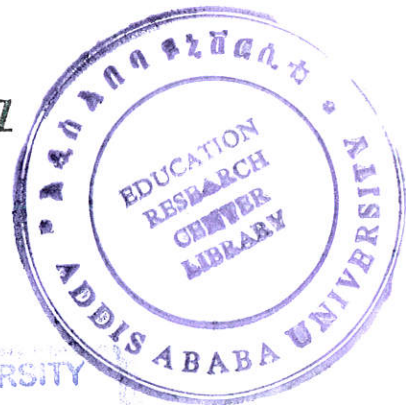


ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES

**EFFECTIVENESS OF THE UTILIZATION OF EDUCATIONAL RADIO PROGRAMS IN
PRIMARY SCHOOLS IN ADDIS ABABA: THE CASE OF
THREE PRIMARY SCHOOLS**

BY: MULUGETA ABEGAZ



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**A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES OF ADDIS ABABA
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By: Mulugeta Abegaz

**COLLEGE OF EDUCATION
DEPARTMENT OF CURRICULUM AND TEACHERS
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Abstract

The study attempted to evaluate the effectiveness of educational radio programs in three primary schools in Addis Ababa. Fifteen people (three principals, six teachers and six students) were selected as a source of information. Their selection was based on willingness to participate in the study (for the teachers) and academic performance, age and sex (for students). A qualitative case study was employed. The data was collected through interviews, observation and document analysis. The study revealed that primary schools' principals and teachers have good perception towards the educational radio programs. Furthermore, students are more interested to acquire knowledge from educational media, such as educational radio. Due to this most of the teachers try their best to utilize the programs regularly. However, the utilization process affected by different factors. Some of the major identified factors were teachers' lack of training on radio instruction utilization, inavailability of support materials such as radio teachers, guides, enough radio sets, and illustrative materials and lack of evaluation system on the success and failures of radio lesson by the classroom teachers. Nevertheless, the problem of schools' location, classroom size, and timetable in the utilization of educational radio programs is insignificant in the case of the three selected primary schools of Addis Ababa. To alleviate of the problems which observed in the utilization processes the school community as well as the concerned educational officials and policy makers should be given proper attention to fulfill the necessary inputs and trainings for the classroom teachers on the way of utilization. The findings and concluding remarks forwarded in the study will help policy makers, educational bureau officials, educational media experts and program producers to give due attention for the proper utilization of educational radio programs.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

One of the objectives of education is to strengthen the individuals and the society's problem solving capacity, ability and culture starting from basic education and at all levels (TGE, 1994: 1). Moreover, education is one of the most important tools for the advancement of the society. Therefore, the young generation develops knowledge, skills and attitudes through education.

Education involves the transfer of knowledge, information, skills, attitudes and interests. This transformation of messages becomes effective as well as efficient using different instructional media (Mohanty, 1984:102). Radio is one of the instructional media that are extensively used in the developed as well as in the developing countries (McLaughlin, 1998:3). It is an expensive, but powerful medium and can be used in education very effectively and efficiently. Radio offers the possibility of extensive deployment in education, because of the available infrastructure, comparatively low cost of receiving sets and producing programs (Mohanty, 1984:98). The radio programs supported by pre and post broadcast activities; use of printed and visual materials can prove enormously beneficial for all kinds of learners including children. It has the advantage of teaching subjects in which classroom teachers are inefficient or untrained (Ibid)

Jamison and McAnany (1978:187) pointed out three main advantages of radio: improving educational quality and relevance, lowering educational costs and improving access to educational inputs particularly to the disadvantaged groups.

As to Hancock (1976:176), educational radio is effective as an instrument for the teaching and learning of many subjects like social studies, language

studies, drama, story, music, natural sciences, etc, when it used properly at the receiving ends.

If instructional radio used in the right place, in the right way, for an appropriate purpose it will improve classroom experiences (Tesfaye, 1990:5). To utilize educational radio programs effectively in the school, radio sets should be available, teachers need training to correctly utilize the radio programs, teachers' guides and broadcasting schedules should be printed and distributed and maintenance services should be rendered promptly (Brown et al, 1972:8).

Besides, as it is indicated by Teshome (1998:28), the effective utilization of educational radio programs does not take place by itself in schools. Instead like other educational innovations, it mostly occurs in schools where there is suitable leadership, school media policy and school tradition for implementing the programs.

As it stated by Head, 1974:36) in Ethiopia, national radio broadcast in its simplest form began at the eve of the Fascist Italian invasion of the country in 1935. After a few years of interruption regular radio programs transmission restarted in 1942.

However, educational radio program transmission for schools started in 1969 in the district of Menagesha in the former Shewa Province. This program was initiated to solve the shortage of trained teachers that occurred because of the relative expansion of education in the country in the post liberation periods (Asres, 1988:25 and Tenkir, 1992:25). At the very beginning, educational radio, programs were being broadcast at a pilot study. According to EMMS (1981:17), the progress of educational radio was slows up to 1974. Nevertheless, these early activities have laid down some important foundations for the present. In 1974, the EMMS was encouraged by The MOE to make its programs and goals effective. Therefore, between 1976 and 1977 a plan was prepared to enlarge the

educational radio programs throughout the country. According to the plan, in addition to the existing two transmitters nine transmitters were established in nine provinces (the present Regional States). These eleven transmitters covered most of the country. Thus, the educational radio broadcast extended its dimension up to nation wide level between 1980 and 1983(Demissew and Tilson, 2000: 1 and Petros, 2002:8). The broadcasts were intended “to improve, develop and implement the school curriculum and to introduce new and modern teaching method to schools” (EMA, 1998:3). On the other hand, since the Academic Year of 1995/96 new educational radio broadcasts have been and are being transmitted to supplement and enrich the newly designed primary school curriculum (Ibid).

The new educational and training policy of Ethiopia also has given detailed emphasis on the use of educational technology (TGE, 1994:16). This is due to the role and significance of educational technologies in providing quality and relevance education to all sections of the society when they are used effectively at the receiving end. Radio is one of the widely used educational technologies. It plays a significant role of delivering quality and efficient education worldwide. In Ethiopia, radio has a role of delivering supplementary knowledge since it is beginning. Addis Ababa as the capital of the country is one of the areas to utilize educational radio broadcasts.

Different individuals and organization concerning the utilization of educational radio programs in Ethiopia do various researches. For instance, the Educational Media Agency (EMA) conducted a survey on a few sample schools all over the country using questionnaires as a method of data collection in 1988. The Agency released the result in the form of report in 1991. According to the report, several factors seriously affected the utilization of the educational radio programs. Among these were lack of antenna, lack of well-furnished listening rooms, inadequacy of maintenances for non- functioning radio sets, shortage of radio sets and weak types of radio sets (EMA, 1991:43).

Furthermore, Mammo (1986) and Kassa (1991) studied on factors that affect the implementation of educational radio programs in some selected government schools of Addis Ababa. Both studies concluded that there was poor implementation of educational radio programs in governmental primary schools of the Capital. This is due to, shortage of radio sets, large number of students in one listening room, absence of strict follow ups by the school directors whether the teachers utilized the programs or not, disturbing noise and shortage of dry cell (Mammo, 1986: 86-88 and Kassa 1991; 45-46).

In 1998, Kahsay also conducted a study on evaluation of utilization of Social Studies radio instruction at lower grades (first cycle) of Primary schools of Addis Ababa. This study finally concluded that the vast majority of primary schools in Addis Ababa have utilized Social Studies educational radio programs regularly. However, there state of utilization is improper due to lack of knowledge and skills on utilization, less audibility of the programs due to frequency errors in many schools occasionally, absence of trained media representatives in many schools.

Meanwhile, Teshome (1998) conducted extensive research to investigate and describe the utilization and performance of educational radio support programs in primary education. The study is concerned with how radio is applied in primary education and what characterizes the result of that application in school context. In 2004, he also studied the effectiveness of Grade one English Interactive Radio Instruction Programs in Ethiopia. The study has demonstrated that English for Ethiopia Interactive Radio Instruction has been more effective in improving students learning than the traditional instruction.

The situation implies, though available research output have instantly urge attention to be paid for the utilization of educational radio programs, the use of them has not been strong in Ethiopia. For decades, findings of researches portray that the utilization of educational radio programs more or less were

found in inefficient in enriching the school curricula. The recommendations of all the aforementioned studies emphasized the need for further research on the effectiveness of the utilization of radio lessons. Thus, to indicate the seriousness of the problems and still to urge the concerned bodies to turn their attention towards the problems related to educational radio programs, additional studies are required with different settings and participants

This study as a result is intended to contribute to improvement of effective utilization of educational radio lessons in primary schools of Ethiopia in general and Addis Ababa in particular by providing additional inputs by evaluating the present utilization process. It is delimited mostly to evaluate the perception of teachers towards the medium; the training of teachers in radio program utilization skills; the current availability of radio support materials and the problems they encounter during the utilization process. As different from the previous studies stresses only in the conditions of the classrooms and the school compounds other than external factors such as the quality of program production and the broadcasted programs, technical factors, frequency errors, and commitments of higher educational personnel. In addition, the study attempted to addresses the contemporary state of the utilization process with different research settings and different informants. It attempted to evaluate the effectiveness of the programs based on certain criteria such as the relevance of the program to supplement and enrich a particular subject area, validity of the topic transmitted through radio, appropriateness and accessibility to students' interest.

1.2 Statement of the Problem

Ethiopia relatively has an old aged experience, which span for more than three decades in using radio to support primary education (Demissew and Tilson, 2000:1). Thus, educational radio played an important role in enriching the curricula and solving the shortage of trained teachers. Currently, the new educational and training policy of the country gives due attention to the supply,

distribution, and utilization of educational technologies and facilities to promote quality, relevance and expansion of education (TGE, 1994: 16). In addition, the policy gives responsibility to the regional states for running the educational radio broadcasting for primary schools (ibid). The AAEB Educational Mass Media Unit, therefore, producing and broadcasting educational radio programs to primary schools of Addis Ababa since 1995/96 as a supplementary program for classroom learning (Petros, 2002). Concerning the implementation of educational radio programs different scholars conducted several researches in Addis Ababa and other regional states. However, most of the studies have given higher attention on inputs and facilities of the radio stations and schools. According to the findings of these studies, the state of implementation is improper and inefficient due to a number of constraints. Some of the problems mentioned in researches were absence of separate listening rooms, shortage of dry cells, large class sizes, etc, (Mammo, 1986, Kassa, 1991 and Kahsay, 1998).

Although available research outputs have conducted repeatedly, their application is not still strong. Thus, additional efforts should be made to inform and give hints to the policy makers, educational bureau officials, and educational media experts about the conditions of the utilization processes of the broadcasting programs at the classroom level. Therefore, this study was designed to contribute additional inputs in the recent developments of the educational radio programs. To this end, this study attempted to evaluate the current utilization process based on teachers' and principals' perceptions towards the medium, teachers' training, and supply of support materials. Besides, the study attempted to identify the underlying factors that hindered the effective utilization of educational radio programs.

1.3 Purposes of the Study

- Evaluate the effectiveness of the utilization process of educational radio programs in primary schools in Addis Ababa
- Identify the problem area in utilizing educational radio programs in primary schools
- Suggest alternative approaches and solutions to utilize the broadcasting radio programs effectively

1.4 Research Questions

This study attempts to address the following research questions.

1. How do teachers and school principals perceive the utilization of educational radio programs in their classrooms & Schools?
2. How much are teachers trained in utilization of educational radio programs?
3. How available are necessary support services such as teachers' guides, workbooks, radio sets etc?
4. What are the major problems (factors) that hindered the effective utilization of educational radio programs in primary schools?

1.5 Significance of the Study

The research will give a highlight about the current utilization process of educational radio programs in primary schools in Addis Ababa. By doing so it will:

- Provide basic baseline data concerning the utilization of educational radio programs in the study area.
- Helps the teachers' identify their weak points and strengths. Makes them see whether the utilizing the programs as expected.

- Enables also with previous studies the concerned bodies to see what is going on in the schools in relations to their expectations and wakes them up for making necessary adjustments.
- Increase awareness among the officials of the Mass Media Unit of Addis Ababa Education Bureau, program producers, policy makers, implementers, etc, in restructuring the educational radio programs in a way that could bring concrete change in supplementing and enriching primary schools' curricula.
- Give hints for further studying the field.

1.6 Limitation of the Study

This study has the following weaknesses.

- All the primary schools, which included as research settings in this study have grades from Grade 1-8. However, due to time constraints it was only possible to include only Grade 5 and 6.
- There was shortage of well-organized documents which give hints how schools utilized educational radio programs.
- This study involved only teachers, students and school principals who currently are engaged in the teaching learning process. However, it was better if curriculum designers, media experts, program producers and other concerned bodies were included in the study. Time and resource constraints limited me to do so.

1.7 Organization of the Study

This Study is organized into five parts. The first part treats the problem and its approach. Part two presents review of related literature. Part three deals with the research methodology. The fourth part devoted narration of the findings, the last holding the conclusion.

Definition of Terms

Educational Radio is the application of radio in the formal school courses for direct teaching.

Effectiveness: refers to the capacity to produce result.

Primary Schools refer to the schools that range from Grade 1-8.

School principal refers to the head teacher. In this paper, it is used interchangeably with the term school directors.

Training refers to any type of program designed to introduce teachers with various techniques of utilizing educational radio programs in the classroom.

Utilization refers to the extent to which the radio programs are actually used in a classroom situation.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

In this chapter pertinent works of others are reviewed briefly under the following sub headings: the importance of radio in education, experiences in the effective utilization of educational radio program, the importance of radio for education in Ethiopia, the role of the classroom teacher in utilizing educational radio programs, support materials needed for effective utilization of education radio programs and factors that affect the effectiveness of the utilization of educational radio programs.

2.1 The Importance of Radio in Education

Now radio is one of the widely used electronic media globally. It has a history of more than 80 years of being extensively utilized in the world. Radio has been extensively used almost by all societies for education, development and other social activities (Hilliard, 1985: 3, Cable, 1965: 73).

According to Brown et.al (1977: 216), it was in 1924 that real school broadcasting began by the BBC for the first time. At the beginning, radio in most cases was used for various forms of adult education (Evans and Nation, 1996: 35, Keegan, 1994: 5). Hawkrige and Robinson said (1982: 229) radio stated to serve the non-formal education but was later adapted to the formal education.

As Sive (1983: 67) and Bates (1984: 63) argued currently, several developed and less developed countries have utilized radio to support their educational systems. Their main objective to utilize educational radio is to improve instruction. The improvement of instruction in turn brings about rapid and desired changes in the learners' behaviors.

As a medium of communication, radio has a number of advantages in supporting educational activities. Radio has a capacity of communicating knowledge quickly to large groups of people situated at different points throughout the country or in a specific geographical area. In short, radio has the potential to ease of communication (Chester, 1987: 204, Kumar, 2000: 163). Moreover, radio has the potential of wide coverage. Because its broadcast may cover a sub continent, a continent or the entire world (Kumar, 2000: 163).

According to Brown (1977: 216), educational radio broadcasting is a useful means of providing learning experiences for a large number of students. Radio messages reach the audience instantly. There is no time lag and no waiting period. Radio is easily accessible. Therefore, radio broadcasts are home-based education that can be providing in one's privacy (Kumer, 2000: 163). It is also accessible to non-literate and literate people.

In addition to its advantages for educational services, educational radio is also useful as a learning resource particularly for those who are far from where resource materials are available (Bates, 1984: 16). Radio instructional technology is less capital intensive and has lower running cost than other media (Mohanty, 1984: 74, Dele 1959: 283, Hass and Packer, 1965: 223).

Moreover, as it stated by Tickton (1970: 223), radio helps the classroom teacher to bring resources (materials) ordinarily beyond those available to local classrooms. For example, schools may have no musical instruments under this condition; radio can be an essential substitution in teaching music. Radio permits unavailable teaching and learning materials to be available to all schools. The other unique characteristics of radio, which makes it different from and makes it more advantageous than the print media is that it enables the class to have a sense of active participation and realism (Chester 1987: 205). It brings the world to the classroom. Radio can help students to listen to the details of essential ceremonies, conferences, history making etc. Students

can learn the biography, personality and thoughts of famous and well-known figures (Mohanty, 1984:9 and Tickton, 1970:173).

Quite apart from its important contributions to support education, radio has many limitations and weaknesses of its own. As Cable, (1965: 77) explains one of the limitations of radio is its inflexibility. It dictates fixed lesson times that are sometimes inconvenient for schools, which prefer their own time-table. Furthermore, it is not permissive for elaboration on any aspect of the lesson until it is over, which may not be the best psychological monument. On the other hand, the classroom teacher has no control over the pace of development of a radio lesson. The other limitation of radio is that normal receptive conditions are often poor in remote areas, especially at the time chosen to schools (Kumar, 2000:163).

In spite of these limitations, there is so much that is beneficial in an educational radio service that the inability of a small percentage of schools to benefit from it should not deter educational authorities from establishing and developing such services wherever needed (Cable, 1965:7).

2.2 Experiences in the Effective Utilization of Educational Radio Programs

According to Romiszowski (1988:141) and Temu (1995) and Reeves (1990) in Teshome (2004: 7), the concept of effectiveness at a normal condition refers to the capacity to produce results. The most common effectiveness indicates that studies in educational radio were focused on students learning gains, professional development of teachers, cost effectiveness and the improvement of educational access.

Since countries began to utilize radio for educational services as a support material, several experiments and researches have been done in many countries including those from Africa (Bishop, 1995: 196). Although it is out of

the concern of this paper to review all the experiments and research works conducted in different countries it seems justifiable to brief the experiences of some countries, which have underlined the effectiveness of radio in supplementing and enriching the curricula of primary schools.

One of the countries that utilized educational radio broadcasts effectively in primary level was Thailand in South East Asia. According to Bishop (1995:188), Thailand has utilized radio Broadcasts effectively and inexpensively to instruct numerous different subjects like English, Social Science and Music in primary schools. Thailand began educational radio broadcasts in 1958 for support and enriched its primary schools' curricula. As a supplementary to their regular lessons, students received an average of 10 to 30 minutes of broadcasts per week in each subject. To evaluate the effectiveness of radio instructions, the Ministry of Education of Thailand conducted a large-scale field study in 1958 and 1959. According to the result of the evaluation, students who received radio music supplements were found to be significantly better than students who did not receive radio broadcasts are. However, according to Schramm (1977: 186-88), the English lessons did not bring similar positive results and were significantly needed extensive revision. However, the English lessons in the contrary to the Social Science radiobroadcasts met their objectives of influencing socially desired attitudes and values. Thus, the education radio broadcast in Thailand was found effective.

Another country, which utilized educational radio broadcasts more effectively, was Nicaragua, in Central America (Bishop, 1995:206). Nicaragua's Ministry of Education began a project to teach mathematics by radio for the first three grade levels of the primary schools in 1973. The project was conducted by the technical and financial aid of the USAID. The main objective of the project was to examine the effectiveness of educational radio in teaching mathematics in the primary grades. Everyday students were made to be instructed mathematics by radio for 50 minutes. Throughout the broadcasts, the students

expected to participate actively. The responsibility of the classroom teacher was to follow the daily radio broadcasts. Feedbacks were obtained from weekly test, classroom observations and teacher comments. Finally, tests carried out in 1977 showed that it was indeed an effective medium for teaching in the primary schools mathematics and probably for other subject as well. In such tests students in the radio classes achieved significantly higher achievement. In 1978, the program brought to an end when revolutionary actions swept Nicaragua bringing schools and other programs to a halt (Bishop, 1995: 206-207).

In Pakistan, as in many others developing nations, all radio stations were broadcasting school educational programs. The radio lessons were prepared by experienced teachers and specialists in the subject matter and transmitted them in fixed schedules. Educational broadcasts handbooks were being distributed well a head of time by Audio-visual centers for the guidance of teachers and school principals (Ibid: 188).

According to Head (1974:64), Mauritius is the other less developed nation to exploit the potentialities of the mass media, particularly radio, to enrich the formal school programs and to provide alternative paths to it.

According to Imhoof and Christensen (1986: 51), educational radio broadcasts launched in Kenya to teach English language. In 1980, a project known as Radio Language Arts Project (RLAP) was launched in Kenya with the intention of teaching English language skills to children in grade one to three. The programs focused mainly on the four language skills: listening, speaking, reading and writing. To evaluate the effectiveness of this program the Ministry of Education of Kenya conducted summative evaluation. Finally, the evaluation demonstrated that much higher achievements were attained in the radio classes than in traditional ones (Demissew, 1991: 50-51).

Bates (1984: 216), stated the Dominican Republic is another developing nation that launched Radio-Assisted Community Basic Education (BADECO) in 1982. The aim of the project was to provide elementary education to children who lacked access to public schools.

Thus, from the above experiences of the success of educational radio broadcasts, it can be concluded that even though radio has been criticized for being an aural media, researches clearly indicated that is effective and efficient in teaching most subjects if it properly and effectively utilized at the received end (Hancock, 1976, Mohanty, 1984 and Knirk and Gustafson, 1986:165).

2.3 The Need of Educational Radio in Ethiopia

In Ethiopia, educational radio stations have served to enrich the curriculum and supplement classroom teachers during all the regimes of Ethiopia (since 1950). Although each regime followed its own unique policy and ideology, all of them have used the media for the same purposes. These are according to Teshome (1998:73)

- * Providing formal education
- * Improving student learning
- * Improving school facilities (resources)
- * Improving teachers competence
- * Improving educational resources
- * Minimizing educational costs

As argued by Tilson and Demissew (2000: 1) educational radio has been particularly important in Ethiopia for several purposes. First, the country is larger and mountainous and travel is difficult. Second, it has helped to support classes with under qualified teachers. This has been particularly true in the second cycle of primary schools. Third, it has expanded the experiences of the children. Four, the programs provide general enrichment in a variety of ways.

There was a study conducted by the UNICEF in 1990 to identify the major mass media used in Ethiopia to support the formal education. The study suggested that radio was the most important learning media especially for the younger audience (UNICEF, 1990:5).

The scope of production and transmission of educational radio programs has widened immensely. At present educational radio is being broadcast to all urban and rural schools of the country in various ethnic languages such as Amharic (in all regional states of FDRE including Addis Ababa and Dire Dawa), Tigray (in Tigray), Oromo (in Oromia), Somali (in Somali), Harari (In Harari), Afar (in Afar), Sidama, Wolayta, Hadya, Gurage, Siltie, Kamabata, Gedeo, Kafficho (some of the languages of ethnic groups in SNNPRS), Anuak (in Gambella), etc, (Petros, 2002). Environmental Science, Social Science and English language have received maximum attention (See Appendix 4). As the following table depicts there are 12 educational radio broadcasting stations in Ethiopia at the present.

Table 2:1. Educational Radio Transmitting Stations in Ethiopia

No	Name of the station	Region	Year of establishment
1	Alemaya	Oromia	1980
2	Bahir Dar	Amhara	1980
3	Debre Markos	Amhara	1981
4	Dessie	Amhara	1981
5	Gimbi	Oromia	1981
6	Gondar	Amhara	1996
7	Gore	Oromia	1981
8	Legedadi	Oromia	1981
9	Mekele	Tigray	1981
10	Robe	Oromia	1980
11	Walayta Soddo	SNNPRS	1970
12	Yirgalem	SNNPRS	1999

** Source: adopted from Petros, 2002:9*

As it stated by Petros (2002: 6) in Ethiopia, educational broadcasting particularly radio is given priority by the government of Federal Democratic Republic of Ethiopia (FDRE) to support primary school.

At present in four regional states, namely Amhara, Oromia, SNNPR and Tigray the above mentioned radio stations are sited and transmitted educational programs for the primary grades. The remaining regional states, including the Addis Ababa City Administration, have no educational radio transmitting stations. However, schools of Addis Ababa have been receiving educational radio programs from the Legedadi Educational Radio transmission station (AAEB, 2006:7).

2.4 The Role of the Classroom Teacher to Utilize Education Radio Programs

All the efforts of planning educational radio programs are for efficient utilization. Otherwise, what has been spent in the process is a waste of resources. That is why the role of the classroom teacher in utilizing the programs broadcast is vital.

According to Hayter (1974: 56), one of the roles of the classroom teacher is in utilizing the educational radio broadcasts by arranging the seats of students. In normal classroom seating, students usually sit in straight rows. This arrangement may not be suitable for listening to the radio broadcast. As a result, it needs a different seating arrangement so that each student is sitting near enough to the radio for effective listening. As it stated by Hancock (1977: 280), the most preferable sitting arrangement to follow the radio broadcasting attentively is a semi-circular or group arrangement. In reality, the role of the classroom teacher is not only restricted to a specific time but can be derived into three major parts in relation to radio broadcasting.

2.4.1 Before the Broadcast

The role of the classroom teacher begins by doing some activities before the broadcast. Before the program is on the air the classroom teacher should accomplish tasks like making students mentally ready, describing key words and concepts, raising questions which would be answered from the broadcast, making sure that the radio sets works properly and adjusting it and so on.

2.4.2 During the Broadcast

When the program is on the air, the teacher should done tasks like, checking the attention of students, avoiding noises, avoiding students from note taking

unless they are requested by the radio teacher to do so. Note taking during the radio lesson (broadcast) should be discouraged for it distracts the concentration of the students and block the flow of messages. Moreover, the teacher should help his/her students by showing maps, charts diagrams, glob etc, when the radio teacher told him/her to do so. Furthermore, the teacher is expected to list important words, phrases, expressions, etc, that are to be revised after the radio lesson. Assign the students to respond aurally; physically or in writing, when the radio teacher asks questions is also one of the tasks of the classroom teacher.

2.4.3 After the Broadcast

After the broadcast is the final stage at which activities are to be performed by the classroom teacher. In the post broadcasting the teacher, following instructions in teachers' guide exercises are to be done, the interest and reaction of students towards the broadcast are to be assessed and recorded to be used as a feedback for the producers and broadcasters of the programs. Besides, the classroom teacher is expected to correct any misunderstanding of the students through discussion with them.

None of these three activities is complete by themselves for effective utilization of the radio programs. These three activities are the most integrated ones. The failure in one of these activities, affect others, because each depends on the efficiency of the other. That is why the role of the teacher becomes vital for efficient and effective utilization of the educational radio program in formal education. Regarding this vital responsibility of the classroom teacher Kent writes:

The teacher should remember at all times that he/she has a personal relationship with the class that no teaching and can ever hope to emulate and the success of the radio broadcasts depends on the conscientious preparation and skillful handling of the teacher (1967:75).

2.5 Support Materials Needed for Effective Idealization of Educational Radio Programs

What is planned should include not only production but also distribution of material resources. Important programs can be broadcast, teachers can be adequately trained but without the necessary support, effective utilization of the program is hardly unthinkable. Of course, some of the materials may be available in the school environment to be collected and arranged by the teacher for classroom utilization. Still there are other things which necessarily are produced and distributed by the broadcasting agency or whoever is in charge of them.

These materials include Teachers Guides, Students workbooks, radio sets and study guides for students and records if possible. Assistance provided by supervisors who have a special training or experience can also be part of the support. Teachers' guides explain the contents, supplementary readings and the possible combination of media, which can be used to make the lessons livelier. They also "embrace" suggestion, for preparation and follow up activity for broadcasts, including possible corrections with overall scheme of work (Hancock, 1977: 292).

2.6 Major Factors that Affect the Effective Utilization of Education Radio Program

Utilization refers to the actual implementation of the educational radio lessons at the receiving end (Percival, 1984: 23). It is the incidence at which teachers and students use the broadcast for teaching and learning process. In practical sense, it can be that said the radio instruction is properly utilized when teachers apply the before, during and after the broadcast activities and when students listen the programs attentively and react actively at the right time in the classroom (Hancock, 1977:65).

Utilization of radio instruction can be influenced (affected) by a number of factors. One major limitations of radio in the use of education program technically it is a one-way medium that uses only single sense (Hass and Packer, 1965: 223). Moreover, as Hass and Packer, have asserted that the absence of electric power, distance from broadcasting station, lack of suitable radio programs (schedule) and the feeling of some school principles and that radio has a "disturbing effect" upon the classroom have prevented the effective utilization of radio instructions. Hancock (1977: 65) in his own behalf was also listed a long list of factors that influence (affect) utilization of any educational medium that could be summarized as follows:

- * The quality of educational materials to be used
- * The managerial skills of the system
- * The training of the participant professionals
- * Investment on the personnel's facilities and materials
- * Flexibility and development of technical infrastructures

On the other hand, as it stated by Hawkrigde and Robison (1982: 30), the main factors, which highly influence the effective utilization of educational radio programs, are geographical, political, cultural, economic and technical conditions.

At large different educators in the field have listed a number of factors (hindrances) that facilitate or affect the effectiveness of the unitization of radio in education depending upon the research findings at their hands and the background of their respective environment. Here, however, the factors, which are considered as major and most relevant to the scope of this study, are treated briefly.

2.6.1 Physical Environment

As Block (1984: 72) argued educational radio broadcasts have no use unless they can be heard properly at the receiving end. Hearing in turn can be affected by a number of factors such as listening room, the receiver, seating arrangements and so on. According to Hancock (1977: 268) it is not necessary to reserve special room for radio reception. It is simpler to move the receiver than to disturb the class. It is also better if the listening rooms are always free from outside noise such as traffic, air routes, workshops and noise from stairways or corridors. The seating arrangement should be flexible and the receiver should be always away from reflecting surfaces such as large tabletops. Non-reflecting materials should be replacing by wall surfaces, which cause reflection of sounds. The learners should sit in front of the receiver and should be not too far from it and the teacher must be in front of the receiver and not too distant from it because he may have visual materials to show during the broadcasting (Wittch and Schuller, 1979:293). The number of students should not be above the average class size because proper utilization or follow up work is impossible for the teacher dealing with many students and physical conditions for hearing will be poor (Hancock, 1977:190).

2.6.2 Timetable (Program)

School timetable (program) is another factor that affects the effectiveness of the utilization of instructional radio lessons. Dale (1959: 286), Hass and Packer (1965: 222), Morsy (1984: 37) and Hancock (1977: 189) have stated that the absence of suitable broadcasting timetable to each school is a serious obstacle to utilize radio instructions effectively and properly. Here the major source of problem may be the clash between the timetables of the educational media agencies and the receiving schools. Educational media agencies have their own fixed timetable (program) for each radio lesson. On the other hand, schools arrange their schedule taking into account several issues, such as the

proximity of the school with students' residence, weather conditions, shifts etc. As a result, a problem may arise to fit the school timetable with the broadcasting schedule that, thereby, affects the effectiveness of the utilization of radio lesson. As Hancock (1977: 188) argued to integrate the educational radio lessons with the normal teaching timetable of the school advance information is required. This information must state the objective and target audience and outline of the content (Wedell, 1986:187).

2.6.3 Evaluation of Educational Radio Programs

Absence of evaluation and follow up are the other factors that are affecting the improvement and effective utilization of educational radio lessons. Knowledge of the achievement of the teaching objectives of educational radio broadcasting is important to adapt the needs of changes. Therefore, evaluation must ensure the knowledge of what is happening and suggest possible changes in any system (Crisell, 1990:165).

According to UNESCO, (1980: 67) the main aim of educational radio program evaluation is to measure the degree to which the program has successfully achieved its objectives. It evaluates the effectiveness in terms of the number of students reached, the new skill acquired and the extent to which behavior is altered by the educational radio project.

2.6.4 The Interest of Students to Learn from Radio

The effective utilization of radio for educational purposes required students' strong interests, high degree of activity and participation. During the time of broadcasting students should not remain silent. It is essential to have active and effective interaction between the radio teacher, the classroom teacher and the listening students. As many educators in the field believe it, students are more successful at internalization, recalling and applying what they learnt, when they actively participate during the instruction (Tickton 1970: 225). To

this end, students should participate actively by answering and asking questions orally, by writing, reading, and manipulating materials, signing, s doing physical exercise, etc, before, during and after the broadcast.

In addition, when the radio lessons are on air students have to show a good disciplinary behavior. Radio lessons are broadcasted at a fixed time. It is out of the capacity of the classroom teacher and students. If the lesson once passed, it is impossible to be repeated unless it is already recorded in tape recorders. Therefore, educational radio lesson needs a good discipline and higher attention. Any disturbance or noise is harmful. That is even a disciplinary problem of a single child can distract the entire concentration of the classroom which makes radio lessons valueless (Marcus, 1978).

2.6.5 Teachers' Training, perceptions and Attitudes Related Factors

One of the factors that negatively affect the effective utilization of educational radio lessons is lack of training among the classroom teachers. Unless teachers are aware, how to use and why the medium is used they will never utilize it. Therefore, one of the methods to avoid this obstacle is to train teachers (Coddington, 1979:134).

According to Jamison and McAnany (1978:18), training can give at various stages. There are orientation and full time training programs. In orientation training teachers are introduced to how with media are used, what specific contributions they have and about the physical need of media programs. If the use of media is accepted to the educational system the utilization training should be given as full time course for teachers. Such training should properly integrate with the normal teachers' evaluation programs.

Training alone may not ensure effective utilization of radio broadcasts. Thus, the effectiveness of a radio lessons depend largely up on the classroom teachers' attitude, commitment and willingness (Chester, et al, 1987: 208, Welesh, 1973 and Hancock, 1977:154). This is because; it is the teacher who prepares and organizes the classes to listen to the broadcast. If classes were not well organized, then clearly no program would be utilized. Therefore, unlimited effort should be made to enable, teachers to develop positive attitude, commitment and willingness towards the radio lessons and to equip them with ample training on how to use the medium.

Equally important pertaining the teachers and educational radio utilization process is the perception of teachers and initiation to utilize the programs properly. In this respect Nishimoto (1969: 133) remarked that the extent to which educational radio programs are utilized depends upon the extent to which teachers are clear about the degree to utilize and the perception they have towards them. Thus unreserved efforts should be made to enable teachers to have positive perceptions towards the broadcasts and equip them with adequate knowledge and skills on how to use the medium. In the first place teachers should be involved in planning and production of radio programs. Teachers' participation in the development of radio broadcast cause for understanding and positive perception of teachers about the importance of the broadcasts.

CHAPTER THREE

METHODOLOGY

3.1 Methodological Approach

Research involves the quest for an answer to unsolved problems. Pushing back the frontier of ignorance is its goal and originality it's frequently the quality of a research project. However, previous important studies are deliberately repeated using identical or similar procedures with different subjects and different settings at different times. Replication is always desirable to confirm or raise questions about the conclusion of previous studies (Best and Khan, 1993:38). Research methodology in education may fall in two broad approaches (perspectives): quantitative research and qualitative research. According to Hancock (1998:45), early forms of research originated in the natural sciences such as biology, chemistry, geology, physics, etc, and were concerned with investigating things which we could observe and measure in some way. Such observations and measurements can be made objectively and repeatedly by others (Ibid). This Process is referred as "quantitative research. He further added that much later come researchers working in social sciences: psychology, sociology, anthropology, etc, Here researchers were interested in studying human behavior and the social world inhabited by human beings. They found increasing difficulty in trying to explain human behaviors in simple measurable terms. Measurement tells us how often or how many people behave in a certain way but they do not adequately answer the question why? Research which attempt to increase our understanding of why things are the way they are in our social world and why people act the way they do is "qualitative" research. The word qualitative according to Denzin and Lincoln (2003) cited Amare, (2004:47) implies an emphasis on qualities of entities and on process and meanings that are not experimentally examined and measured in terms of quantity, amount, intensity, or frequency. Moreover, qualitative research is

multi-directional in focus, consisting interpretative and naturalistic settings, attempting to give senses of developments in terms of the meaning people giving them (Ibid).

The intention of this study was to evaluate the effectiveness of educational radio programs in primary schools of Addis Ababa. To put this into effect, qualitative research methodology is chosen. The reason for this basis itself on the idea of Huberman and Miles (1994) which says to investigate an issue in education, which is a human endeavor using qualitative approach, seems justifiable. Other scholars such as Lecompte and Preissele (1993:24) strengthen this idea by saying “when the concern of educational research is with people qualitative research can be employed”. Their justification is controlling and manipulating activities of human beings are somewhat difficult. Furthermore, Hancock (1998: 45) has also asserted “qualitative research describes social phenomena as they occur naturally. No attempt is made to manipulate the situation under the study.” All these points reveal that using natural setting of human beings as a direct source of data is supported and advised in qualitative research. Therefore, the present study used qualitative research methodology to evaluate the effectiveness of educational radio programs in primary schools in Addis Ababa.

3.2 Design of the Study

Research design, according to Yin (2003:21) cited in Solomon (2004:9), is a logical sequence that connects empirical data to the study’s initial research questions and ultimately to its conclusion. The intention of this study was to collect data specific to the utilization of educational radio programs in primary schools. To answer the basic questions and achieve the objectives of the study a qualitative case study design was employed. Different scholars in the field of educational research define case study as empirical inquiry that studies contemporary phenomena within the real life context in which multiple sources

of evidences are used (best and Khan, 1993; Gall, et.al, 1996; Yin, 1994). Specifically, Burges (1993:51) has stated case study as one of the designs in qualitative research and focuses on examine a “specific case”. From another perspective, Yin (2003:1) in Solomon (2004:7) has pointed out that case study is a preferred strategy when how or why questions are being posed, when the researcher has minimum control over the events and when the focus is on contemporary phenomenon with some real life context.

Since the present study evaluates issues related to educational research specially the effectiveness of educational radio programs in primary schools, a qualitative case study design was appropriate. To this end, three primary schools selected among 368 governmental, public, private, etc, primary schools in the capital (AAEB, 2005:7). The three selected primary schools given fictitious names because of the ethical principles that bind me and the research participants (see Appendix 1). These schools are named as PS1, PS2 and PS3.

The sample schools were selected because of my better exposure and access to different information. Because of their understanding of any educational research for improvements, many of the teachers of the sample schools helped me in overcoming some obstacles and some times unwillingness and/or resistances from people who are data source of the study.

3.3 Procedure

The major concern of this study is to evaluate and describe the effectiveness of the utilization of educational radio programs in primary schools in Addis Ababa. To achieve the expected goal of the study the researcher was followed the following procedures (phases).

The first phase engaged in an extensive review of literatures and preparation of the proposal. This was essential to develop a conceptual framework and data collection strategies of the study. Secondly, the preliminary assessment, which

was a contact with different peoples of the school, took place. Moreover, the researcher made general observation, selective interview and document assessment to get general information and develop appropriate data collection procedures for the evaluation. Based on the information obtained the study identified the information rich persons in the school. In the third phase the main data collection activities have been conducted. In the fourth phase the collected data has been studied, organized categorized and reported.

3.4 Research Setting

The first and most important point in research work is having an interest and a suitable research environment that helps to collect an appropriate data with kindly cooperation. With this, Seyoum (1998:7) contends 'without interest it is very difficult to think and engage in effective research tasks'.

On the other side, among the important duties of the researcher is identifying an appropriate research setting. Thus, for this study three primary schools were selected as its settings. Primary schools were selected as research settings; because educational radio broadcasts in the country transmitted for and utilized mostly in primary schools. To this end, among 368 primary schools in the capital, only three primary schools were selected as research settings.

3.5 Research Participants

In educational research with research settings equally important are the participants. Basically, the sources of data for this study were primary school teachers. In addition, documents, school principals and students were included as a source of data.

Regarding the issue of sampling in qualitative research different scholars forwarded their own views. For instance, Lecompte and Priessele (1993:57) notes, that "choice of whom to study is an interactive process which takes place

first in the initial stage of a qualitative or field study. As sampling is crucial for later analysis, Burges (1993) has also stated that it is essential for the success of the research strategy that participants are fully sympathetic with the task as the reluctant informants rarely provide usable data. Therefore, sampling in the case study of qualitative approach is purposefully selective and tends to be small number of people nested in their context and studied in depth (Huberman and Miles, 1994).

This study, as it is discussed in Section 3.4 selected three primary schools in Addis Ababa. As the focus of the study was to evaluate the effectiveness of educational, radio programs in three primary schools, the study selected those teachers and students who are expected to provide authentic data without any exaggeration and bias. Therefore, in order to collect the right information the student researcher contacted and discussed with different people who have good knowledge about the issue under study. Based on the discussions with school principals, unit leaders and students which have relation with the issue under study have been considered as a reference point to select information rich informants. The total number of teachers participated in the study were six. Moreover, six students and three principals were also involved as informants.

3.6 Methods of Data Collection

In qualitative research there is no one and superior method that is used to gather information rather varieties of methods are advised to be used. Thus, the necessary information for this study were collected though interviews, observations and document analysis.

3.6.1 Interviews

In qualitative research, interviewing is a major source of data needed for understanding the phenomena under study. For the purpose of this study, semi-structured interview was used. The purpose of the interview was not

simply to put things in someone's mind but to assess the perspective of persons who were interviewed. Therefore, the interview for this research was conducted with primary school students, teachers and principals to know their understanding and perspectives about the issue. Thus, an interview was conducted with a total of fifteen participants (six teachers, six students and three principals). That is 2x3, 2x3 and 1x3 respectively from each case. Teachers were selected through searching for those who can provide tangible and authentic information and willingness to participate in the study.

Students were also selected based on their academic performance, age, and sex. Moreover, to create a suitable atmosphere and relation the selection was based on the willingness of the individual to participate in the study. On the other hand, interviews with school principals were conducted to access their perspectives towards educational radio lessons and understand their effort in providing support and guidance for teachers. In this study, the process of interviewing was conducted through taking intensive field notes. Each informant was given a pseudonym name for ethical reasons and to protect confidentiality. All the interviews were conducted in Amharic the official language of Ethiopia for ease of communication. All the relevant interviews were translated into English for analysis.

3.6.2 Observation

As it indicated by Merriam (1988:102), "observation is one of a major means of collecting data in case study research. It gives the first hand account of the situation under study and when combined with interviewing and document analysis allows for a holistic interpretation of the phenomena being studied. In observation which is more appropriate in qualitative study, the researcher's sense organs are the key instruments to collect data (Wamahiu and Karugu, 1995). According to Gall, et.al(1996:57), when observation is employed in qualitative research it always consists of detailed description of people's

activity, actions and the full range of interpretational and organizational process which are part of observable human experience.

Observations of educational radio broadcasting class were conducted in the classroom of the teachers who were participants in the process of interviewing. Great efforts were made to conduct a critical observation on students' seating arrangements and the comfortability of the classes for radio listening; students' participation and interest to learn from radio and utilization of illustrative materials by the classroom teachers during the radio lessons (see Appendix 3). The student researcher also attempted to observe the utilization process of all subjects that have a transmission programs from the educational radio station. Thus, observation sessions were conducted for six periods.

3.6.3 Documentary Sources

Documents are important sources of data for qualitative research. Documents in this study were used both as major instruments of data collection and as supplementary evidences with the interview responses and classroom observation notes. Thus, in this study I employed analysis of documents such as teachers' guides and timetables.

Validity and Reliability

In an attempt to group variations in human experience one can not rely on only a single method. As a result this study applies different interconnected methods as all of the data collection techniques described above have their own strengths and weaknesses. One way to emphasize the strength and minimize the weakness is the use of more than one method in the study (Borgan and Bilken, 1992:9). By selecting complementary methods researcher can cover the weakness of one method with the strength of another. Therefore, good research will often include multiple methods of data collection techniques known as

triangulation. Triangulation of data permits the verification of qualitative data. Triangulation in this study was intended as one way of securing validity. This is the use of a variety of methods, sources of data and varieties of theories in order to check the findings and supplement results (Gall, et al, 1996:67). It involves checking information that has been collected from different sources or methods for consistency of evidences across sources of data.

According to Miles and Huberman (1994), triangulation is supposed to support a finding by showing that independent measures agree with it or at least they do not contradict with it. I have tried to secure the validity through data, theory, and methodological triangulation.

3.7 Data Analysis Strategy

Qualitative studies are involved in word arguments than numerical explanation. Case study focuses mainly on describing, recording, analyzing and interpreting the conditions that exist (Borgan and Bilken, 1992).

In this research the data, which collected through interview, observation and document were studied carefully and repeatedly. This was done by referring to the notebook and other related materials. After the collected issues were studied, they were categorized in line with their similarities. This categorizing or grouping of issues served to put related issues together in a series of chapters in the analysis. By doing so, the data was presented, interpreted and concluded in the following chapters.

CHAPTER FOUR

DISCUSSIONS AND FINDINGS

The main purpose of this study was to evaluate the effectiveness of educational radio programs in primary schools in Addis Ababa. To treat the issue properly and thoroughly qualitative case study is applied. The case study has been conducted in three primary schools of Addis Ababa, which are labeled by pseudonym as PS1, PS2 and PS3. Data are collected using observation, interview and documents. Extended and in-depth interviews were conducted with each of key participant. Each participant is given a human pseudonym for ethical reasons and to protect confidentiality. Observation and documents are used both as major and supplementary sources for triangulation.

4.1 Perception of Teachers and School Principals in the Utilization of Educational Radio Program

Perception refers 'to the way in which man senses and becomes aware of his/her environment (Sampath, 1984: 17). Perception plays a great role to facilitate or hinder individual activity. This is because according to Morgan et al (1986: 580) and Western (1996: 155) perception of an individual refers to the way any event in the world and the world itself looks, sounds, feels, tastes and smells to him/her. Therefore, it seems apparent that teachers and school principals perception in the utilization of educational radio programs has an important role in determining their engagement in utilizing the radio programs either positively or negatively.

In the following section, the perspective of teachers and school principals and my own interpretation will be presented.

regular user of the radio lesson since it plays an important role by enriching instruction through adding newly found concepts. Concerning this, he said:

Topics, which are not sufficiently and explicitly presented in textbooks, can be enriched well through radio. This is especially helpful for teacher as well as students where there is no additional reference other than the textbook. Moreover, radio brings fresh knowledge since print media consume time. In short, it allows scarce learning resources to be made available to all schools. This is my perception towards educational radio programs (Tadiwos Ayalew 21/03/2007).

Another teacher from PS2 is Muluwork Tadesse who is teaching English, perceives educational radio as a medium, which creates a suitable teaching-learning atmosphere in which only few teachers succeed in creating it. She expresses this saying:

Radio could provide drama, songs, dialogue and a variety of presentation that only few teachers could create. In addition, it stimulates the interest of students by setting the stage for discussion or debate, presenting opinion of outside experts from remote sources (Muluwork Tadesse 21/03/2007).

Education is not limited to the classroom teaching only. It has been broad-based and multi dimensional. There is no frontier in learning and teachers are not the only sources of learning (Mohanty, 1984: 8-9). Students could receive knowledge by inviting different personalities, though; it is difficult due to various reasons. Thus, under this condition as Sisay Zeleke a Social Studies teacher from PS3; radio teacher could invite and present important personalities for students. He discusses this as follows:

Educational radio programs may use resourceful people and real materials of life to facilitate learning that it beyond the capacity of the classroom teacher. For instance, to explain the governmental process it becomes possible on radio to interview public officials and figures, which actually seems difficult on face-to-face basis. (Sisay Zeleke 24/03/2007).

From Sisay's points of view, it is possible to say that radio lessons served as forums for students to know more about governmental day-to-day activities (processes) from the right persons through interviews by the radio teachers. Thus, students could receive the desired information without leaving their classroom or without any invitation of other external bodies. Furthermore, educational radio programs enable the learning and maximize the degree of realism, which is unaffordable for the actual classroom teachers to do so.

Besides, Amelework Gessesse an Environmental Science teacher from PS3 is another informant for this study. She has given similar accounts with Demeke, Alemayehu, Muluwork, Tadiwos and Sisay about the use of educational radio programs. However, they are not sure whether their colleagues have positive perception or not about educational radio programs. About this Amelework says:

Some teachers are not the users of educational radio programs at all. The reason for this as they usually mention that it is radio lesson is filled with repetition; the teacher can make better instruction than the radio teacher can and so it is simply time killing. Thus, they engage in dictating old lecture notes to their students. Their commitment might be eroded because they are highly attached to the lecture method for long years (Amelework Gessesse 16/04/2007).

According to the information obtained from informants in the case of the three primary schools of Addis Ababa, teachers have positive perception and understanding of the advantage of educational radio programs. Therefore, although there are obstacles in the process of utilization, they try to utilize educational radio programs regularly.

In addition to teachers, the student researcher has made a thorough discussion with three school principals, from PS1, PS2 and PS3. Principals, as the head of

the school should have full information and good perception about the effectiveness of educational radio programs. They have to monitor the day-to-day works of the programs like other school administrative duties. Furthermore, principals should give unreserved support and motivation for teachers to utilize the broadcasting radio programs according to the schedule without interruption. They can accomplish these activities if they have positive perception towards the radio programs. To know their perception this writer has discussed with Girma Alemu, the principal of PS1. He said:

As to me, radio is one of the widely used media that plays a significant role in promoting quality and relevant education to the formal and non-formal educational systems. It could present facts that the classroom teacher may fail to demonstrate and explain in the class. Radio is an aid to the classroom teacher. However, it does not mean it is a substitute for him/her. Nevertheless, radio should be an aid for classroom teachers if it is properly used /utilized/ in the classrooms. To utilize the programs effectively positive perception and awareness is essential. I have positive perception about the educational radio programs. I have given unlimited assistance and motivation to the teachers. Thus, in our school, the majority of the teachers make efforts to utilize the programs regularly according to the schedule of the school (Girma Alemu, 23/02/2007).

In the same case, the student researcher has interviewed Yacob Woldeyes who is a principal of PS3. Yacob has perceived educational radio programs as an input to deliver quality education especially during the time when schools face shortage of training and qualified teachers. Concerning this he said:

In addition to being, as an aid to classroom teachers educational radio programs play an important role as an input to solve the shortage of qualified teachers until the schools fulfill the preconditions of utilization. Thus, I have perceived educational radio programs as a means in the educational sector that help the system deliver relevant and expanded education to the majority school children (Yacob Woldeyes, 26/03/2001).

According to the information obtained from the interviewed teachers and school principals, it has been found that they have positive perception in the utilization process of educational radio broadcasts. Based on this teachers regularly utilize educational radio lessons as an aid and supplement of their subject areas. Likewise, principals motivate and help teachers use the programs according to the school timetable.

4.2 Teachers' Training in the Utilization of Educational Radio Program

Training is an essential means to change the perception of teachers and improve their skills. Teachers use new techniques when they are convinced of their worth (Sampath, 1984: 25). According to Hancock, (1976: 154) training may be designed for higher experts and producers of educational radio programs. Nevertheless, the best program produced by these people end up in the air if teachers, fail to utilize them. Training of teachers thus, becomes important.

Discussion of informants' interview concerning teachers training in the utilization of educational lessons is presented as follows.

All the informants (teachers and school principals) agreed on the need of training to utilize the broadcasting lessons effectively and regularly. However, still now due to lack of training most teachers are ignorant of how to utilize the radio lessons properly. Debebe Abera, for example a principal of PS2, explained his experience about teachers training on the utilization of educational radio lessons as saying:

Teachers' training on radio lesson utilization is one of the tasks of educational Bureaus. However, the vast majority of teachers are untrained. Thus, it is not hard to imagine how far the lack of training of teachers in the area can negatively affect (influence) the proper utilization of the

broadcasts. This is because, teachers' efforts to make proper use of radio programs is partly dependent upon the skills and understanding they have how to use the medium. This implies that is unless teachers know the reason to use the radio instruction and the way to co-teach with the medium, proper implementation of the radio lesson is unlikely to attain. Hence, lack of training on radio utilization is one of the obstacles, which is accountable for the improper utilization of radio instruction (Debebe Abera 02/04/2007).

As Debebe states it, teachers utilize educational radio programs traditionally, i.e. without proper training. Thus, in the process of utilization, teachers face various difficulties. According to Tadiwos Ayalew, a teacher from PS2, most teachers have not acquired any training about the utilization of educational radio programs in teachers' training institutions or via workshops. Due to this, they utilize educational radio programs without proper skills. He explained the condition as follows:

Most teachers who teach in primary schools have not acquired skills that enable them to utilize the educational radio lessons properly. Due to this, some teachers have reservation to utilize radio lessons. Although most teachers attempt to utilize the lessons, they utilize them inconsistently. Sometimes the programs are interrupting due to frequency errors in the radio sets. During this time, the teachers immediately switch off the radio set and start their own lecture rather than arranging the correct frequency. (Tadiwos Ayalew (10/04/2007).

In order to utilize radio programs efficiently what Welsh (1973: 125) argued that trained teachers must be used is unquestionable. Teachers training institutions have been producing fresh many graduates every year. Nevertheless, most of the would-be-teacher leaves out the institutions without vital skills and knowledge about the utilization of educational radio programs. Yacob Woldeyes, a principal from PS1 explained this as follows:

Primary school teachers the ones graduated recently flood out every year without any idea of how to make the best use of the radio lessons that they must use. This contributes to the insufficient use of radio program. Such cases lead to failure in their performance. Thus, failures in performance of educational radio at work are perceived as a training problem (Amelework Gessesse, 16/04/2007).

On the other hand, lack of proper and sufficient training makes the teachers be afraid of taking any responsibility in performing something. In primary schools, teachers are reluctant to the utilization of education radio program. Sisay Zeleke, a teacher from PS3, explained the reasons in the following way:

Teachers are hesitant to acquire a new responsibility, which they consider that is not their task or they have not been trained in colleges. Lack of training then calls for teachers' resistance to utilize the technology. If radio is to play an effective part in the educational system, Teachers' Training Institution must include contents that develop utilization skills of educational media (Sisay Zeleke, 16/04/2007).

From the above descriptions, teachers and principals agreed on the need of training in the utilization of education radio programs. However, as it is stated by these informants' teachers lack training. Training teachers and school principals frequently asks the concerned Educational Bureaus to organize training sessions, though these bodies remained silent. Thus, teachers suffered difficulties in the utilization of educational radio lessons due to lack of training.

4.3 Availability of Support Materials of the Educational Radio Program

The support materials that were considered in this study are radio teachers' guides, radio sets and illustrative materials.

4.3.1 Educational Radio Teachers' Guides

According to Hancock (1977), the availability of radio teachers' guides on the hands of teachers is crucial for the effective utilization of the programs. This is because they allow individual teachers to plan their lesson. Indeed, it is from the teachers' guides that the classroom teachers know what topic to be transmitted, what illustrative materials to be prepared in advance and what activities to be performed before, during and after the broadcasts. Without the teachers' guides at hand, effective utilization is unlikely to be achieved (Wedell, 1986: 163).

Although radio teachers' guides are key inputs in the effective utilization of educational radio programs, primary schools of Addis Ababa currently faced difficulties due to the absence of ample teachers' guides. All the teacher informants and school principals were seriously disappointed as their plans, activities and motivations are greatly influenced by the lack of radio teachers' guides. The interview conducted with teachers reflects their disappointment on the approach they expected to follow.

Educational radio teachers' guides are the key inputs in the utilization of radio lessons. However, the state of radio teachers' guides is disappointing. This is due to the shortage of these materials. The shortage of radio teachers' guides in turn inhibits teachers to utilize the programs in the right way. The school community does not easily solve the problem getting of teachers' guides, since this is beyond its capacity. Therefore, the only responsible for this problem is might be the Educational Mass Media Unit of the Addis Ababa Education Bureau. (Amelework Gessesse 27/03/2007).

Another teacher emphasized the lack of strong connection or relation between school principals and the Mass Media Unit of the Education Bureau as follows:

Because of loose ties between school principals and the educational Mass Media Unit of Addis Ababa Educational Bureau, we are always in trouble due to the inavailability of radio teachers' guides. Since there are no radio teachers' guides, we sometimes work half-heartedly. Because, we face difficulties to know which topic would be transmitted and what kind of illustrative materials are to be used in that specific week (Demeke Abebe 3/04/2007).

School principals have similar comments with Demeke Abebe concerning the loose ties between school principals and the educational Mass Media Unit of Addis Ababa Education Bureau. Among school principals Girma Alemu, from PS1, for instance, confirm the situation in the following way:

Actually, the absence of radio teachers' guides is a serious problem that highly affects the activities of the teachers to utilize radio programs in the right way. The source of the problem is that the Mass Media Unit of the Addis Ababa Education Bureau is unable to produce and distribute the guides in the right time. As the school administrators, we always reported the case to the Unit and the Sub City Education Department. However, they are reluctant to giving response and solution to the problem, i.e. the absence of radio teachers' guides. This indicates that the educational Bureau officials have the least attention towards educational radio programs. They have given priority to other administrative issues than the radio lessons (Girma Alemu 22/03/2007).

It is not exaggeration to conclude from the interview conducted with teachers and school principals that the concerned educational officials of the Bureau and Sub-Cities educational departments partially ignored the educational radio programs. Because they are very slow and reluctant to distribute essential materials for the success of the programs especially radio teachers' guides. Because of their reluctance, the teachers in the schools face difficulties to prepare themselves and materials in advance. Because, without teachers' guides they do not know which topic to be transmitted in that specific week and which material is available for that instruction.

4.3.2 Radio Sets

Radio sets are materials used to receive the broadcasting lessons in the classroom or elsewhere. To utilize the broadcasting lessons properly, a reliable radio receiver (set) is essential. This should be sufficiently powerful for every member of the class to hear it without constraints. It is hardly necessary to describe how disastrous it can be for the success of the radio lesson if the school fails to provide reliable radio sets. Thus, the radio sets are a means of sharing educational broadcasts over the whole area of educational responsibility. Besides, the availability of reliable radio sets, the state of maintenance service for these radios is one issue in the success of the utilization process. Practically, it is impossible for every nation to provide new radio sets at every time. Therefore, schools should use the radio sets for a long time. To use the sets for a long time maintenance service is essential. Thus, the schools should take into account the maintenance service when they think of the utilization of radio programs.

As radio sets are essential for the effective utilization of radio lessons where as the shortage and lack of maintenance service affects this process. The research attempted to assess the state of availability of radio sets and maintenance services. As explained in the literature part, radio sets are the primary materials in the utilization process. Thus, interviews were conducted with teachers and principals about the availability and other related issues of radio sets.

One of the principals from PS3 expresses his feeling through interview that his school suffers from difficulties due to the inavailability of reliable radio sets and budget constraints for maintenance service.

We have several radio sets our in school. Only few radio sets are serviceable. Most of the radio sets are outdated as they are old aged. In addition, these radio sets have damages due to lack of proper maintenance service. The problem of maintenance service was aggravated due to budget constraints. The school's budget is very small and it allocated for other administrative and academic works. This condition seriously affects the normal running of the educational radio utilization process in our school (Yacob Woldeyes, 24/04/2007).

Principals in all schools noted that schools' radio sets suffer from lack of proper maintenance services. They announced the problem to the concerned bodies formally and informally. Nevertheless, no one is willing to hear their voices. "Not to give up"; all principals said that "we are still questioning when ever there is a chance until we get some resolution for the problem that bound us."

4.3.3 Illustrative Materials for the Radio Lessons

The availability and employment of illustrative materials like globes, maps, charts, diagrams, concrete materials etc during radio instruction have a paramount role in facilitating students' learning. They greatly enhance the liveliness and likelihood (Welesh, 1973: 56). In radio lessons, learning different concepts can become real, adequate and complete with the support of various illustrative and instructional materials. However, as all informant students commented on classroom teachers come to class everyday without illustrative materials, including the periods of the radio lessons. For instance, Gizachew Aklilu a student from PS1 expresses his grievance as follows:

In most cases, teachers do not use illustrative materials in the classroom during the radio lessons. They use these materials only during the evaluation periods or when supervisors come to their classes. Even some of the illustrative materials used are not clearly visible to those who sit at the back (Gizachew Aklilu 16/04/2007).

During the observation, I found no teacher coming to class using illustrative materials. Illustrative materials are useful instruments in radio lessons, which communicate messages through the sense of sound only. All informant teachers do not deny their failure in using illustrative materials, but they said 'we do not have much time to prepare illustrative materials and teaching aids because of higher load per a day'. However, school principals do not agree with teachers concerning lack of suitable time to prepare illustrative materials and teaching aids for radio lessons and even for the normal teaching learning process. Regarding this Girma Alemu, the principal of PS1 said:

The problem is not only shortage of time but also the interest and initiations of teachers in using illustrative materials even that are available in the pedagogical center of the school. In our pedagogical center, there are ample teaching aids for each subject. However, most teachers remember the teaching aids during the school and department evaluation periods. It is the day-to-day duties of teachers to use teaching aids. Currently, our school ratified the new result oriented evaluative strategy. In this strategy, teachers are required to use and produced teaching aids regularly. Therefore, I hope teachers will improve their habit of using teaching aids to get better results (Girma Alemu 25/04/2007).

To assure the explanation given by Girma Alemu I observed the pedagogical centers of all schools. In these centers, there are many teaching aids and illustrative materials that may serve as teaching aids for radio lessons. However, most of the teaching aids are very old and as an informant student, Gizachew said, are not clearly visible.

4.4 Major Constraints that Affect the Effectiveness of Educational Radio Programs in Primary School

As it is stated in the literature part, educational radio programs have many advantages to the teaching-learning process. However, the application of radio teaching is not free of constraints. The effectiveness of radio lessons' utilization

is influenced by a multitude of factors. The factors, which are considered as major and most relevant to the scope of this study, are treated briefly here after.

4.4.1 Environmental Factors

Environment is a broad concept that almost affects (influences) all activities. Jamison and McAnany (1978:97) identify external and internal constraints in terms of school environment radio utilization process. It is true that these factors have directly and indirectly influences upon the effective utilization of educational radio programs. Nevertheless, the emphasis of this study is on factors that arise in the school environment which include the location and the size of the classroom for listening radio programs, seating arrangement and comfortability of the classroom.

Now a days, many people forward different comments on the status quo of primary and secondary schools of Addis Ababa. One of these comments which different peoples widely discuss is the location of schools. As it is widely explained by government officials, parents, students and teachers on different mass media and meetings that several primary and secondary schools of the capital are located in a place where different disturbing agents exist. Some schools are located near heavy traffic areas, market places, factories etc. The noises, which come from these places, may affect the teaching-learning process in general and the radio lessons in particular. Educational radio transmission, because of its nature, requires absolute silence since it does not entertain any interference and give a room to the teacher to repeat lessons once they pass. To have effective utilization of the radio lessons, therefore, if possible the school environment should be free of any disturbing agents.

The findings of this section are mainly drawn from constant observation of the informant teachers' classrooms supplemented by discussions with them.

From the observation, it is clear that in all the sample schools the status quo is almost similar. All schools are located in a place where there is no heavy traffic area, markets and other disturbing noises. Thus, these three primary schools are found in place where that is almost free from disturbing effects. Similarly, I have observed seating arrangements and the size of six classrooms (the classes of the informant teachers). Regarding students seating arrangements, the condition is not similar with the seating arrangement stated Chapter Two. Literatures explain that during the radio lesson students should be sitting in a semi-circular arrangement. This is to enable students to listen to radio lessons being very near to the radio sets (Hancock, 1976:187). Students were sitting in three rows, not in semi-circular seating arrangement that is suitable for listening radio lessons. Concerning the size of the classrooms, as I observed, each classroom cannot accommodate students more than 60 students. Fortunately, since 2006/07 academic year, the number of students in each classroom is not more than 60. This is due to the construction of additional buildings in each school premises. To support (supplement) the observation on the classroom teachers' account, I made discussions with teachers on the influence of physical environment on the utilization of educational radio programs. Concerning this, Demeke Abebe, a teacher from PS1 said:

In Addis Ababa, several schools' teaching learning process is affected by environmental factors, such as disturbing noises. But our school is fortunately free from disturbances that come because of environmental obstacles. Currently, due to the construction of additional classrooms the number of students in each class /section/ is existing in normal condition i.e. on average sixty. This situation created a conducive atmosphere for the teaching learning process, especially for students to listen to radio lessons attentively (Demeke Abebe 23/04/2007).

Similarly, Muluwork Tadesse, from PS2 explained the conditions as follows:

Our school is one of the primary schools of Addis Ababa, which is free of noises that come from external environment. Thus, we are teaching our students relatively without external disturbing external agents such as noises. Besides, as my experience the utilization of educational radio is not affected by external noises in our premises. But I do not mean that there are no other problems that influence radio lessons (Muluwork Tadesse 18/04/2007).

The situation in PS3 is similar with PS1 and PS2, as I understood it from the discussions with teacher informants of that school namely Amelework Gessesse and Sisay Zeleke. On the other hand, teacher informants of the three primary schools have similar exposition regarding the students seating arrangement during radio lessons. For instance, Sisay Zeleke from PS3 expresses his account as follows:

During the radio lessons, there is no special seating arrangement. Students are sitting as usual. We cannot arrange students sitting differently from the usual arrangement; that is, sitting in straight rows. This is because students' benches are difficult to move and consume time to arrange (Sisay Zeleke 17/04/2007).

From the above explanation, it is possible to conclude that environmental factors have minimal effects in the utilization process of radio programs in the case of the three schools. However, students seating arrangement is still the traditional one even during the radio lessons. Literatures explain that during radio transmission, students should be sitting in a semi-circular arrangement. This is to enable students to listen to radio lessons being very near to the radio sets (Hancock, 1976:187).

4.4.2 Timetable

Many human activities are bounded in time. The influence of time may be relatively less for activities involving only an individual. Its effect becomes severe when a number of activities are involved at different times and places. The same holds true to school radio broadcasts. The schools have their own timetable (program) about when to start and end class. These arrangements are based on many other factors such as tea breaks and lunchtime. Nevertheless, the educational radio transmission does not consider these factors for each school. What the school can do is adjust follow their timetable according to the schedule of the radio broadcast, but not the reverse. The schools have benefited from radio lessons a lot when they adjust their timetable accordingly.

However, in many schools educational radio lessons are affected by the mismatch /clash/ of schools' and radio transmission stations' timetables (Educational Media Agency, 1998: 86).

Both teacher and school principal informants generally confirm the influence of timetable in their schools is insignificant. The school principals adjust the timetables by giving priority to radio lessons. However, both teachers and principals have complaints on lack of program repetition from radio stations (transmission stations). One of the teachers, from PS1, expresses his comment through interview as follows:

In the case of PS1, mismatch between timetable of the school and radio station is not considered as an influence that affects the utilization of radio lessons effectively. From the very beginning, the school's administration arranges the periods by taking into consideration radio lessons. Nevertheless, the serious challenge in this regard is lack of more repetitions of radio lessons from transmission station. The problem occurred in the second week of October when educational radio lessons began to transmit. Except English and Social Studies radio lessons which have four and two

repetition chances respectively, other subject matters whose lessons on radio are repeated once in a week. This condition together with few radio sets creates trouble in the utilization process (Alemayehu Mekonnen, 24/03/2007).

On the other hand, sometimes due to various reasons, schools (some sections) might lose their radio lessons for a week. This condition occurs frequently because of public and national holidays as well as meetings of the staff. Regarding this, Tadiwos Ayalew from PS2 said:

It is obvious that schools and other institutions are closed during holidays and staff meetings occasionally. The problem here occurs with the absence of more radio lessons', repetition in case of Addis Ababa. Except English and Social Studies, which have relatively more repetition a week, other subjects have only one-repeated radio lessons a week. Because of many sections at each grade level and shortage of radio sets, one section receives a radio lessons only one period a week. Thus, if the school is closed due to staff meeting or holyday on that day, students and teachers totally miss the lesson of that specific week (Tadiwos Ayalew, 21/03/2007).

All the school principals agreed with the above teachers' comments. In their schools as they said as much as possible they try their best to avoid clashes between the radio and the school timetables. They arrange the programs based on the schedule that they receive from the Educational Media Agency. However, as all teachers emphasized, the problem arises from lack of repetition in each subject matter from the radio transmission centers. According to the account of Yacob Woldeyes, the principal of PS3, the problem comes from absence of radio transmission station for the schools of Addis Ababa after socio-political and economic structural decentralization of the country.

Primary schools' radio lessons are produced by each regional state. Addis Ababa Education Bureau produces radio lessons for primary schools, which are found in the capital. However, the Bureau has not its own radio transmission station for educational purposes. The Bureau transmitted radio lessons through Legedadi radio station, which is now owned by the Oromia Education Bureau. The station has given a service not only for the primary schools of Addis Ababa, but also for three regional states namely Oromia, Amhara and SNNPR. Thus, the transmission studio delivers many lessons, which are produced by four regional states. In turn, this results from shortage of time for extra repetition. Thus, all subjects except English lessons, which are produced by the central Educational Media Agency, have only one repetition chances a week. This condition together with few radio sets in schools, create a complicated problem in the utilization processes. In my opinion, the only solution to solve the problem of repetition is recording the live transmissions. However, at the present conditions the schools can not affords it because of budget constraints (Yacob Woldeyes, 19/04/2007).

As I observed from the timetable that was sent from the Educational Mass Media Unit of Addis Ababa Education Bureau, except English and Social Studies radio lessons (which have four and two repeated chances respectively in a week) all the programs (Amharic, Environmental Science and Science) have only once repetition chances a week (see Appendix 4 and the timetable). According to the school principals account English has given more repetition chance rather than other subjects, since English radio lessons helped students to develop language skills such as speaking and listening. In addition, as it is observed in the timetable of the Educational Mass Media Unit of AAEB, the radio programs are arranged by taking into account the newly full day schools teaching and learning program (from 8:15 AM to 3:35 PM) that was introduced since 2006/07 Academic Year.

4.4.3 Evaluation of Radio Lessons

With a view of bringing about improvement in the educational broadcast, it is imperative to evaluate them and get feedback from users. Evaluation of educational radio is felt essential for providing adequate data and feedback in order to bring about improvements in the quality of programs to ensure better utilization. The effectiveness of educational broadcasting largely depends on constant monitoring and continuous evaluation (Mohanty, 1984: 15 and 133). On the contrary, lack of constant monitoring and continuous evaluation largely affects the normal and effective utilization of the broadcasting lessons (Bishop, 1995: 71). Based on the views of these writers and the nature of the information gathered from the informants, the study has presented the discussion about evaluation of educational radio programs as follows. All informant teachers unanimously explained the absence of evaluation of the success or failure of educational radio programs. One of the teachers from PS1, Demeke Abebe, expresses his account as follows:

Since the last few years, in our school, there has been a tradition of evaluating the successes or failures of various activities, which have relevance to teaching-learning process. However, in the case of evaluating educational radio programs the opposite is true. As part of the teaching-learning process, schools should conduct evaluation on the positive and negative aspects of the programs. However, in many schools the issue of evaluating educational radio programs is highly neglected. This is due to the more attention school administrators' pay for bureaucratic works than the academic ones (Demeke Abebe 20/03/2007).

Similarly, Muluwork Tadesse from PS2 argued that school principals do not usually worry about developments outside their offices after they assign teachers and prepare timetables. More often, they are engaged in communicating with the officials of the Sub-City and *Kebele* Education Departments. In addition, she said:

Currently school principals' attention towards academic issues is very small. I think this is due to the load; they have to accomplish bureaucratic works. Most of the time they are engaged in activities that create awareness concerned the newly found result-oriented evaluation strategy among teachers. Thus, they do not have time to follow the effectiveness of educational radio programs through helping teachers evaluate the state of the lessons. As a result, schools and teachers do not evaluate if educational radio programs are successful in enriching the curricula (Muluwork Tadesse 18/04/2007).

In the mean time, school principals do not deny the inability of schools to conduct evaluation on the successes or failures of the broadcasting radio lessons. However, they do not agree with teachers on the reason. The principals argued that the problem is related to teachers' initiation in conducting evaluations on the utilization process of educational radio lesson. Girma Alemu, the principal of PS1, gave his account as follows:

It is a common practice by some teachers to blame the school principals in any problems. Evaluating educational radio lessons is the duty of teachers. They could conduct evaluation without waiting for the school administrators, if they have the wish. The users of educational radio programs are mainly classroom teachers and students not school principals. However, if they ask us for any support we are ready to assist them in their activities to perform the task. (Girma Alemu 20/04/2007).

The principals of PS2 and PS3, Debebe Abera and Yacob Woldeyes, respectively agreed on the above explanation of Girma Alemu's. They confirm on the absence of educational radio program evaluation in their schools. In addition to Girma's points, they emphasizing on the lack of experience in conducting evaluation on the works of radio lessons.

Schools have utilized radio lessons for a long period. However, the school community does not worry about their achievements. Thus, schools do not conduct any evaluation to assess the successes or failures of radio lessons. In short schools do not develop an experience that enables them to conduct evaluation on the works of educational radio lessons (Debebe Abera, 19/04/2007) and Yacob Woldeyes, 20/04/2007).

It was clear from the discussion with teachers and principals that there is no evaluation on how much the radio lessons are effectively utilized or not. Nevertheless, teachers and principals have different views on the reason. Teachers accused the principals of neglecting the radio lessons by giving priority and more attention to other administrative works. However, principals do not accept teachers' complaints. In return, they accused teachers of having lack of initiation to do something including radio lessons' evaluation without waiting for instructions and blessing from the school principals

4.4.4 The Interest of Students to Learn from Radio

Students are the major beneficiaries and actors in teaching-learning process. Educational radio programs have been transmitted mainly to help students acquire additional knowledge. Thus, in order to acquire more knowledge, students should have keen interest to learn not only from the classroom teachers but also from educational media, such as radio. Without students' interest to learn more from educational technologies, their application and transmission only remains futile. If students have a true interest toward educational media, they can be active participants and good listeners. However, they remain silent and hesitant, if they are less interested and so develop hatred towards the medium. Students should be active participants in teaching-learning process, even during radio lessons. The source of participation is students' internal interest and motives to learn. Thus, interest is a key to achieve higher result in any activities including learning.

It is not exaggeration to conclude based on the interview and observation that most students in the three schools have already developed higher interest to learn from radio lessons. The account of both students and teachers, which design after this, is summarized as follows:

Most students are very eager to learn and acquire knowledge through educational radio programs. This is due to the good presentation of radio lessons, which are attractive and student centered unlike the classroom teachers', which are mostly dominated by teachers talk only. When classroom teachers teach without the help of radio they may not give a chance for students to participate, since the teacher dominates the implementation of all classroom activities only. All activities are implemented by the classroom teachers only (Sara Abraham (PS1) 20/04/2007).

Another student from PS2, Mesay Solomon held similar view with Sara Abraham about radio lessons. He said that most students like the radio lessons unlike the traditional teaching method, which is teacher- centered, where as the radio lessons are most participatory.

The presentations of the radio lessons are participatory. They encourage students to communicate to each other. In addition, the programs create conducive atmosphere in the classrooms, which enable students to discuss different views and concepts freely. Thus, most students are more interested and eager to participate actively during radio lessons than the normal classes (Mesay Solomon 20/04/2007).

Above all, one student participant, Genet Eshetu, from PS2, was emphasizing the importance of educational radio programs especially English radio lessons in developing the communicative skills of the students.

I think most students might be the beneficiaries in radio lessons, particularly English lessons, if they follow them properly. My reason for this argument is that the way of the presentation is mostly communicative. It urges students to speak and listen rather than simply observe the activities that are taking place in the classroom. Students could not develop the language skills unless they communicate to each other in and outside the classrooms. In this regard, educational radio English lessons play a significant role (Genet Eshetu 23/04/2007).

In addition, Yared Melaku and Kidist Regassa students from PS3 added some points that urged him to have interest towards the educational radio programs.

We are very eager to learn more from modern technologies, especially from educational radio. This is mainly because of their way of presentation, which is short and precise. Furthermore, radio lessons are selective. They give much attention only to those topics, which are better, if they have supplements from media (Yared Melaku and Kidist Regassa 23/04/2007).

In addition to student informants, teachers also assured that most students in their classes are more interested to learn from radio lessons. During the radio lessons, students are more active participants than the normal periods. Amelework Gessesse, a teacher from PS3, explained her accounts as follows:

Most students in my classes eagerly wait for radio programs rather than teachers' lecture. Radio teachers prepare questions and ask students politely to answer and discuss upon points with their friends and teacher. This situation creates an atmosphere of competition among students. This is an important experience to develop confidence. (Amelework Gessesse (24/04/2007).

Although most students are very eager and interested to learn through radio transmission, very few students in each classroom are careless for anything. These students usually sit at the backbenches. As I observed in the classrooms of the informant teachers from the three sample schools, few students were

non-participants during the radio lessons. Especially during the actual radio transmission, the majority of these non-participant students were observed taking notes from the blackboard which the classroom teacher had written. Moreover, some of them were sleeping and others were copying notes or doing assignments of other subjects, laughing and talking to each other with low voices.

CHAPTER FIVE

SUMMARY AND IMPLICATIONS

5.1 Summary

Educational technologies played an important role in providing quality and relevant education to all sections of the society simultaneously. To this end, the new educational and Training Policy of Ethiopia (1994:14) gives much emphasis in applying educational technologies to support the teaching-learning process. Radio is one of the technologies, which is widely used to support the classroom learning globally. However, it only supplements (support) the classroom learning when it is utilized effectively at the receiving end. On the other hand, effective utilization of educational radio programs might be dependent on the perception of teachers regarding the programs, teachers' in-service trainings and orientation about the utilization, availability of supporting materials, location of the school, interest of students and others.

In Ethiopia educational radio programs began to function in the 1960s'. Thus, the country has a rich experience, which span over three decades, in using radio to support primary education in particular.

In the past two decades, various individuals and institutions attempted to conduct research in the implementation and utilization of the educational radio programs at the school level. Although available researches outputs have instantly urged attention to be paid for the utilization of educational radio programs, the use of them still has not been strong in Ethiopia. Most of research findings portray that the utilization of educational radio programs is more or less found inefficient to enrich the school curricula due to various problems that encountered in the utilization process. This study as a result, is intended to contribute its part to the improvement of the effectiveness of

utilization of educational radio lessons in primary schools of Ethiopia in general and Addis Ababa's in particular.

The study employed a qualitative method of educational research. Particularly a case study design was used. The present investigation was carried out in four phases. The first phase included review of literatures and preparation of a proposal. In the second phase, a general preliminary assessment through interviewing, talking and observing had conducted. By incorporating the feedbacks from the second phase in the third phase, the main data collection process was accomplished. In the fourth phase the collected data were studied, categorized, organized, interpreted and reported. Interviews, observations and documents were utilized to collect relevant data to this study. Three sample schools were taken from Addis Ababa as research settings.

In the analysis, the study has understood that teacher have positive perception towards the educational radio lessons. All the informants (teachers and school principals) asserted that educational radio transmission has a significant role in supplementing and enriching the classroom learning and the school curricula. In spite of some occasions, teachers made a great effort to utilize the program regularly. However, very few teachers do not utilize the programs as they have regarded it as unnecessary repetition and time killing. On the other hand, school principals gave assistance and motivation for teachers to utilize the radio lessons. This is again due to the positive perception they have developed towards the medium.

Nevertheless, their way of utilization is merely traditional or haphazard. This is due to absence of training (in service, workshop and orientation) about the utilization skills of the radio lessons. There is no any attempt by the concerned educational officials to organize in-service training, workshops or orientation sessions for the primary school teachers at least to give some clues about the utilization process. Due to lack of training on the utilization process,

occasionally teachers faced difficulties when some technical and other problems occurred. As teachers do not have training about the utilization, they might resist applying the technology in the teaching-learning process as supplementary instructional aid.

In order to utilize educational radio programs effectively at the receiving end, support materials like radio teachers' guides, radio sets and illustrative materials should be available. However, there is a big difference between the literatures and the objective reality. In actual cases, schools suffered a lot from lack of relevant support materials. Specially, the shortage of radio teachers' guides is immense. It is very difficult for teachers to prepare themselves and the necessary illustrative materials in advance without the radio teachers' guide. On the other hand, schools also have a problem related to radio sets. Shortage of radio sets may arise when the number of sections in each grade level increases as a result of high enrollment, when the already existing radio sets are broken but not repaired and when distribution of radio sets to schools by the Educational Bureau decrease or stop.

Even at the normal condition, educational radio programs are not free from impending factors. One of the impending factors, which are treated in this study, is an environmental factor. Some of the factors that are related with environment in radio lesson utilization are location of the school, the size of classrooms and students seating arrangements. Fortunately, the three selected sample schools are located in places far from disturbing agents. In addition to these due to the construction of additional classrooms in the last years the classroom size is improve, each class does not accommodate more than 60 students. However, still there is no improvement of students seating arrangement during radio lesson. They sit in straight rows as usual during the radio broadcasts.

Furthermore, timetable clashes (mismatch) are one of the impending factors for the effective utilization of the educational radio lessons. However, in the case of the three primary schools in Addis Ababa, the influence of timetable in affecting the effective utilization of educational radio programs is insignificant. This is due to school principals giving priority to the radio lessons when they are arranging (preparing) the school's timetables at the beginning of the academic year. However, some sections missed the transmission of radio lessons in few occasions. These occasions are national and public holydays as well as the times of staff meetings. Some sections, which received the radio lesson transmission on that day, missed the lesson. The sections never utilized the lessons of that particular week. This is due to shortage of radio lesson repetition. Except English and Social Studies, (which have four and two repetition programs), other subjects: Amharic, science and social science have one repetition period a week. Due to the presence of many sections and shortage of functional radio sets, each section has only one period for radio lessons. Therefore, during holidays and staff meeting breaks few sections, which have the opportunity to receive on that day forced to miss the lesson.

To enable the educational radio program to play a meaningful role in supporting the classroom learning, constant monitoring and continuous evaluation should be conducted. In fact, lack of constant monitoring and continuous evaluation largely affects the normal and effective utilization of the broadcasting lessons. Unfortunately, primary schools lack experience in evaluating the successes or failures of the educational radio services. Teachers blamed school principals in having no attention for the radio lesson implementation. Rather they spent more time in administrative works particularly in introducing the new result based evaluation policy, which would be applied as of the next Academic years (2007/08). On the contrary, school principals totally oppose teachers complain and accused them from lack of willingness and initiation to do the task.

The main beneficiaries of educational radio program are students. To acquire knowledge from the medium they should have keen interest to learn from it. As participant students and classroom observation state it most students have keen interest to learn from educational media, in this case radio. This is due to its way of presentation, which is student centered, participatory, communicative, short and precise as well as selective. To this end, students eagerly waiting for the radio lessons. Most students are active participants and showing good discipline during the actual transmission of radio lessons. However, some students are non-participants.

To sum up, what one understands from the findings of the study is that teachers have positive perceptions towards educational radio programs. In addition, due to the construction of additional classrooms the condition of large class size has been improved. Thus, findings from the study indicate that educational radio programs were more or less effective in supplementing and enriching primary school curricula. However, still a number of internal and external challenges affected the effectiveness of utilization of educational radio programs.

5.2 Implication of the Study

In Ethiopia, studies have been made by different scholars and institutions on the nature of educational radio programs. On its part, this study intended to contribute its part to the improvements of the effectiveness of the utilization process by evaluating the state of the contemporary utilization of radio lessons. However, many factors still affect the effectiveness of the utilization process of radio lessons in primary schools. Thus, to alleviate the problems observed in the utilization process of educational radio programs, attention should be given to the following areas.

- The teachers' and school principals' perception of educational radio programs shows that they develop better awareness of utilizing the medium. These teachers and principals can make real contribution in disseminating the function of radio lessons for their peers. For this effect, schools in collaboration with the Mass Media Unit of Addis Ababa Education Bureau, Sub- City Educational Departments or NGOs facilitate seminars and workshops in the school environment.
- The distribution of teachers' guides, radio sets, maintenance of broken radios and the use of illustrative materials during the transmission are very low. Thus, attempt to be made to improve the distribution of teachers' guides, the maintenance of broken radio sets, and encouraging teachers to use illustrative materials, which have relevance to the lessons.
- Schools have not the culture of evaluation on the weak and strong sides of educational radio lessons. Thus, schools should be given due attention to introduce the culture of evaluation on the weak and strong sides of the broadcast educational radio.
- Schools still suffered a lot due to lack of more repetition from transmission stations. Thus, an attempt should be made by the concerned educational officials and transmission stations to have more radio lesson repetition chances. For instance, schools able to alleviate the problem by recording all the programs transmitted from the radio transmission stations.

Finally, since the factors that affect the utilization process of educational radio programs are interrelated, attempting to solve one problem at a time can pave the way in minimizing the other problems, thereby improving the utilization of radio broadcasts in the school.

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Appendix 1

Researcher Ethical Principles

Thank you for accepting to participate in my research, entitle effectiveness of the utilization of educational radio programs in primary schools. My purpose is to undertake research as a fulfillment for MA qualification at the Addis Ababa University, Department of Curriculum and Teachers, professional Development Studies. The study focuses on evaluating the effectiveness of the utilization of educational radio programs in Addis Ababa: the case of three primary schools. Data will collect through interviews with you and observation in your classroom.

The information you share with me will be kept secured with at most confidentiality and your personal identity kept anonymous. Pseudonyms will be used in cases names are needed in the report. There are no known risks (to you) and discomfort associated with the study.

Principles and Procedures for the Research

The following are my ethical principles and procedures. I am willing to discuss these principles with you in pursuit of an agreed upon and amended framework. Do not hesitate to ask any question about the study either before participating or during the time you are participating.

- Participation in the study is voluntary. You have a right to withdraw from the research any time.
- Information given to me (by you) will be treated as belong to you; and it can be used only with your permission.
- Observation and interpretation made by me will be treated as belong to me.

Thank you

Mulugeta Abegaz, the Researcher

Effort: I will try to evaluate the effectiveness of utilization of educational radio programs in primary schools in Addis Ababa by making every effort in talking to people, spending as much time as possible in the field and search for rationale to establish whatever truth claim will be made by me. I will ask different people to comment on my draft report.

Appendix 2

Interview Guides

Below are questions, which focus on the evaluation of the effectiveness of the utilization of educational radio programs in primary schools in Addis Ababa. Therefore, please give your explanations in relation to the utilization of educational radio programs in your school.

Thank You!

Questions for the informants who participated in the interview.

For Teachers and School Principals

1. How do you perceive the educational radio programs?
2. How do you evaluate your training to utilize the radio programs?
3. Have attend a workshop or any in service training that can help you to utilize the radio lessons effectively?
4. How is the availability of support materials (radio teachers' guides, radio sets, and illustrative materials) in your school?
5. How do you see your students' interest towards and to learn from educational technologies?
6. Have you evaluate the successes or failures of radio lessons? How?
7. How do you see your students' participation during radio lessons?
8. What are the challenges you faced in the utilization process of educational radio programs?

For Students

1. How do get learning by radio?
2. How is your interest to learn from educational radio programs?
3. Are your classroom teachers used illustrative materials during radio programs? How?
4. How do you participate (act) during educational radio broadcast?
5. How do you evaluate the interest of your classmates to learn from educational radio programs?

Appendix 3

Classroom Observation Checklists

Name of the School _____

Date of broadcasting _____ Grade _____

Lesson Topic _____

Program No. _____

Activities of the teacher and students	Yes	No
1. Arrange seats	_____	_____
2. Put the radio in right place	_____	_____
3. Use additional teaching aids	_____	_____
4. Write the topic on the board	_____	_____
5. Asking questions about the lessons	_____	_____
6. Revise the previous lesson	_____	_____
7. Turning the radio on time	_____	_____
8. Monitoring students discipline	_____	_____
9. Encouraging students to respond	_____	_____
10. Speaks at the right time	_____	_____
11. Doesn't move out of the class	_____	_____
12. Avoiding noises	_____	_____
13. Clarity main points	_____	_____
14. Encouraging students to ask questions	_____	_____
15. Encourage (leads) discussion	_____	_____
16. Assign tasks	_____	_____
17. Concludes radio lessons	_____	_____

Appendix 4

Educational Radio Programs Produced and Broadcasted by the AAEB Mass Media Unit

<i>No.</i>	<i>Subjects</i>	<i>Grade</i>	<i>Transmission periods in a week</i>	<i>Remarks</i>
1	Amharic	1-8	Once in a week	Produced by AAEB
2	English	1-4	Four times in a week	Produced by EMA
3	English	5-8	Twice a week	Produced by EMA
4	Social Studies	5-8	Twice a week	Produced by AAEB
5	Environmental Science	1-4	Once in a week	Produced by AAEB
6	Science	5-6	Once in a week	Produced by AAEB

Source: Addis Ababa Education Bureau Educational Mass Media Unit's weekly Radio Transmission Timetable

በአዲስ አበባ ትምህርት ቢሮ በለገዳ ማሠራጫ ጣቢያ በባለ አንድ ኪሎሞት
 የ1999ዓ.ም የመደበኛ ትምህርት የሬዲዮ ኘርግራም ሥርጭት የጊዜ ሠሌዳ

የክፍል ትምህርት የሰዓት	የክፍል ትምህርት የሰዓት	የሬዲዮ ሥርጭት ሰአት	ሰኞ		ማክሰኞ		ረቡዕ		ሐሙስ		ዓርብ	
			የትምህርት አይነት	ክፍል	የትምህርት አይነት	ክፍል	የትምህርት አይነት	ክፍል	የትምህርት አይነት	ክፍል	የትምህርት አይነት	ክፍል
1	2:15-3:00	2:20-2:35	እንግሊዘኛ	3	እንግሊዘኛ	3	እንግሊዘኛ	3	እንግሊዘኛ	3	እንግሊዘኛ	7
		2:45-3:00										
2	3:05-3:50	3:10-3:25	እንግሊዘኛ	1	እንግሊዘኛ	1	እንግሊዘኛ	1	እንግሊዘኛ	1	አካላዊነት	1
		3:35-3:50	ሕብረተሰብ	5	ሳይንስ	5	እንግሊዘኛ	8	አማርኛ	6	እንግሊዘኛ	6
3	3:05-3:50	4:00-4:15	አማርኛ	4	አካላዊነት	2	አማርኛ	1	አካላዊነት	3	አማርኛ	2
		4:20-4:35										
ዕ ረ ፍ ት												
4	5:05-5:45	5:05-5:20										
		5:30-5:45	አማርኛ	8	ሕብረተሰብ	8	አማርኛ	8	አማርኛ	7	ሳይንስ	5
5	5:50-6:35	5:55-6:10										
		6:15-6:30	ሳይንስ	6	ሕብረተሰብ	5	እንግሊዘኛ	5	ሕብረተሰብ	8	ሕብረተሰብ	7
የ ም ሣ ዕ ረ ፍ ት												
6	8:00-8:45	8:05-8:20	እንግሊዘኛ	4	እንግሊዘኛ	4	እንግሊዘኛ	4	እንግሊዘኛ	4	አካላዊነት	4
		8:25-8:40	ሕብረተሰብ	7	ሕብረተሰብ	6	አማርኛ	7	ሳይንስ	6	አማርኛ	5
7	8:50-9:35	8:55-9:10	እንግሊዘኛ	2	እንግሊዘኛ	2	እንግሊዘኛ	2	እንግሊዘኛ	2	አማርኛ	3
		9:15-9:30	ሕብረተሰብ	6	እንግሊዘኛ	5	እንግሊዘኛ	6	እንግሊዘኛ	7	እንግሊዘኛ	8

Declaration

I confirm that this thesis is my original work.

Name Munirata Araya

Signature [Handwritten Signature]

Date of Submission 16/07/07

This thesis has been submitted for Examination by my approval as a university advisor.

Name Amare Argeem

Signature [Handwritten Signature]

Date of Submission 16/07/07

