. (21-25) periods per week. This may greatly affect these teachers in planning Awigni language radio lessons.

Bayens in her survey study confirmed this fact. Recently compiled local results from the Kansas Teacher working conditions survey indicates that 85% of the teachers in her school and 61% of Lawrence's teachers do not think they enough non instructional time to do their jobs.

In her survey, she concluded that decreasing the teaching load and increasing the amount of time that elementary teachers to have to plan is paramount importance (Amanda Bayens, 2007:1-3).

#### 4.4. Availability and use of Supportive Materials

An item in the questionnaire asked teacher respondents about the adequacy of Awigni language radio sets and Awigni language Radio teacher's guide in their schools. A summary of the result is presented in table 8.

**Table 8: Frequency and Percentage Distribution of Teachers' Responses on the Adequacy of Awigni Language Radio Sets, Awigni Language Radio Teachers Guide and Radio Lesson Manual in Schools**

Teachers Responses	Types of supportive materials	
	Radio sets	Radio teachers' guide and radio lesson manual
Adequate	1(5)	0(0%)
Inadequate	19 (95%)	20(100%)
<b>Total</b>	<b>20(100%)</b>	<b>20(100%)</b>

As shown in the above table, 1(5%) of teacher respondents responded that Awigni language radio sets are adequate. On the other hand 19(95%) of teacher respondents, responded Awigni language radio sets are inadequate. From this it can be deduced that Awigni language radio sets are inadequate.

Similarly none 0(0%) of the teacher respondents reported that Awigni language radio teacher's guide and radio lesson manuals are adequate and 20(100%) of the respondents reported that Awigni language radio teacher's guide and radio lesson manuals are inadequate. In other words, there is no radio teacher's guide and radio/lesson manual for Awigni language radio broadcast. This indicates that the teaching-learning process in Awigni language radio broadcast takes places with out radio teacher's guide and radio lesson manual.

The interview results of school directors and zone educational media experts also revealed that Awigni language radio sets, radio teacher's guide and radio

lesson manual are inadequate. They confirmed that only one radio set is available for the majority of schools. They said that radio sets are inadequate because they have financial constraints to buy additional radio sets. Besides this, the interview result of both school directors and media expert indicated that Awigni language radio teacher's guide, and radio lesson manuals are (completely absent) because they are yet on the way to be prepared for the program. Moreover, as the student researcher observed only one radio set is was used in the school for the transmission of the program and teachers did not have any radio teacher's guide and radio lesson manual in their hand during the actual transmission.

So, it can be concluded that the number of radio sets is inadequate. And Awigni language radio teacher's guide and radio lesson manual is completely absent in the sample schools. As a result, the inadequacy of radio sets and the complete absence of Awigni language radio teacher's guide and radio lesson manual affects the implementation of Awigni language radio instruction in the first cycle primary schools of the zone.

#### **4.5 Radio Function**

Teacher respondents were asked to rate the extent of Awigni language radio function in the sampled schools. The item presented a four point scale measurement ranging from never to always. The findings of the study show that a large number of teacher respondents said the radios' functioned 'always'. A small number of them said the radios were functional 'sometimes' and a very small number of them said radios were 'rarely' functional.

**Table 9: Frequency and Percentage Distribution of Awigni Language Radio Functioning in Schools.**

Radio function	Number of Respondents	
	No	Percentage
Always	16	80
Sometimes	3	15
Rarely	1	5
<b>Total</b>	<b>200</b>	<b>100%</b>

As shown in the above table, the majority of teacher respondents 16(80%) reported radios functioned always, 3(15%) said sometimes, and 1(5%) rarely.

#### **4.6 Radio use in the School**

An item in the teacher's questionnaire asked teacher respondents to rate how often they use Awigni language radio for grade three and four in their schools. The response are resented as follows.

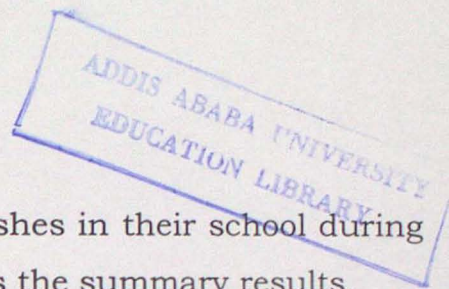
**Table 10: Frequency and Percentage Distribution of Teacher Respondents on the Radio use in the School.**

Radio use in the School	Respondents	
	Frequenc y	Percentage
Regularly	5	25
Sometimes	15	75
Never	0	0
<b>Total</b>	<b>20</b>	<b>100%</b>

As shown in table 10 the frequency and percentage distribution of teacher respondents on how often they use Awigni language radio for grade three and four said radio was used either 'regularly' or 'sometimes'. Thus 5 (25%) of them

responded they use radio 'regularly' and 15 (75%) of them 'sometimes'. This indicates that radio function in the sampled schools lacks regularity. Similarly, the interview results of school directors indicated that because of occasional absence of broadcast from the center [source] and unexpected electric power interruption, there are no regular function Awigni Language Radio broadcasts for grade three and four. However, to solve this problem interviewed school directors explained that batteries and cassettes were used. But they explained that there is no regular adequate supply of cassettes.

#### 4.7 Clashes of Time Scheduling



Teachers were asked the existence of scheduling clashes in their school during Awigni language radio programme. Table 11 indicates the summary results.

**Table 11: Frequency and Percentage Distribution of the Existence of Scheduling Clashes by Teacher Respondents**

Clashes of time scheduling	Respondents	
	Frequency	Percentage
Yes	12	60%
No	8	40%
Don't know	0	0%
<b>Total</b>	<b>20</b>	<b>100%</b>

The above table indicates that 12 (60%) of teachers reported the presence of clash of scheduling while 8(40%) of the teacher respondents responded that class scheduling is not a problem during Awigni language radio broadcast in their respective schools. As shown the majority 12 (60%) of teachers mentioned the presence of clash of scheduling. Thus, it can be concluded that scheduling conflict can adversely affect the implementation of Awigni language radio broadcast.

## 4.8 Teacher Training and Implementation Factors

### 4.8.1 Pre-service Training

One major factor that influences effective implementation of radio instruction is pre-service and in-service training of teachers. Thus, to evaluate the implementation of Awigni language radio instruction an item in the teacher questionnaire asked whether teachers have pre-service training or not. Table 12 summarizes the results.

**Table 12: Frequency and Percentage Distribution of Teachers with Pre-service Training**

<b>Item</b>	<b>No</b>	<b>%</b>
Trained	15	75%
Not trained	5	25%
Don't know	0	0%
<b>Total</b>	<b>20</b>	<b>100%</b>

As it is shown in table 12, 15 (75%) of teacher respondents have pre-service training. However, 5 (25%) of teacher respondents have not had pre-service training. This indicates that there are teachers, about (25%), who teach in Awigni language radio program without taking pre-service teacher training.

### 4.8.2. Teacher Training Courses and Implementation of Awigni Language Radio instruction

Teachers were asked whether courses of teacher training that they take took, in include how to implement Awigni language radio lessons or not. The responses are summarized in the table below (table 13).

**Table13. Frequency and percentage Distribution of Teachers' Involvement in Radio Instruction Courses**

Teacher training I took included how to implement radio instruction	Respondents	
	Frequency	Percentage
Yes	3	15%
No	15	75%
Don't know	2	10%
<b>Total</b>	<b>20</b>	<b>100%</b>

As indicated in the above table, the majority of teacher respondents 15(75%) have not taken teacher training courses which includes how to implement radio lessons, while 3 (15%) of them have taken teacher training courses which includes courses how to implement radio lesson. And few teacher respondents [2 (10%) ] reported that they don't know whether teacher training courses include how to implement radio lesson. This indicates that the majority of teachers 9 (95%) instruct without taking courses on how to implement radio instruction.

#### **4.8.3 In-service Training**

So as to implement radio instruction effectively, teachers need to participate in in-service training. Thus, to assess teachers in Awigni language radio instruction, in this regard they were asked how often they participated in service training in the last 3 years (2004-2007). Table 14 summarizes this.

**Table1 4: Frequency and Percentage Distribution of Teachers' Involvement in In-service Training**

Extent of involvement	Respondents	
	Frequency	Percentage
Never	10	50%
Once	4	20%
Twice	4	20%
Three times	2	10%
More than three times	-	-
<b>Total</b>	<b>20</b>	<b>100%</b>

As it is shown in the above table, the involvement of teachers in in-service training is limited. From a total of 20 teachers, half of them, 10 (50%) did not have any in-service training since 2004, 4 (20%) were involved only once in the last three years. And another 4 (20%) were involved three times since then. On the basis of this information, it can be concluded that the involvement of teachers in in-service training was given less emphasis. With regard to in-service training, media experts in the Zone Educational Department also strengthened this fact. They confirmed that few teachers have been involved each year because of financial problems to arrange in-service training for a large number of teachers.

Generally the above information indicates that the involvement of teachers in service training is in significant.

#### **4.8.4 Local Teachers' Participation in Producing and Transmitting Awigni Language Radio Instruction**

To make radio instruction more effective the participation of local teachers in the production and transmission of Awigni language radio is important. With regard to this, teachers were asked how often they participated in producing and transmitting Awigni language radio broadcasts. This is indicated in table 15 as follows.

**Table 15: Frequency and Percentage Distribution of Teachers by Participation in Producing and Transmitting of Awigni Language Radio Instruction.**

Extent of Participation	No of Respondents	
	No	%
Once	2	10%
Twice	1	5%
Three times	-	-
More than three times	-	-
Never	17	85%
<b>Total</b>	<b>20</b>	<b>100%</b>

As it is indicated in the above table, from a total of 20 teachers almost all, 17 (85%) teachers have never participated in producing and transmitting Awigni language radio instruction. 2 (10%) of them have participated only once and very few of them i.e. 1 (5%) have participated twice in producing and transmitting Awigni language radio instruction. This indicates that the participation of local teachers in producing and transmitting Awigni language radio instruction is forgotten. Although two media experts in the zone educational department explained that local teachers have participated in the process of production and transmission of grade 3 and 4 Awigni language radio broadcast, the other 3 media experts said that because of financial constraints only a limited number of teachers have participated in the process of production and transmission of grade 3 and 4 Awigni language radio broadcast.

Further, the respondents said because of financial problems, only volunteer teachers have participated with out payment.

Generally, it can be concluded that, the participation of local teachers in production and transmission of Awigni language radio broadcasts for grade 3 and 4 is played down.

#### **4.8.5 Supervisory Support**

In order to enhance the effectiveness of teachers' in teaching Awigni language radio broadcast, supervisory support has paramount importance. An item in the teachers' questionnaire asked teachers how often they have been supervised by supervisors during the last 3 years. Five alternatives were given (never, once, twice, three times and more than three times). Teachers were asked to put a mark with a tick (☐) in one of the five alternatives that best suits their answers. The results are summarized in table 16 as follows.

**Table 16: Number and percentage Distribution of Supervisions made in Awigni language radio broadcasts.**

Extent of Supervision	Teacher Respondents	
	No	%
Never	17	85%
Once	2	10%
Twice	1	5%
Three times	-	-
More than three	-	-
<b>Total</b>	<b>20</b>	<b>100%</b>

As it is indicated in the above table, 17 (85%) of the teacher respondents said they have never been supervised since the last three years. 2 (10%) of them said that they have been supervised only once and 1 (5%) of the teachers reported that they have been supervised twice while teaching during Awigni language radio broadcasts. This indicates that the majority of teachers have never been supervised during Awigni language radio broadcasts in the last three years. Thus, the importance of supervisory support, in the zone has been undermined or forgotten.

#### **4.8.6 Radio Maintenance Service**

One major factor that affects implementation of radio instruction is maintenance service from the center. An item in the teachers' questionnaire asked teachers the adequacy of radio maintenance service from the center. Teachers were given 3 alternatives (i.e. adequate, inadequate and don't know). The results are summarized as follows.

**Table 17: Number and percentage distribution of the Extent of Radio maintenance service from the center by teacher respondents.**

Radio maintenance service	Teacher Respondents	
	No	%
Adequate	4	20%
Inadequate	15	75%
Don't know	1	5%
<b>Total</b>	<b>20</b>	<b>100%</b>

As indicated in table 17, out of 20 respondents, 15 (75%) of them reported that radio maintenance service from the center is inadequate. 4(20%) of them reported that the maintenance is adequate and 1(5%) of them reported that they do not have any information about radio maintenance in their school. On the basis of the above information, it is clear that the majority of teacher respondents 15(75%) reported that radio maintenance service from the center is inadequate. This indicates radio maintenance service is ignored. Also the interview with school directors and zonal education media experts indicated that radio maintenance service for the schools is inadequate. Media experts in the zone education department said that the radio maintenance service for the user school is inadequate because of lack of skilled personnel in the area.

Generally the above discussion shows that radio maintenance service from the centre for Awigni language radio broadcasts is inadequate.

#### **4.8.7 Support from School Directors**

For effective implementation of radio instruction in schools support from school directors is of paramount importance. Among the many support services that school directors should give are providing a timetable for radio broadcasts, arranging enough space for listening, providing classroom with sockets, etc. Accordingly, teachers were asked to indicate the extent of school director's

support for effective implementation of Awigni language radio instruction in their respective schools. Table 18 summarizes this

**Table 18. Frequency and Percentage Distribution of the Extent of School Directors' support by Teacher Respondents.**

Extent of support	Teacher Respondents	
	No	Percentage
Low	13	65%
Medium	7	35%
Don't know	0	0
<b>Total</b>	<b>20</b>	<b>100%</b>

As it is indicated in the above table, out of the total of 20 (100%) teacher respondents, 13(65%) of them mentioned low support of school directors for implementation of Awigni language radio instruction while 7(35%) of them rated medium support of school directors. From this, one can understand that the support of school directors for the implementation of Awigni language radio instruction is low.

#### **4.8.8 Number of Students in one Class**

Research findings on the impact of class size in primary school learning revealed that small classes display significantly more effort to learn in the classroom, take more initiative in learning activities and exhibit less non-participatory or descriptive behavior than large classes (Grass and smith 1978 as cited in Finn and Voelk, 1994, 773-774). In connection with this, an item in the teachers' questionnaire asked teachers to assess whether or not the number of students in a class affects Awigni language radio instruction. Their responses are summarized in table 19.

**Table 19. Percentage Distribution of Teacher Respondents on the effect of big Number of Students in one Class.**

<b>Teachers Responses</b>	<b>Teacher Respondents</b>	
	<b>No</b>	<b>Percentage</b>
Yes	18	90%
No	2	10%
Do not know	-	-
<b>Total</b>	<b>20</b>	<b>100%</b>

As indicated in table 19, 18(90%) of respondents reported that the number of students in one class adversely affects the implementation of Awigni language radio instruction while 2 (10%) of them reported that high number of students in one listening class does not affect Awigni language radio instruction.

From the above information, it is clear that the majority of respondents 18 (90%) reported that the presence of high number of students in one class adversely affects the implementation of Awigni language radio instruction. Similarly the classroom observations in the sampled schools indicate that high number of students are found in one class as a result many students are sat on the floor.

#### **4.9 Quality, Presentation and Content of the Program**

An item in the teachers' questionnaire asked teachers whether they agree or disagree on questions which state the quality, presentation and content of Awigni language radio broadcast. Table 20 summarizes the responses.

**Table 20. Frequency and Percentage Distribution of Teacher respondents on the Quality, Presentation and Content of Awigni Language Radio Instruction.**

	Item	Responses			
		Yes	No	Don't know	
1	Present accurate and well organized content in an engaging manner	15(75%)	5(25%)	-	20(100%)
2	Provide clear and straight forward instructions	13(65%)	6(30%)	1(5%)	20(100%)
3	Incorporate response pauses that are neither too long nor too short	14(70%)	6(30%)	-	20(100%)
4	Provide clear guidance to the classroom teacher	18(90%)	2(10%)	-	20(100%)
5	Suitable to the age level and interest of students	12(60%)	8(40%)	-	20(100%)
6	Contains all elements in the syllabus	8(45%)	11(55%)	1(5%)	20(100%)

As it is shown in table 20, 13(65%), present accurate and well organized content in an engaging manner, 15(75%), provide clear and straight forward instructions, 18(90%), provide clear guidance to the class room teacher, 14(70%) incorporate neither too long nor too short responses pauses and 12(60%) of respondents believe the broadcast lessons is suitable to the age level and interest of the students.

In other words, the majority of teacher respondents agreed on the quality presentation and content of Awigni language radio broadcasts. This indicates the quality presentation and content of Awigni language radio broadcasts is accepted by teachers. However, a little more than half, 11(55%) respondents disagreed on the content of the program i.e. the program doesn't contain all elements in the syllabus.

Almost three similar items were asked by student respondents whether they agree or disagree on the quality of presentation and content of Awigni language radio instruction. The items are presented in table 21 and summarized as follows.

**Table 21: Frequency and Percentage Distribution of Student Responses on the Quality, Presentation and Content of Awigni Language Radio Instruction**

	Item	Responses			
		Yes	No	Don't know	Total
1	Encourages students participation	180(90%)	20(100%)	-	200(100%)
2	Provides new ideas in addition to those found in the textbook	185(92%)	10(5%)	5(2.5%)	200(100%)
3	Generally the program, transmits in an interesting manner	150(75%)	50(25%)	-	200(100%)

As it is indicated in the above table, 180(80%) of respondents reported that Awigni Language Radio Program encourages student students participation, 185 (92%) respondents reported that Awigni Language Radio Program provides new ideas in addition to those found in the textbook, and 150 (75%) of respondents reported that it is transmitted in an interesting manner. Based on the above information, it is clear that the number of teachers who said 'Yes' in each item is greater than those who said 'No'. i.e. the frequency of students who said 'Yes' in each item is between 105-190 while the frequency of students who said 'No' is between 10-50. Based on this fact, it is possible to conclude that the quality, presentation and content of Awigni language radio broadcast is accepted by students.

#### **4.10 Students' Activity in Practical Activities**

For effective implementation of radio instruction, the program should involve students in practical activities.

An item in the students' questionnaire asked students how often they are involved in practical activities during Awigni language radio instruction. The alternatives are (always, occasionally, sometimes and rarely). Students were asked to put with a tick (☐) mark in one of the alternatives that best suits their answers. The obtained result is summarized in table below (table 22).

**Table 22: Frequency and Percentage Distribution of Students' Participation in Practical Activities During Awigni Language Radio Broadcast.**

Extent of participation	Student Respondents	
	Frequency	Percentage
Always	40	20%
Occasionally	70	35.3%
Sometimes	80	40%
Rarely	10	5%
<b>Total</b>	<b>200</b>	<b>100</b>

As it is indicated in the above table, out of 200(100%) students, 80 (40%) of them reported that they participated in practical activities 'sometimes', 40 (20%) of them reported that they participated 'always', 70(35%) of them reported that they 'participated 'occasionally' in practical activities and 10(5%) of them reported that they 'rarely' participated in practical activities during Awigni language radio broadcast.

This indicated that students 'sometimes' participate in practical activities during Awigni language radio instruction.

#### **4.11 Adequacy of the Program and Sound Clarity**

One indicator of the quality and appropriateness of a program is its adequacy and sound clarity during transmission. To evaluate this, student and teacher respondents in the sampled schools were asked. The obtained result is summarized in table 23.

**Table 23: Frequency and Percentage Distribution of Student and Teacher Respondents on Adequacy and Sound Clarity of Awigni Language Radio Broadcast**

No	Activities	Student Respondents		Teacher Respondents		
		Yes	No	Yes	No	
1	Is the program adequate	75(37.56%)	125(62.95%)	5(25%)	15(75%)	20(100%)
2	Awigni language radio broadcast has clear sound	90(45%)	110(55%)	4(20%)	16(80%)	20(100%)

As it is shown in the above table, 125(62.95%) of the student respondents and 15(75%) of teacher respondents reported that the present number of Awigni language radio broadcast is inadequate. While 75(37.5%) and 5 (25%) of student and teacher respondents respectively reported that the present number of Awigni language radio broadcast is adequate. From this, it is clear that the present number of Awigni language radio broadcasts is inadequate. In much the same manner 110(55.1%) of the student respondents and 16 (80%) of the teacher respondents reported that the sound of Awigni language radio broadcast is not clear. While 90 (45%) of students and 4 (20%) of teachers reported that the sound is clear. Regarding sound clarity, the proportion of both students and teachers who said 'No' is greater than those who said 'Yes'. Therefore, it can be concluded that the sound of Awigni language radio broadcast is not clear. The interview results of school directors also assert this. In explaining the problems faced in implementing Awigni language radio broadcast, they confirmed that the sound of Awigni language radio broadcast is not clear.

## 4.12 Extent of Proper Implementation of Awigni Language Radio Broadcast at the Classroom Level

### 4.12.1 Teachers Activities

In order to ascertain whether or not teachers are performing the instructional activities expected of them (before, during and after broadcast), actual classroom observation of 20 classes in the sampled schools during the actual transmission was carried out. This had been done by employing a checklist. The responses are summarized in tables as follows.

#### A. Before Broadcast

Table 24 summarizes the observed results of the activities which should be performed by Awigni language grade 4 and 3 teachers. The activities are revising the previous lesson, introducing the title of the forth coming radio lesson and explaining difficult concepts and/or terms of the forthcoming radio lesson.

**Table 24: A Frequency and Percentage Distribution of Teachers  
Performing before Broadcast Activities by Grade Level**

No	Activities of the teachers	Grade three				Grade Four				Total (N= 20)			
		Yes		No		Yes		No		Yes		No	
		No	%	No	%	No	%	No	%	No	%	No	%
1	Revises the previous radio lessons	2	20	8	80	4	40	6	60	6	30	14	70
2	Introduces the title of the forth coming radio lesson	4	40	6	70	3	30	7	70	7	35	13	65
3	Explains difficult concepts and/or terms of the forth coming radio lesson	3	30	7	70	2	20	8	80	5	25	15	75

As it is shown in the above table, out of 20 observed grades 3 and 4 teachers, 14(70%) were seen not revising the previous radio lessons. Only 6(30%) of grade 3 and 4 Awigni language teachers were seen revising the previous lesson. In much the same manner, 13 (65%) and 15 (75%) of grade 3 and 4 Awigni

language teachers were observed not introducing the title of the forth coming radio lesson and not explaining the difficult concepts and/or terms of the forth coming radio lesson respectively. While only 7(35%) and 5(25%) of both grade levels studied teachers during Awigni language radio broadcast were observed introducing the forth coming radio lesson and explaining difficult concepts and/or terms of the forth coming radio lesson. This indicates that the great majority of the observed teachers did not perform the before broadcast activities during Awigni language radio instruction.

### ***B. During the Broadcast***

The during-broadcast instructional performances of the observed teachers are summarized as follows in table 25.

***Table 25: Frequency and Percentage Distribution of Observed Teachers on Instructional Performance during Awigni Language Radio Broadcast by Grade Level.***

No	Activities of the teachers	Grade three (N=10)				Grade Four (N=10)				Total (N= 20)			
		Rating				Ratings				Ratings			
		F	S	R	N	F	S	R	N	F	S	R	N
1	Encourages students to answer questions when they are asked by the radio teacher	1 (10)	2 (20)	2 (20)	5 (50)	2 (20)	1 (10)	2 (20)	5 (50)	3 (15)	3 (15)	4 (20)	10 (50)
2	Demonstrates using illustrative materials when recommended by radio teacher	2 (20)	1 (10)	3 (30)	4 (40)	1 (10)	1 (10)	2 (20)	6 (60)	3 (15)	2 (10)	5 (25)	10 (50)
3	Supervises students to maintain good discipline	1 (10)	1 (10)	6 (60)	2 (20)	1 (10)	2 (20)	4 (40)	3 (30)	2 (10)	3 (15)	10 (50)	5 (25)

1 Note F= Frequently R= Rarely  
S= Sometimes N= Never

2 Numbers in brackets are percentages of observed teachers

As it is indicated in table 24, 10(50%) and 4(20%) of the observed teachers of grade 3 and 4 were found "never" and "rarely" encouraging the students respectively to answer questions when they were asked by the radio teacher while 3(15%) of the observed teachers were found "frequently" and "sometimes". Encouraging their students to answer questions when they were asked by the radio teacher. In much the same manner, 10(50%) and 5(25%) of the observed teachers of both grade levels were found "never" and "rarely" use any illustrative materials respectively when recommended by the radio teacher during Awigni language radio broadcast. While 2(10%) and 3(15%) of the observed teachers of grade 3 and 4 were "sometimes" and "frequently" used illustrative materials respectively when they were asked by the radio teacher during Awigni language radio broadcasts.

Furthermore, 10(50%) of the observed teachers were seen "rarely" supervise their students to maintain good discipline during 5(25%) of the observed teachers of both grade levels in the sampled shows "never" supervise their students to maintain good discipline during Awigni language radio broadcast

Generally, it can be concluded that the great majority of the observed teachers of both grade levels in the sampled schools did not perform the activities which should be performed during Awigni language radio broadcast.

### ***C. After broadcast***

The instructional activities which should be performed after broadcast are illustrated in table 26

**Table 26: Frequency and Percentage Distribution of Observed Teachers while they were Performing Instructional Activities after Broadcast During Awigni Language Radio Broadcast.**

No	Activities of the teachers	Grade three (N=10)				Grade Four (No=10)				Total (N= 20)			
		Yes		No		Yes		No		Yes		No	
		No	%	No	%	No	%	No	%	No	%	No	%
1	Revises the main points of the days lessons	4	40	6	60	3	30	7	70	7	35	13	65
2	Encourage students to ask points which are not clear to them	3	30	7	70	2	20	8	80	5	25	15	75
3	Check whether or not the radio lesson is grasped by the students	2	20	8	80	4	40	6	60	6	30	14	70

As it is revealed in the above table, 13 (65%) and 15(75%) of the observed teachers of grade 3 and 4 were seen not revising the main points of the days lesson and not encouraging students to ask points which are not clear to them respectively, out of the total of 20(100%) teachers of both grade levels, only 7(35%) and 5(25%) of the observed teachers were seen revising the main points of the days lesson and encouraging their students to ask unclear points respectively. While 14(70%) of the observed teachers of both grade levels were observed not asking their students whether they have understood the radio lesson. Out of the total of 20(100%) teachers, only 6(30%) were observed checking their students whether they have understood the day's radio lesson during Awigni language radio lesson.

Generally, table 26 revealed that, the majority of the observed teachers did not show efforts to perform the activities which should be performed after broadcast during Awigni language radio broadcast.

## 4.12.2 Students Activities

For successful implementation of radio instruction, students' activities in the classrooms are important. The students' activities may include their participation and good discipline before, during and after broadcast. Table 27 summarizes the obtained results.

**Table 27: Frequency and Percentage Distribution of Observed Students in their Activity Before, During and After Awigni Language Radio Broadcast.**

No	Activities of the teachers	Grade three (N=10)				Grade Four (N=10)				Total (N= 20)			
		Ratings				Ratings				Ratings			
		A	M	F	N	A	M	F	N	A	M	F	N
Before broadcast	Maintaining good discipline	2 (20)	5 (50)	3 (30)	-	3 (30)	6 (60)	1 (10)	-	5 (25)	11 (55)	4 (20)	-
During broadcast	1. Participate by answering questions (raising their hands) and performing other activities asked by the radio teacher	-	1 (10)	4 (40)	5 (50)	-	1 (10)	4 (40)	6 (60)	-	2 (10)	8 (40)	11 (55)
	2. Maintain good discipline	2 (20)	7 (70)	1 (10)	-	3 (30)	6 (60)	1 (10)	-	5 (25)	13 (65)	2 (10)	-
After broadcast	1. Participate by asking questions and/or, answering questions by raising their hands	-	2 (20)	2 (20)	6 (60)	-	1 (10)	2 (20)	7 (70)	-	3 (15)	4 (20)	13 (65)
	2. Maintain good discipline	4 (40)	5 (50)	1 (10)	-	4 (40)	4 (40)	2 (20)	-	8 (40)	9 (45)	3 (15)	-

Key A= All of them M= most of them F= Few of them N= Never

Figures in brackets are percentages of observed classes

According to the information in the above table, out of a total of 20 classes, in 11 classes (55%) and in 13 classes (65%) the observed students never participated during and after transmission of Awigni language radio program respectively. In other words during transmission and after transmission of Awigni language radio program, only in 2 classes (10%) and in 3 classes (15%)

the observed students were "most of them" participated by answering questions when asked by the radio teacher and by asking questions.

This clearly indicates that, in the majority of the observed classes, students never participated during and after Awigni language radio instruction.

On the other hand, it was only in 5 classes (25%) and in 8 classes (40%) that "all students" were observed maintaining good discipline before and after Awigni language radio transmission respectively. And it was only in 5 classes (25%) during transmission where all of the students were observed having good discipline during Awigni language radio broadcast.

Thus, it is clear that, in the great majority of the observed classes, the disciplinary condition of the students was not as expected during Awigni language radio instruction.

"Frequently" refers to a situation when the teacher accomplishes 80% and above the expected activities "sometimes" refers to a state when the classroom teacher accomplishes between 20% and 80% of the expected activities. "Rarely" represents a situation when the class room teacher performs 20% and below of the expected activities and "never" refers to a situation when the expected activities are not totally accomplished. "Most of them" shows that the expected activities are accomplished by 80% to 99% of the students. "All of them" indicates that when 100% of the students accomplish the expected activities "Few of them" indicates that when below 30% of the students performed the expected activities. "Never" indicates that when the expected activities is not entirely performed by any one of the students.

#### **4.13 Teachers' Attitude Towards Awigni Language Radio Broadcast**

Teachers were asked to rate statements that are intended to measure the extent of opinion towards Awigni language radio broadcast. The rating scale was

constructed in the form of Likert scale. Teachers were given five options to select ranging from strongly agree up to strongly disagree. 6 favorable and 6 unfavorable totally 12 item opinion statements were used as a measuring device.

The responses of teachers to the attitude describing statements are illustrated in table 28 below.

**Table 28. Teachers Attitude toward Awigni Language Radio Broadcast.**

	Item	Scale					No
		SA	A	U	D	SD	
		No	No	No	No	No	
1	Awigni language radio broadcast can help the teacher	10	9	1	0	0	20
2	Awigni language teachers have a good opportunity to learn teaching techniques from Awigni language radio broadcasts	7	6	1	4	2	20
3	The quality of education will not decrease if we give up Awigni language educational radio broadcasts.	1	1	2	11	5	20
4	Awigni language radio broadcast can not make students more interested in their learning.	0	0	0	4	16	20
5	Students will achieve more in academic subjects with Awigni language radio rather than with out it.	5	10	3	2	0	20
6	I am not anxious in listening to Awigni language radio broadcast.	0	2	0	9	9	20
7	I dislike hearing Awigni language radio broadcast.	0	2	6	6	12	20
8	I become flexible in managing students in the class room during Awigni language radio broadcast	9	9	1	1	0	20
9	I am willing to continue using Awigni language radio even if it is inconvenient	7	11	0	10	1	20
10	Awigni language radio broadcast is not stimulating	0	1	0	7	12	20
11	I would be happy if we give up listening to Awigni language radio broadcast.	0	0	0	6	14	20
12	In general I like Awigni language radio broadcast.	12	7	0	1	0	20

Note SA= Strongly Agree

U= Undecided

SD= strongly disagree

A= Agree

DA= Disagree

In the above table, the serial numbers, 1,2,5,8,9,12 are favorable statements while serial number, 3,4,6,7,10 and 11 are unfavorable statements.

In the favorable statements the five scales have the following scores: SA= 5 A= 4, U= 3, DA= 2, SD= 1. Conversely in the unfavorable statements, the five scales have the following scores: SA= 1, A= 2, U= 3, DA= 2 SD= 5

The computed results are:-

1. The summated score is 1016. To get this, first, the number of individuals who checked each position in each statement was multiplied by the respective scores; then, all the results were added.
2. The expected scores for each of the five possible strength of attitude for the 20 individuals were computed in the following ways.

For most favorable attitude =  $5 \times 12 \times 20 = 1200$

For favorable attitude =  $4 \times 12 \times 20 = 960$

For neutral attitude =  $3 \times 12 \times 20 = 720$

For unfavorable attitude =  $2 \times 12 \times 20 = 480$

For most unfavorable attitude =  $1 \times 12 \times 20 = 240$

3. Thus, the comparison of the summated score (i.e. 1016) with the expected scores shows that the summated score is between most favorable and favorable expected scores. More specifically the number 1016 is near to 960 (favorable attitude expected score) than to 1200 (most favorable expected score). Therefore it can be concluded that the 20 teachers have favorable attitude towards Awigni language radio broadcast.

#### **4.14 Students' Attitude Towards Awigni Language Radio Broadcast**

Students were asked to rate statements that are intended to assess the extent of opinion towards Awigni language radio broadcast. The rating scale was constructed in the form of Likert scale. Students were given five alternatives to select ranging from 'strongly Agree' to 'strongly disagree'. Six favorable and six unfavorable totally twelve item opinion statements were used as measuring device. The responses of students to the attitude describing statements are summarized in table 29.

**Table 29: The Responses of Students to the Attitude Describing Statement in Awigni Language Radio Broadcast by Grade Level**

	Item	Grade three respondents (No=100)					Grade four respondents (No=100)					Total (N= 200)					
		Scale					Scale					Scale					
		SA	A	U	D	SD	SA	A	U	D	SD	SA	A	U	D	SD	
		No	No				No	No				No	No				
1	Awigni language radio broadcast is very interesting to me	37	45	3	15	10	46	47	2	1	4	83	92	5	16	14	200
2	I am always under strain in Awigni language radio class	30	50	1	9	10	32	40	3	11	14	62	90	4	20	24	200
3	Awigni language radio broadcast is fun	40	45	4	6	5	28	41	10	10	11	78	86	4	16	16	200
4	Awigni language radio broadcast makes me uncomfortable	16	10	1	41	32	14	19	0	31	38	30	29	1	71	70	200
5	Awigni language radio broadcast makes me impatient	8	12	2	44	34	7	8	3	41	41	15	20	5	85	75	200
6	Awingi language radio broadcast makes me restless	3	7	0	60	30	2	8	0	4	50	5	15	0	100	80	200
7	Awingi language radio broadcast makes me irritable	4	8	3	40	45	6	7	2	50	35	10	15	5	90	80	200
8	I dislike hearing of Awingi language radio broadcast	6	15	1	48	30	4	5	1	50	40	10	20	2	98	70	200
9	I have always enjoyed hearing Awingi language radio broadcast in school	50	40	1	2	2	50	45	1	4	0	105	85	2	6	2	200
10	I get more satisfaction from lessons supported by Awigni language radio broadcast than those without.	61	35	0	3	1	49	48	0	1	2	110	83	0	4	3	200
11	I achieve higher mark in subjects supported by Awingi language radio broadcast than those without.	50	45	1	2	2	30	69	0	1	0	80	114	1	3	2	200
12	In general I am satisfied with Awingi language radio broadcasts.	46	50	2	1	1	41	56	0	2	1	87	106	2	3	2	200

The serial numbers, 1,3,9,10,11 and 12 are favorable statements while serial number 2,4,5,6,7 and 8 are unfavorable statements. On the favorable statements the five positions have the following scores:

Strongly agree =5 Disagree =2 Agree = 4 strongly disagree =1 Undecided =3

Conversely, in the unfavorable statements the five positions have scores:

Strongly agree =1 Disagree =4 Undecided =3 Agree = 2 strongly disagree =5

The Computed Results are:

1. The summated scores for the 200 student respondents is 9618. To calculate this, first, the number of individuals who checked each position in each statement was multiplied by the respective score, then, all the obtained results were added.
2. The expected scores for each of the five strength of attitude for the, 200 students were computed as in the following way  
For most favorable attitude  $5 \times 12 \times 200 = 12,000$   
For favorable attitude  $4 \times 12 \times 200 = 9600$   
For neutral attitude  $3 \times 12 \times 200 = 720$   
For unfavorable attitude  $2 \times 12 \times 200 = 4800$   
For most unfavorable attitude  $1 \times 12 \times 200 = 2400$
3. Then, the comparison of the summated score (that is 9618 with the expected scores indicates that the summated score is between most favorable and favorable expected scores). More specifically, the number 9618 is nearer to 9600 (favorable attitude expected score) than to 12,000 (most favorable expected score). Thus, it can be concluded that the 200 student respondents have favorable attitude towards the Awigni language radio broadcast.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1. Summary

The main concern of this study was the assessing of Awigni language radio broadcast in the first cycle primary schools of Awi Administrative zone. More specific objectives were:- Assessing the extent to which the intended Awingi language educational radio programme is put into practice, investigating the quality ,content and presentation of the programme, identifying whether the necessary supportive materials are available for the programme, identifying Awigni language classroom teachers' and students' activities before, during and after broadcast, and identifying the attitude of students and teachers towards Awigni language radio instruction.

The study employed descriptive survey research methodology. The zone was divided into 5 woredas. From each woreda, one school was selected using random sampling technique (i.e. a total of 5 schools were selected). From each grade level 100 students were selected using simple random sampling technique. Thus a total of 200 students were involved to fill out the students' questionnaire. In addition to this, 20 grade three and four teachers in the sample schools participated to fill the teachers' questionnaire. To examine how far the programmes are properly implemented by the class room teachers and students, classroom observation was employed using an observation checklist. To do this, classroom observation during the actual transmission was conducted in 10 grade three and in 10 grade four classes. Thus, a total of 20 classes were randomly selected from the user schools.

Further more, interview was held with the selected 5 school directors and 5 education department media experts (Awigni language radio program producers).

The data were tabulated for analysis which includes statistical applications involving frequency counts percentages and descriptive phrases. Except the attitude related data, the collected data, were discussed employing percentages and frequencies. The analysis and interpretation of the attitude related responses was summation of scores followed by comparison with the expected scores of the five attitude strengths (most favorable, neutral unfavorable and most unfavorable) were used.

The findings of the study are summarized as follows:

1. The results of the questionnaire administered to the students and teachers which measures their attitude towards Awigni language radio broadcast indicates that they have favorable attitude towards the broadcast.
2. Through the questionnaire most of the teachers reported that radio sets are inadequate.
3. Through the questionnaire, teachers reported that there is no Awigni language radio teacher's guide and radio lesson manuals.
4. Most teachers also reported there are problem of radio function, poor maintenance service from the centre and absence of supervision.
5. The analysis of teachers' questionnaire also indicated the existence of problems as a result of large class sizes, clash of class scheduling and high teaching load, all these adversely affect the implementation of Awingi language radio broadcast.
6. The majority of teachers also reported the presence of quality and appropriateness of the program content and presentation to the age level and interest of the learners.
7. The results of teachers' questionnaire also revealed that some of the teachers assigned to teach in Awigni language for grade three and four are under qualified. Also the involvement of teachers in in-service

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- training is inadequate i.e. the majority of the teachers have never participated.
8. The majority of teachers have never participated in producing and transmitting instructional programmes for Awigni language radio lesson.
  9. The training of user teachers (in-service training) on Awigni language radio instruction implementation was found a neglected area. As it is indicated 50% of both grade level sample teachers were found untrained and 20% of them trained only once.
  10. The great majority of teachers 12(60%), have not taken teacher training courses which include how to implement radio lesson during their training program.
  11. The great majority of the observed teachers and students were found not performing the instructional activities which should be performed before, during and after broadcasts. Moreover, the discipline of the students before, during, and after broadcast was found not good (not in the expected way) in the majority of the observed classes.
  12. A large majority of the students and teachers reported that the number of Awigni language radio program is inadequate. Coupled with this, the majority of students and teachers reported that the sound of Awigni language, radio broadcast is not clear.

## **5.2 Conclusions**

The findings of this research then, led the researcher to conclude that:-

1. There is a failure of communication between zone education department media experts and teachers in implementing Awigni language radio broadcast.
2. There is lack of teacher training in radio instruction implementation.

3. Students and teachers have a positive attitude towards Awigni language radio broadcasts.
4. The complete absence of Awigni language radio teacher's, guide, radio lesson manuals, inadequate supply of radio sets, cassettes, batteries, the presence of large class size, the presence of conflict of time scheduling, high teaching load etc. are some of the factors which adversely affect the implementation of Awigni language radio instruction.
5. The presence of less qualified teachers, the inadequacy of in-service training of teachers, the presence of some less concerned school directors (regarding instructional problems large class size, high teaching load and inadequate radio maintenance service etc) are also affect the implementation of the program.
6. The absence of instructional activities which should be performed before, during, and after broadcast has a great impact on the effectiveness of the program.
7. The low involvement of teachers in producing and transmitting of Awigni language radio programmes, seems to have an impact on effective effectiveness of Awigni language radio instruction.

### **5.3 Recommendations**

Based on the findings of the study, the following recommendations are suggested.

1. For the effective implementation of Awigni language radio instruction, media experts at zonal level, school directors and classroom teachers should work co-operatively. This includes, providing report of evaluation results on implementation of the programme, participation of teachers in producing and transmitting of Awigni language, radio programme etc.
2. Training on Awigni language radio instruction should be provided.

3. School media representatives who can give proper support to teachers in radio instruction should be assigned.
4. Awigni language radio teacher's guide and radio lesson manuals should be prepared soon and should be distributed to the user schools.
5. There should be adequate radio sets, cassettes, adequate radio maintenance service and supervision for effective implementation of the program.

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# APPENDIX A

Addis Ababa University

College of Education

Department of Multicultural and Multilingual Education

Questionnaire for Grade Three and Grade Four Students

## Instruction I

This study is aimed at evaluating the implementation of Awigni language radio broadcasts in the first cycle primary schools of Awi Zone. The purpose of this questionnaire is to obtain information about the attitude of students towards Awigni language radio broadcast, implementation factors, quality, appropriateness of the program content and presentation.

### Section I:

#### Personal Data

Name of school \_\_\_\_\_ grade \_\_\_\_\_ section \_\_\_\_\_ age \_\_\_\_\_

Sex: female \_\_\_\_\_ male \_\_\_\_\_

### Section II Attitude

#### Instruction II

Each of the statements below expresses an attitude toward Awigni language radio broadcasts. Please tick () your opinion with respect to each statement in only one of the five alternatives (i.e. 5=strongly agree 4=agree, 3=undecided, 2=disagree, 1= strongly disagree)

No	Item	5	4	3	2	1
1	Awigni language radio broadcasts is very interesting to me					
2	I am always under strain in Awigni language radio class					
3	Awigni language radio broadcasts is fun					
4	Awigni language radio broadcasts makes me uncomfortable					

5	Awigni language radio broadcasts makes me impatient					
6	Awigni language radio broadcasts make me restless.					
7	Awigni language radio broadcasts make me irritable.					
8	I dislike hearing of Awigni language radio broadcasts					
9	I have always enjoyed hearing Awigni language radio broadcasts in school.					
10	I get more satisfaction from lessons supported by Awigni language radio broadcasts than those without.					
11	I achieve higher mark in subjects supported by Awigni language radio broadcasts than those without.					
12	In general I am satisfied with Awigni language radio broadcasts					

### Section III:

#### Implementation factors, Quality, appropriateness of program organization and contents.

#### Instruction III

Please tick () your responses for questions (1-8) and provide written answers to questions (9-11). You can have more than one answer for each question.

- Do you think the number of radio programs is adequate?  
A, Yes                      B, No                      C, don't know
- Do you think that Awigni language radio instruction encourages students' participation?  
A, Yes                      B, No                      C, don't know
- The reception of Awigni language radio broadcasts is generally  
A, clear                      B, Not clear                      C, don't know
- Awigni language radio broadcasts provide new ideas in addition to the points found in the text book.  
A, Yes                      B, No

5. Overall, Awigni language radio lessons are presented in an interesting manner

A, Yes                      B, no

6. How often do you participate in practical activities during Awigni language radio instruction?

A, always   B, occasionally   C, sometimes   D rarely   E, never

7. Would you list the problems that you encountered in Awigni language radio classes?

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8. What should be done to improve the implementation of Awigni language radio broadcasts (if there is a need?)

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9. Would you comment on the quality of Awigni language radio broadcasts?

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**APPENDIX B**  
**Addis Ababa University**  
**College of Education**  
**Multicultural and Multilingual Education**  
**Questionnaire for Teachers**

The study is aimed at evaluating the implementation of Awigni language radio broadcasts for grade three and four in the first cycle primary schools of Awi zone. Your school has been selected to participate in the present study.

The information to be obtained through the questioner is going to be used only for the study undertaken. Therefore, the co-operation of teachers by giving genuine information is highly valuable to complete the study. Your genuine information is essential for providing adequate data in order to bring about improvement in the quality of Awigni language radio programs ensuring better implementation. All information you provide will be treated confidentially. Do not write your name.

*Thank you in advance*

**General Direction:-**

This question consists of five sections. Section one deals with personal data, section two deals with availability and use of Awigni language radio, section three deals with implementation factors, section four deals with program organization and content and section five deals with teacher's attitude. Please carefully read the instruction at the beginning of each section.

**Section One Personal Data**

**Instruction I**

Please mark with a tick (☑) your responses to objective items and provide written responses to open-ended items.

1. Name of the school \_\_\_\_\_

2. Sex: male\_\_\_\_\_ female\_\_\_\_\_
3. Qualification 10+2\_\_\_\_\_ 10+1\_\_\_\_\_ 12+2\_\_\_\_\_
- 12+1\_\_\_\_\_ 12 complete\_\_\_\_\_ 10complete\_\_\_\_\_
4. Total service years in-teaching profession:
- Below 1year\_\_\_\_\_ 11-5 years\_\_\_\_\_
- 2-5 years \_\_\_\_\_ 16-20 years\_\_\_\_\_
- 6-10 years \_\_\_\_\_ above 20 years\_\_\_\_\_
5. Your total teaching load in periods per week
- Less than 10\_\_\_\_\_
- 10-15\_\_\_\_\_ 16-20\_\_\_\_\_ ----- 21-25 \_\_\_\_\_ above 26\_\_\_\_\_

**Section two: Availability and use of radio and supportive materials**

**Please mark with a tick (☑) objective items and provide written responses for open ended questions.**

1. Do you think there are sufficient radio sets in your school?  
A, Yes                      B, no                      D, I don't know
2. How often does the radio set in your possession function in your school?  
Always\_\_\_\_\_ occasionally\_\_\_\_\_ sometimes\_\_\_\_\_
- rarely\_\_\_\_\_ never\_\_\_\_\_
3. How often do you use Awigni language radio for grades three or four?  
Regularly                      Sometimes                      Never
4. Do you think there is a sufficient number of radio lesson manuals and teachers guide for Awigni language radio for grade three and or four?  
A, Yes                      B, No                      D, do not know
5. Do Awigni language radio broadcasts for grade four matches with reception schedule at your schools?  
A, Yes                      B, No
6. Were a timetable and supporting materials for suggested activities provided in advance of Awigni language radio broadcasts?  
A, Yes                      B, No                      D, Do not know

7. The present number of Awigni language radio broadcasts for grade for and/or three covers all elements in the syllabus?  
A, yes                      B, No                      D, Do not know

**Section three: Teacher Training and Implementation factors**

**Instruction III**

Indicate your responses to the following questions by circling the letter of your choice except the questions which require written responses

1. Have you taken teacher training?  
A, Yes                      B No
2. Did courses of teacher training that you took include how to implement radio lessons?  
A, Yes                      B, No C, I don't know
3. How often have you participated to develop Awigni language radio program?  
A, never    B, once    C, twice    D, three times  
E, more than three times
4. How often were you are observed by media supervisors during the last 5 years?  
A, never    B, once    C, twice    D, three times
5. The maintenance service from the center is more?  
A, adequate    B, inadequate    C, do not know
6. How often have you participated in the in-service training of teachers over the last three years?  
A, never    C, twice                      E, more than three times  
B, once    D, three times
7. How do you rate the support provided by the school director for the implementation of Awigni language radio broadcast for grade-three or grade four?  
A, moderate    B, low    C, high

8. Has the number of students per class created a problem on the effective implementation of Awigni language radio broadcast for grade four and/or three?  
A, Yes                      B, No                      C, do not know

9. If your answer for question No six is "A" please mention the instructional problems you have faced

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10. In your opinion what factors contribute for the less effective implementation of Awigni language radio broadcast? (If you believe there is a problem in the implementation).

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**Section four:      Quality, program Organization and Content of Awigni Language Radio.**

**Instruction IV**

Instruction: please mark with a tick (☑) your responses in the space provided.

1. Awigni language radio programs present accurate, well organized content in interesting and engaging manner.

A, Yes                      B, No                      C, I don't know

2. Awigni language radio programs provide clear and straight forward instructions, which are consistent in all programs.

A, yes                      B, No                      C, don't know

3. Awigni language radio programs incorporate response pauses that are neither too long nor too short

A, yes                      B, No                      C, undecided

4. Awigni language radio programs provide clear guidance to the class room teacher through complete program notes and on air instructions,  
A, yes                      B No
5. Is the content of the programs suitable to the age level and interest of the students for which it is intended?  
A, Yes                      B, No                      C, don't know
6. The reception of Awigni language radio broadcast is  
A, clear                      B, not clear                      C, don't know
7. Do you think the no of radio programs of grade three or four is adequate?  
A, yes                      B, No                      C, kon't know

**Section five: Teachers' Attitude towards Awigni Language Radio broadcast**

**Instruction V**

Each of the statements below expresses an attitude towards Awigni language radio broadcast

ast please put a mark with a tick (✓) in each statement (i.e. 5= strongly agree, 4=agree, 3= uncertain, 2= disagree and 1= strongly disagree.

No	Item	5	4	3	2	1
1	Awigni language radio broadcast can help the teacher					
2	Awigni language teachers have a good opportunity to learn teaching techniques from Awigni language radio broadcast					
3	The quality of education will not decrease if we give up Awigni language educational radio broadcasts					
4	Awigni language radio broadcast can make students more interested in their learning.					
5	Students will achieve more in academic subjects with Awigni language radio rather than with out it.					

6	I am not anxious in listening to Awigni language radio broadcast.					
7	I dislike hearing Awigni language radio broadcast					
8	I become flexible in managing students in the class room during Awigni language radio broadcast.					
9	I am willing to continue Awigni language radio use even if it is inconvenient.					
10	Awigni language radio broadcast is stimulating					
11	I would be happy if we give up listening to Awigni language radio broadcast.					
12	In general I like Awigni language radio broadcast.					

ለመምህራን የተዘጋጀ መጠይቅ

የዚህ መጠይቅ ዋና ዓላማ ከ 1-4ኛ ክፍል በአዊኛ እየተሰጠ ያለውን የሬዲዮ ትምህርት አተገባበር (አጠቃቀም) መገምገም ነው። በዚህም መሠረት የአንተ(ች) ት/ቤት በጥናቱ እንዲካተቱ ከተመረጡ ት/ቤቶች ውስጥ አንዱ ነው።

በመጠይቁ የሚገኘው መረጃ ለሚደረገው ጥናት ብቻ ያገለግላል። በዚህ ጥናት መሰረት የመምህራን ቀና ትብብር በጣም ከፍተኛ ጠቀሜታ ያለው ሲሆን ይህም መረጃ ከ 1-4ኛ ክፍል በአዊኛ ቋንቋ እየተሰጠ ያለውን የሬዲዮ ትምህርት ያለበትን ችግር ለመለየትና የመፍትሔ ሃሳቦችን ለመጠቀም፣ እንዲሁም ለወደፊት ፕሮግራሙ ከዚህ በተሻለ መንገድ እንዲቀርብ ያገዛል። በመጠይቁ ላይ ስም መጻፍ አያስፈልግም።

ስለትብብራችሁ እናመሰግናለን።

ዋና ትዕዛዝ

ይህ መጠይቅ አምስት ክፍሎች አሉት፣ የመጀመሪያው ክፍል የግል የህይወት ታሪክን ያትታል ሁለተኛው ክፍል በአዊኛ ቋንቋ እየተሰጠ ያለውን የአዊኛ ቋንቋ የሬዲዮ ትምህርት አተገባበር (አጠቃቀም) ዙሪያ ያሉ ችግሮችን ይዳስሳል፣ አራተኛው ክፍል ደግሞ ስለፕሮግራሙ ጥራት ይዘትና አቀራረብ፣ 5ኛው ክፍል መምህራን በፕሮግራሙ ዙሪያ ያላቸውን አዎንታዊ እና አሉታዊ አመለካከት ለማወቅ የተዘጋጀ ነው። እባክዎ በእያንዳንዱ ክፍል መገቢያ ላይ ያለውን ትዕዛዝ በጥንቃቄ ያንብቡት።

ክፍል አንድ፡- የግል የህይወት ታሪክ

ትዕዛዝ አንድ፡- እባክዎ ለምርጫ ጥያቄዎች የ (✓) ምልክት፣ የዕሁዳ፣ መልስ

ለሚጠይቁት ጥያቄዎች ደግሞ በተሠጠው ቦታ ላይ የዕሁዳ፣ መልስዎን ይጻፉ። የትምህርት ቤቱ ስም \_\_\_\_\_

1. ያታ፡ ወንድ \_\_\_\_\_ ሴት \_\_\_\_\_ እድሜ \_\_\_\_\_
2. የትምህርት ደረጃ \_\_\_\_\_ 10-2 \_\_\_\_\_ 10+1 \_\_\_\_\_ 12+2 \_\_\_\_\_ 12+1 \_\_\_\_\_  
12ኛ ያጠናቀቀ \_\_\_\_\_ 10ኛ ያጠናቀቀ \_\_\_\_\_

3. አጠቃላይ በማስተማር መያያዣ የስራ ልምድ

ከ1 ዓመት በታች \_\_\_\_\_

ከ2-5 ዓመት \_\_\_\_\_

ከ6-10 ዓመት \_\_\_\_\_

ከ11-15 ዓመት \_\_\_\_\_

ከ16-20 ዓመት \_\_\_\_\_

4. በሳምንት የምታስተምረው ክፍል ጊዜ ብዛት

ከ10 ያንሳል \_\_\_\_\_

ከ 21-25 \_\_\_\_\_



ሀ. ያጠቃልላል ለ. አጠቃልልም ሐ. አይታወቅም

3. የአዊኛ ቋንቋ ትምህርት በሬድዮ ለማዘጋጀት ለምን ያህል ጊዜ ተሳትፏል?

ሀ. አንድ ጊዜ ለ. ሁለት ጊዜ ሐ. ሦስት ጊዜ

መ. ከሶስት ጊዜ በላይ ሠ. በጭራሽ አላውቅም

4. ባለፉት ሦስት አመታት የሬድዮ ትምህርት ስፕሮግራሞች ለምን ያህል ጊዜ ጎበኝተዎታል?

ሀ. ምንም ለ. አንድ ጊዜ ሐ. ሁለት ጊዜ መ. ሦስት ጊዜ

መ. ከሦስት ጊዜ በላይ

5. ከማዕከል (1ኛ) የሬድዮ ጥገና አገልግሎት አሰጣጥ

ሀ. በቂ ነው ለ. በቂ አይደለም ሐ. አላውቅም

6. ባለፉት ሦስት ዓመታት በስራ ላይ እያሉ ምን ያህል ጊዜ የመምህራን ስልጠና /ወርክሾፕ/ ወስደዋል?

ሀ. ምንም ለ. አንድ ጊዜ ሐ. ሦስት ጊዜ መ. ከሦስት ጊዜ በላይ

7. ለ3ኛ ወይም ለ4ኛ ክፍል በአዊኛ ቋንቋ እየተሰጠ ባለው የሬዲዮ ትምህርት አፈፃፀም የርእሰ መምህሩ ድጋፍ ምን ያህል ነው?

ሀ. ዝቅተኛ ለ. መካከለኛ ሐ. አላውቀውም

8. በአንድ ክፍል ያለው የተማሪዎች ቁጥር መብዛት በአዊኛ ቋንቋ የሬዲዮ ትምህርት ተዕለኖ አለው?

ሀ. አዎ ለ. የለውም ሐ. አላውቅም

9. ለተራ ቁጥር "6" መልስዎ "ሀ" ከሆነ በመማር ማስተማሩ ሂደት የገጠመዎትን ችግር ይግለፁ

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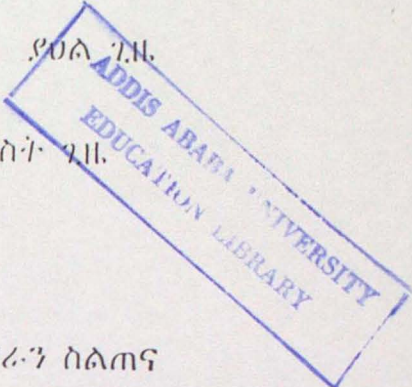
8. በእርስዎ እምነት የአዊኛ ቋንቋ የሬዲዮ ትምህርት በአግባቡ ለመተግበር ዋና ዋና ችግሮች ናቸው የሚሏቸው ምን ምን ናቸው? (በሬዲዮ ትምህርት ችግር አለ ካለ)

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ክፍል አራት:- ጥራት፣ የኘሮግራም አቀራረብና ይዘት

ትዕዛዝ አራት:- መልስዎን የ(✓) ምልክት በማድረግ ያመልክቱ

1. የአዊኛ ቋንቋ የሬዲዮ ኘሮግራም ትክክለኛ፣ በጥሩ ሁኔታ የተዘጋጀና በሚያምር ሁኔታ ስርጨቱን ያስተላልፋል?





ተ.ቁ	ዝርዝር	5	4	3	2	1
1	የአዊኛ ቋንቋ የሬድዮ ትምህርት የክፍል መምህሩን በመማር ማስተማሩ ሂደት ላይ ያግዘዋል					
2	የክፍል መምህሩ በአዊኛ ቋንቋ የሬድዮ ትምህርት በርካታ የመማር ማስተማሪያ ቴክኒኮች የማግኘት እድል አላቸው					
3	የአዊኛ ቋንቋ የሬድዮ ትምህርት በቋረጥ የትምህርት ጥራት አይቀንስም					
4	የአዊኛ ቋንቋ የሬድዮ ትምህርት ተማሪዎች በጣም ተደስተው ትምህርት እንዲማሩ አያገዝም					
5	ተማሪዎች የአዊኛ ቋንቋ የሬድዮ ትምህርት በማሰጠው ትምህርት ላይ ከሌሎች ትምህርቶች በበለጠ ውጤት ያመጣሉ					
6	የአዊኛ ቋንቋ የሬድዮ ትምህርትን ለማዳመጥ አልጓንም					
7	በአዊኛ ቋንቋ እየተሰጠ ያለውን የሬድዮ ትምህርት ማዳመጥ አልጠድም					
8	በአዊኛ ቋንቋ የሬድዮ ትምህርት ክፍል ጊዜ ተማሪዎቹን ለመቆጣጠር እንደሁኔታው አመቻቻለሁ					
9	ኘሮግራሙ ባይመችም እንኳ በአዊኛ ቋንቋ የሬድዮ ትምህርት ለመሰራት ፈቃደኛ ነኝ					
10	የአዊኛ ቋንቋ የሬድዮ ትምህርት ተማሪዎችንም ሆነ መምህራንን አያነቃቃም					
11	የአዊኛ ቋንቋ ትምህርትን ማደመጥ ብናቋርጥ ደስተኛ አሆናለሁ					
12	በአጠቃላይ የአዊኛ ቋንቋ የሬድዮ ትምህርትን አጠዳለሁ					

ለ 3ኛ እና ለ4ኛ ክፍል ተማሪዎች የተዘጋጀ መጠይቅ

የዚህ ጥናት ዋና ዓላማ ከ1-4ኛ ክፍል በአዊኛ ቋንቋ እየተሰጠ ያለውን የአካባቢ ሳይንስ የሬድዮ ትምህርት አተገባበር (አራጸዐም) መገምገም ነው። የመጠይቁ ዓላማም ተማሪዎች በአዊኛ ቋንቋ እየተሰጠ ያለውን የሬድዮ ትምህርት ላይ ያላቸውን አመለካከት መለየት፣ በአተገባበር ላይ ያሉ ችግሮችን መለየት፣ በኘሮግራሙ ጥራት ላይ እንዲሁም በኘሮግራሙ ይዘት ትክክለኛነትና አቀራረብ ዙሪያ መረጃ ማግኘት ነው።

ክፍል አንድ:- የግል የሀይወት ታሪክ

የት/ቤቱ ስም----- የክፍል ደረጃ ----- ክፍል-----ዕድሜ-----

የታ:- ስ.ት----- ወንድ-----

ክፍል ሁለት:- የአዊኛ ቋንቋ የሬድዮ ትምህርት በተማሪው እይታ

የሚከተሉት ዐ.ነገሮች በመሠራጨት ላይ የሚገኘውን የአዊኛ ቋንቋ የሬድዮ ትምህርት የሚሰጠውን ጠቀሜታ፣ የአቀራረቡን ሁኔታና በክፍል ውስጥ ለመጠቀም ያለውን አመችነት የሚያንፀባርቁ ናቸው። ስለዚህ የሚያምኑበትንና በእያንዳንዱ ዐ.ነገር ራት ለፊት ከተሰጡት አማራጮች መካከል አንዱን ብቻ በመምረጥ የጭረት ምልክት (v) በመጠቀም አመልክት(ቺ)። የተሠጡ አማራጮችም:-

5= በጣም እስማማለሁ

4= እስማማለሁ

2= አልስማማም

3= እርግጠኛ አይደለሁም

1= በጣም አልስማማም

ተ.ቁ	ዝርዝር	5	4	3	2	1
1	የአዊኛ ቋንቋ የሬድዮ ትምህርት በጣም ያስደስተኛል					
2	በአዊኛ ቋንቋ የሬድዮ ትምህርት ክፍል ጊዜ ሁልጊዜ እጨነቃለሁ					
3	የአዊኛ ቋንቋ የሬድዮ ትምህርት አስደሳችና አስቂኝ ነው					
4	የአዊኛ ቋንቋ የሬድዮ ትምህርት አይመቸኝም					
5	የአዊኛ ቋንቋ የሬድዮ ትምህርት ማዳመጥ ትዕግስት ያሳጣኛል					
6	የአዊኛ ቋንቋ የሬድዮ ትምህርት ማዳመጥ እረፍት ያሳጣኛል					
7	የአዊኛ ቋንቋ የሬድዮ ትምህርት ማዳመጥ እንድናደድ ያደርገኛል					
8	የአዊኛ ቋንቋ የሬድዮ ትምህርት ማዳመጥ አልወድም					
9	የአዊኛ ቋንቋ የሬድዮ ትምህርት ማዳመጥ ሁሉ ጊዜ ያስደስተኛል					
10	የአዊኛ ቋንቋ የሬድዮ ትምህርት በማይሰጥባቸው ትምህርቶች ይልቅ በሚሰጥባቸው ይበልጥ እረካለሁ					
11	የአዊኛ ቋንቋ የሬድዮ ትምህርት በማይሰጥባቸው ትምህርቶች ይልቅ በሚሰጥባቸው ጥሩ ውጤት አመጣለሁ					
12	በአጠቃላይ በአዊኛ ቋንቋ የሬድዮ ትምህርት እረካለሁ					



## APPENDIX C

### Classroom observation Checklist

Name of school \_\_\_\_\_ date \_\_\_\_\_

Name of observer \_\_\_\_\_ period \_\_\_\_\_ time \_\_\_\_\_

Grade \_\_\_\_\_ section \_\_\_\_\_

Lesson title \_\_\_\_\_

No of students listening \_\_\_\_\_

Direction please check using tick mark (✓) on the information given

Teacher activities	No	Before broadcast	Yes	No	comment	
	1	Revises the previous lessons				
	2	Introduces the title of the forth coming radio lesson				
	3	Explains difficult concept and/or terms of the forth coming radio lesson				
Student activities	1	Maintain god discipline	All of them	Most of them	Few of them	Never
Teacher activities	No	During broadcast	Frequently	Some times	Rarely	Never
	1	Encourages students to answer questions when they are asked by the radio teacher				
	2	Demonstrates using illustrative materials when recommended by radio teacher				
	3	Supervises students to maintain good discipline				
Students activity	No	During broadcast	All of them	Most of them	Few of them	Never
	4	Participated by answering questions (raising their hands) and/or performing other activities when asked by the radio teacher				
	5	Maintain good discipline				
Teacher activities	No	After broad cast	Yes	No	Comment	
	1	Revises main points of the days lesson				
	2	Encourages students to ask points which are not clear to them				
	3	Check whether or not the radio lesson is grasped by the pupil				
Students activities		After broadcast	All	Most of them	Few of them	Never
	4	Participate by asking questions and/or answering questions (raising their hands)				
	5	Maintaining good discipline				

**APPENDIX D**  
**Addis Ababa University**  
**College of Education**  
**Multicultural and Multilingual Education**  
**Interview prepared for school Directors**

The main purpose of this interview is to gather relevant information regarding the implementation of Awigni language radio broadcast and to suggest possible recommendation based on the findings, so, you are kindly requested to respond to all questions. Your information is kept confidential.

*Thank you for your co-operation*

1. What do you say about the adequacy of radio sets?
2. What do you say about the adequacy of radio manual and radio teacher's guide?
3. Would you briefly explain about the regularity of radio use in your school specific to grade three and four in Awigni language radio broadcast?
4. How much do you use electric power, cassettes and tap recorder?
5. What are the problems that you have faced in implementing grade four and/ three Awigni language radio broadcasts?
6. What do you say about the radio maintenance service from the center?
7. Do you discuss with teachers how they or how they can make better use of the Awigni language radio broadcast?
8. How much effort do grade 3 and 4 teachers exert for effective implementation of Awigni language radio broadcast?
9. What do you suggest for the betterment of Awigni language radio broadcasts?
11. Do you have any thing to say (add) about Awigni language radio broadcast?

**APPENDIX E**  
**Addis Ababa University**  
**College of Education**  
**Multicultural and Multilingual Education**  
**Interview Prepared For Awigni Language Radio**  
**Broadcast Media Expert[Programm Producers]**

The main purpose of this interview is to gather relevant information regarding the implementation of Awigni language radio broadcast and to suggest possible recommendation based on the findings, so, you are kindly requested to respond to all questions. Your information is kept confidential.

*Thank you for your co-operation*

1. What do you say about the contribution of grade three and four Awigni language radio broadcasts for the teachers and students?
2. Would you mention the supporting materials that you have provide for the user schools?
3. Do you think the support is adequate? If not what do you say about the reason?
4. Would you briefly discuss in service training related to radio program?
5. What do you say about the radio maintenance service for the user schools?
6. Do local teachers participate in the process of producing and transmitting grade three/four Awigni language radio broadcast? If yes how? If no why?
7. What are the problems (if any) that you have faced in the process of production and transmission of grade four or/and three Awingni language radio broadcast?
8. What do you suggest for the betterment of grade four/three Awigni language radio broadcasts?
9. Do you have any thing to add about Awigni language radio broadcast?

## APPENDIX F

A summary Table of the Attitude scores of the pilot test. (For Students)

No of	Items												
Student	1	2	3	4	5	6	7	8	9	10	11	12	Total
1	3	4	5	3	4	5	4	4	3	4	3	5	47
2	3	2	4	1	2	4	5	3	3	4	5	4	40
3	3	2	4	1	2	4	5	3	3	4	5	4	40
4	2	3	4	3	1	4	4	2	1	3	5	4	36
5	4	3	5	5	4	5	5	4	2	4	5	4	50
6	3	4	5	3	4	5	4	4	3	4	3	5	47
7	2	3	4	3	1	4	4	2	1	3	4	5	36
8	2	3	4	3	1	4	4	2	1	3	4	5	36
9	3	2	4	2	2	4	5	3	3	4	5	4	41
10	4	3	5	5	4	5	5	4	2	4	5	4	50
11	3	4	5	3	4	5	4	4	3	4	3	5	47
12	4	3	5	5	4	5	5	4	2	4	5	4	50
13	3	2	4	2	2	4	5	3	3	4	5	4	41
14	2	3	4	3	1	4	4	2	1	3	4	5	36
15	3	4	5	3	4	5	4	4	3	4	3	5	47
16	4	3	5	5	4	5	5	4	2	4	5	4	50
17	4	3	5	5	4	5	5	4	2	4	5	4	50
18	3	2	4	2	2	4	5	3	3	4	5	4	41
19	3	4	5	3	4	5	4	4	3	4	3	5	47
20	2	3	4	3	1	4	4	2	1	3	4	5	36
Sd <sup>2</sup>	0	0	0	1	1	0	0	0	0	0	0	0	29.84
	4	5	2	5	6	2	2	6	6	1	6	2	4
	9		5	2	8	5	5	8	8	8	8	5	
	7			7	7			7	7	7	7		
	9			5	5			5	5	5	5		
	3												
	3												
	8												
	8												
	4												

$$\sum sdi^2 \text{ (summation of each variance)} = 7.46$$

$$Tsd^2 \text{ (total variance)} = 29.84$$

$$\&sd^2 = n/n-1 \frac{(Tsd^2 - \sum sdi^2)}{Tsd^2}$$

$$\&sd^2 = 12/12-1 \frac{(29.84-7.462)}{29.84}$$

$$\&sd^2 = 0.818074$$

Therefore, reliability coefficient for student respondents is 0.82 to the nearest decimal.

## APPENDIX G

A summary Table of the Attitude scores of the pilot test. (For teachers)

No of respondent	1	2	3	4	5	6	7	8	9	10	11	12	Total
1	4	3	5	5	4	5	5	4	2	4	5	4	50
2	3	4	5	3	4	5	4	4	3	4	3	5	47
3	2	3	4	3	1	4	4	2	1	3	4	5	36
4	3	2	4	2	2	4	5	3	3	4	5	4	41
Sd <sup>2</sup>	0	0	0	1	1	0	0	0	0	0	0	0	29.2
	.	.	.	.	.	.	.	.	.	.	.	.	5
	5	5	2	1	6	2	2	6	6	1	6	2	
			5	8	8	5	5	8	8	8	0	5	
				7	7			7	7	7	7		
				5	5			5	5	5	5		

Tsd<sup>2</sup> (total variance) = 29.25

$\sum sdi^2$  (summation of each variance) = 7.125

$\&=sd^2 = n/n-1(Tsd^2 - \sum sdi^2)$

Tsd<sup>2</sup>

Thus,  $\&=sd^2 = 12/12-1 (29.25 - 7.125)$

29

= 0.825174825

Therefore, reliability coefficient for teacher respondents is 0.83 to the nearest decimal.