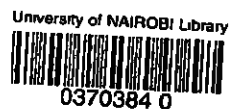


**FACTORS AFFECTING USE OF RADIO
BROADCASTING IN PUBLIC PRIMARY SCHOOLS
IN THARAKA NORTH DIVISION,
THARAKA DISTRICT**

BY

Abraham Mugambi Nkingo

**Research Project Report Submitted In Partial Fulfilment for the
Requirements of the Award of Master of Education Degree in
Educational Administration.**



University of Nairobi.

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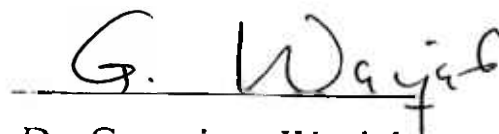
DECLARATION

This research project report is my original work and has not been presented for a degree in any other university.



Abraham M. Nkingo

This research project report has been submitted with my approval as university supervisor.



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DEDICATION

This research project is dedicated to my family: my wife Zipporah Kanyua, my daughter Vannenciah Gaceri, ~~my~~ ^{and my} ~~son~~ son Mordecai Mushindi for their patience, moral support and their sacrifice throughout the entire period of study.

ACKNOWLEDGEMENTS

All the glory unto the Almighty God for giving me good health and creating an enabling environment for my study. I am also indebted to my supervisor Dr Genevieve Wanjala for her tireless and selfless effort in offering guidance to me from the start of this study up to its conclusion.

I would also wish to express my sincere appreciation to my dear wife Zipporah Kanyua my father Robert Nkingo and my Mother Isabella Karimi for the continued prayers, moral support and encouragement during my study period.

Special mention also goes to Mr. Sailas Gichunge Mathiu who was my boss the time I started my studies for offering me the opportunity to start my studies that he gave to me during the entire period of my studies. I can not fail to acknowledge the support Mr. Cyprian Njagi and Mr. Nahashon Katherinya they gave me through out my study.

ABSTRACT

The re-introduction of radio broadcasts to schools was necessitated by the re-introduction of Free Primary Education (FPE) in 2003 Odera (2005). Basically the radio programmes was to supplement for the inadequacy of teachers and learning resources. This study, was carried out to find out the challenges pupils and teachers encounter while using radio broadcast to schools after its re-introduction. The study focused on clarity of radio sound received, language used by the radio teacher, the speed of the radio teacher, and the subject differentials in receiving radio broadcast, on the side of the pupils. On the side of teachers the study examined schemes for radio broadcast, and the reception of support materials

The researcher used 10 percent of the population, which were 6 randomly sampled public primary schools in Tharaka North Division. Through purposive sampling 12 class teachers were sampled for the study. The researcher purposively sampled classes seven and eight. Questionnaires were used to collect the information. Data obtained from the interviews was organized and analyzed using descriptive statistics. Pie charts and bar graphs are also used.

The results showed that clarity of the radio sound presented no challenge. Over 96% of the pupils receive the radio sound quite clearly (Table 4.2.2). However the language used by the radio teacher and the speed of the radio program present a great challenge to pupils in the division and thus to the program. In terms of the language used by the radio teacher, 35.3% of the pupils reported that it was not easy for them (Table 4.2.3). Similarly over 74% of the pupils reported that the radio teacher was fast for them (Table 4.2.4). There were also large differences in subjects in utilization of radio program. Radio lessons in mathematics are least utilized with 45.1% of the pupils reporting that they have at least been taught the subject using radio program. On the other hand 74.5% of

the pupils reported that they have ever been taught Kiswahili using radio program. The percentage of the pupils who reported to have ever been taught English was 48%. social studies was 54.9% and a science was 51%. Schemes for the radio lessons and support materials are challenging issues in implementation of the radio program to schools in Tharaka North Division. Only 33.7% of the teachers who scheme for the radio lessons almost always (Table 4.2.5). Similarly 40% of the teachers almost not receive the support material on time (Table 4.2.6).

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LIST OF ABBREVIATIONS AND ACRONYMS

- BBC:** British Broadcasting Corporation
- CIDA:** Canadian International Development Aid
- EMS:** Educational Media Services
- FPE:** Free Primary Education
- KBC:** Kenya Broadcasting Corporation
- KNUT:** Kenya National Union of Teachers
- KIE:** Kenya Institute of Education
- NGO:** Non Governmental Organisation
- SPSS:** Statistical Professional Social Sciences
- UNESCO:** United Nations Educational, Science and Cultural Organisations
- VOK:** Voice of Kenya
- YWCA:** Young Women Christian Association

CHAPTER ONE

1.0 Background of the study

The Ministry of Education and Human Resource Development (1999) indicates that it is the responsibility of head teachers in public primary schools to ensure that curriculum is well implemented and the teachers work effectively and efficiently to achieve predetermined educational goals. Head teachers also ensure that they establish and maintain effective channels of communication from their schools to the national offices.

Many head teachers and officials of the Kenya National Union of Teachers (KNUT) have repeatedly been heard appealing to the government to employ more teachers because many schools are understaffed; that means many teachers are overworked. Apart from this challenge of teachers being overworked, school administrators have encountered many other challenges since independence but from the year 2003 when the government of Kenya introduced Free primary Education (FPE), the situation worsened; enrolments increased. This shows the teacher pupil ratio to increase to the extent that in some schools classes had over 100 pupils. Learning materials and other facilities were also overwhelmed.

In such working environments teachers can easily lose the morale to work. This can lead to early burn out; it can also result to high staff turnover or lack of effectiveness and efficiency in teaching, Okumbe (2001). The government of Kenya has always endeavoured to promote

the quality of education in the country. It is on that note that radio broadcast to schools was reintroduced.

Radio broadcast to schools has numerous advantages, but with all these advantages it is not meant to replace teachers from the classrooms. Instead it is to aid teachers in their teaching. A head teacher can not dictate teachers to use radio programmes to teach instead one should only encourage them to use the radio programmes. This is because a well planned radio lesson above other advantages, aid teachers in their work for example, instead of a teacher talking through out the day one can have the radio teacher assist him or her to teach for some minutes in a given lesson.

First educational radio broadcasts were transmitted by the British Broadcasting Corporation (BBC) in the year 1924, in North America and Western Europe. The contribution of radio broadcast to the education was very significant, this made many education institutions in United States set up their own radio stations.

Emile and John, (1980) observes that many countries preferred radio broadcast to schools because they lacked trained and qualified teachers. These countries also lacked sufficient teaching and learning resources, and because educational radio broadcasting was seen to have the potential of improving the quality of education by reaching many pupils using a single radio programme, many countries preferred it.

The contribution of radio broadcast to schools attracted the attention of international agencies like United Nations Educational, Science and

Cultural Organisations (UNESCO). Many of the newly independent countries got the assistance from the foreign agencies like UNESCO to start the radio broadcast to schools. In Africa for example, Sydney (1974) records that a Canadian Young Women Christian Association (YWCA) officer in Tanzania received a Canadian International Development Aid (CIDA) grant to help to test the use of radio as a means of stimulating awareness of social issues.

Sydney (1974) adds that in 1969- 1970, the government of Nigeria got assistance from the Canadian University Services Overseas, following a request Nigeria had made. Canada co-worked with the Nigerian government on a schools broadcast project over Kaduna Television. The radio programmes were designed to teach English to the primary schools.

In Kenya, radio broadcast to schools was started in the year 1960 as a division of the Ministry of Education. It was a national strategy for improving the standards of education, to widen access to education, to improve teachers' qualification and to extend educational opportunities beyond the school through distance learning. In 1966, the Kenyan government received six experienced Canadian teachers. These experts began working with Kenya Institute of Education (KIE) in preparing radio broadcasts over the Voice of Kenya (VOK). Sydney (1974) observes that radio lessons were aimed at primary and secondary school learners and teacher training colleges. Schools received teachers' guides and course pamphlets for students free of charge.

Edwin (2007) on Educational Broadcasting in Kenya records that radio broadcast to schools was expanded into Educational Media Services (EMS) in 1976. Later EMS was absorbed into Kenya Institute of Education (KIE). KIE paid Ksh 2.5 million to VOK for the radio programmes. In 1992, When the VOK was granted corporate status and became Kenya Broadcasting Corporation (KBC); the charges for radio broadcast to schools were reviewed to Ksh 11million per term. Then the government of Kenya was facing serious economic difficulties. It is because of that, that she did not review the air time grant to KIE, so the institute was unable to pay for the programmes. Consequently KBC stopped airing the programmes in 1995.

Odera (2005) in her research on Using World Space Radio to improve quality of education in Kenya observes that radio broadcasts to schools were later restarted after the introduction of Free Primary Education (FPE) in the year 2003. This was necessary because many primary schools experienced large numbers of pupils enrolling yet these schools lacked enough trained teachers to handle the large number of pupils in classes. Schools also lacked adequate physical facilities, and learning resources.

This study was carried out to find out the challenges teachers encounter while using radio broadcast to schools, after its re-introduction. It sought to find out what school administrators do to overcome these challenges.

1.1 Statement of the problem

Radio broadcast to schools was re-started in the year 2005 to assist in promoting the quality of education in the country. This was found necessary because after the KBC stopped airing the school programmes in the year 1995, KIE started airing programmes through World Space. This facility was not very accessible to all schools because of various reasons

After the Government introduced FPE in the year 2003, many primary school head teachers were faced with many challenges. FPE made the enrolments of pupils to go up by a big margin as observed by Odera (2005). This found schools unprepared to handle the big number of pupils joining primary schools. Teachers were very few, learning resources and teaching resources were also limited. Therefore the re-introduction of radio broadcast to schools was quite timely because it was not only aimed at improving the quality of learning but also to aid teachers in their work. With its reintroduction, one may want to know if it is really achieving the intended goals.

It was because of that that this study was done to find out the new challenges facing implementation of radio broadcast to schools after its re-introduction through KBC English service in terms of:-

1. The pupils
2. The classroom teacher

1.2 The purpose of the study

The purpose of this study was to investigate the challenges which were facing radio broadcast to schools in Tharaka North Division, public primary schools.

1.3 Objectives of the study

1.3.1 The main objective

The main objective of this study was to establish the challenges which were facing radio broadcast to schools in Tharaka North Division, public primary schools in Tharaka North Division.

1.3.2 The specific objectives

The specific objectives of this study were:

1. To determine the challenges faced by the pupils in the implementation of the radio program in terms of the:
 - a) The clarity of the radio sound received.
 - b) Language used by the radio teacher.
 - c) Speed of the radio teacher
2. To examine if there are subject differentials in implementation of the radio program.
3. To determine the challenges faced by the classroom teachers in implementation of the radio program in terms of the:
 - a) Schemes for the radio lessons.
 - b) Support materials.
4. To establish what the school administration was doing to help to overcome the challenges.

1.4 Research questions

To meet objectives, the study was guided by the following research questions:

1. What are the challenges faced by the pupils in implementation of the radio program in terms of the;
 - i) Clarity of the radio sound received
 - ii) Language used by the radio teacher
 - iii) Speed of the radio teacher
2. Are there any subject differentials in implementation of the radio program?
3. What are the challenges faced by classroom teachers in implementation of the radio program in terms of the;
 - i) Schemes for radio lessons
 - ii) Support materials
4. What is the school administration doing to help overcome the challenges?

1.5 Significance of the study

This significance of this study are follows:-

- The study has shed light to the challenges teachers face as they use radio broadcasts to schools. This will to enable education administrators help teachers overcome these challenges, hence enabling more teachers to use radio broadcasts to promote learning.
- The study findings will to act as a feedback to staff involved in preparation of Radio programmes to schools. This feedback would be used to promote the quality of the radio programmes.

- The study forms basis for further research on radio programmes to schools.

1.6 Limitations of the study

Since little has been done in the area of broadcasting to schools: giving it an administrative perspective, it was not possible to use related research to adequately provide support for this work. The utilisation of broadcast service to schools as support material for teaching to promote learning could have been influenced by many other factors like attitude of the teacher and pupils towards the programmes, availability of the radio and the technical know-how to operate the garget.

1.7 Delimitation of the study

The study was carried out in rural primary schools, the researcher conducted the study in sampled schools in Tharaka North Division of Tharaka district; the research included the Tharaka District Education Officer, head teachers, teachers and Pupils of classes seven and eight in Tharaka North Division were also involved in the study.

1.8 Definition of significant terms

Administration: Okumbe defines administration to mean the process of acquiring and allocating resources for the achievement of organisational goals. In this study administration was used to refer to the people charged with the responsibility of ensuring that education institutions achieve preset educational goals.

Broadcast: used to mean transmission of programmes by several types of distribution systems. In this study broadcast was used to refer to radio programmes for pupils and their teachers for educational purpose.

Formal learning: this is the acknowledged plan stating what is to be learned and how to teach and evaluate. For the purpose of this study formal learning was used to refer to learning instructions taking place in class for learning purposes.

Informal Learning: the process by which learners learn indirectly from their social, physical and intellectual environment of the school.

Mass media: described as any means used to reach many people, for example news paper, radio, television, video screen. For the purpose of this study it was used to refer to radio and television.

Radio broadcast: used in this study to mean radio programmes aired for instructional purposes.

Public primary schools: refers to schools which are supported by public fund and are attended by children between the ages of 5- 13years, in this study public primary school was viewed as defined by cap 211 of Laws of Kenya.

Programme: refers to series of instructional radio broadcasts for pupils.

1.9 Organization of the study

This study is organized in five chapters. The first chapter focused on background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, scope of the study, delimitation and limitation of the study, definition of significant terms and the organisation of the study. The second chapter dealt with the literature review of the study, it examined previous studies on radio broadcast, specialised mass media, and technique of educational radio programme, why radio broadcast to schools. The class size, language factors, summary of the literature review, theoretical and more particularly conceptual framework.

The third chapter focused on research methodology which described the research design, the target population, sample size and sampling techniques, research instruments, instruments validity and reliability, data obtained from the respondents and discussion of the research findings. Chapter four consists of data analysis, interpretation of the data and discussion of the research finding while the fifth gives the summary of the study, conclusions, recommendations and suggestions for further research.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This section deals with review of literature related to the topic, it is sub-divided into the following sub-headings:-

- (a) Previous studies on radio broadcast to schools
- (b) Special mass media
- (d) Techniques of educational radio programme
- (e) Why radio broadcast to schools?
- (f) The factors that influence the use of radio broadcast to schools
- (g) Summary of the literature review.
- (h) Theoretical framework and conceptual framework..

2.1 Previous studies on radio broadcast

UNESCO (1972) records that the 21st General conference of 1980, the international commission of the study of communication problems established under the auspices of UNESCO emphasized the role of the media in connection with education and development. Similarly the report of the international commission on the development on education, better known as *learning to be*, stressed the contribution which mass media could make to education.

A comprehensive research carried out by Schramm in 1977, and the Japanese broadcasting authority in 1969 showed that students receiving television and radio as a supplement to the normal classroom teaching scored higher on the various tests used. This made Schramm conclude that “used as a supplement to classroom teaching the media of

instruction are effective” he observed that if broadcast is used in the right place, in the right way, for an appropriate purpose, it would improve the classroom experience”.

Allan (1974) states that educational radio programmes have a potential to promote Education for All in a country, not only to the school going pupils but also to the old and the non-school going pupils. In analyzing the effect of exposure to the radio on mathematics achievement in the Nicaragua radio mathematics project, Sarale, Friend, and Suppes found that students who had radio scored about 67% correct on the end of the year test, while students who had no radio scored only about 57%. This difference, as Jamison and McAnany (1978) note, is highly statistically significant and reflects a difference of about half a standard deviation.

Jamison and McAnany, (1978) in his analysis of radio primaria as instituted in Sanluis Potosi, reported that he gave pre-test and post tests over a semester period to a random sample of radio and non-radio students in the sixth grade. Spain concluded in the end that radio primaria produced scores that are comparable to those of children in direct teaching schools. Jamison and McAnany (1978:137) argue...

there are some doubts as to the reliability of the results generated, which Spain himself explicitly recognizes for example, of the radio classes are the type of class for which the radioprimeria system was originally intended. In spite of the modesty of Spain’s claims for the cognitive effectiveness of the radio system and the difficulty of drawing firm conclusions from the data he had available, his data suggest that students in the radio schools performed better than those in non-radio schools in both Spanish and

mathematics, and the difference in Spanish was statistically highly significant.

Jamison and McAnany (1978) on reporting the results of the radio correspondence approach to teacher upgrading in Kenya. pointed out that in the period from 1969 to 1972, over 10,000 unqualified teachers successfully completed their radio correspondence upgrading to the P3 level, this competition rate indicates the success of educational radio. In the same survey highlighted by Jamison and McAnany (1978), the supervisors upgrading teachers reported that about 95% of these teachers improved their overall performance after taking the upgrading course.

Odera (2005) in her paper on using world space radio to improving of primary education in Kenya at distance observes that students learn from radio lessons and teachers also benefit from well researched programmes that help to improve teaching. She found out that head teachers play an important role in the use of radio programmes in schools. The scope and mode of using radio in schools relies heavily on the head teachers. They determine the effectiveness and shape the manner in which radio programmes are used in schools. She identifies the following as the roles for head teachers in relation to radio broadcasts:-

- a. There are working radios in the school.
- b. There is a school radio time table.
- c. Every teacher whose subjects are covered by radio has a class time table indicating programmes.
- d. There is a school time table showing the entire radio programme.
- e. All the teachers' guide notes are available and given to the teachers concerned.
- f. Teachers' schemes of work include radio programmes.

The consumers may be reached individually like a teacher listening to a programme in the staff room or at home, or a group of listeners like learners seated in a class room. The bench mark here is that the programmes target not just one listener but a large number of people. David (1985) states that educational radio programmes are regarded as special mass media because the targeted audience are learners in a formal setting. Although some people may argue that all radio programmes have educational value because they consist of messages that are cultural- laden; listeners may there fore learn something from the programme broadcast to school mainly for instructional purposes in formal classrooms.

Without doubt, educational radio and television today must be regarded as mass media instrument of education. This domain may be divided into formal and non- formal education. The division of these categories are based on the content and the purpose of the programmes aired.

Formal education is served by programmes generally in each of the principal subjects learned within the education system, for example, mathematics for class eight, social studies for class five, and other subjects. That shows that the targeted audience of the educational radio broadcast is the school age children, teachers and the teachers training college students. The non- formal education is served by a much wider range of programmes, ranging from teaching of foreign languages, programmes of general interest, current affairs, and natural history among others. The targeted audience for these programmes are the general public.

2.3 Technique of educational radio programme

Jamison et al (1978) argues that radio may referred to as *a blind media* this is because of the fact that although radio has the potential of disseminating knowledge. it lacks a very important element to promote learning: this is the element of feedback. the radio teacher can not know who actually receives the message, or how they react to it. That means that misunderstanding which may appear in the process of delivery of information can not be easily resolved, radio can also not answer questions that are not anticipated before the transmission of the programme. Thus radio broadcast does not take care of individual needs of the learners.

With this in mind it is therefore worth noting that the learners cannot be left alone in the learning process. in a majority of the cases learners require a supervisor, to give guidance, additional clarification of the information received and attend to learner's need exercises, verification of results achieved at particular stages and so on. The radio can not in itself provide for this. In order to consolidate and extend their input, they have to be accompanied by support and follow-up devices of one form or another; all these have to be woven into a system which will provide the human contents necessary in the education process.

Educational radio programmes can be more effective if for example, a truly excellent teacher – better than those who are available in the majority of schools – is chosen for the programme, if the broadcast is prepared with more care, time and effort than a classroom teacher usually afford to devote to his lesson; if the broadcast use such materials,

evidence, demonstrations which can explain the problem better than those which are usually used in the classroom; if the broadcast employs teaching methods more effective than those which can be used in the conventional situation.

The tempo of a direct teaching programme is, generally slower than of comparable general broadcast. More time is given to recapitulation. The slower pacing of narration takes stock of the fact that acoustics are often poor in the classroom. It is usual to seek out particularly clear voices to play the speaking part, and greater consideration is given to the distinctions between one voice and another.

If the school broadcast is to hold its audience it must be interesting. The child in the classroom might not wish to switch off the radio because the teacher is in the class or because other pupils are listening but can easily lose interest and switch off his ears. For a programme to be interesting, the producer should have special interest in the area in which he is working and a particular sympathy for the subject. He should regard contributors to his programme as co-workers. He should also fully understand the nature of his audience.

The more a teacher knows about a coming schools broadcast the more likely is he to use the radio programme, therefore the Institute should send to schools full notes for teachers concerning every radio broadcast to be aired in a given academic year. This should be done well in advance before the start of the series of the broadcast, this is because the notes may draw attention to the specific teaching points to be made in each broadcast or they provide teachers with references to additional

background material and possibly some diagrams where illustrations is likely to make radio lesson more effective.

2.4 Why radio broadcast to schools is important

Broadcast can present an educational message in all forms of the spoken word: narration, dialogue, lecture, discussion, interview, commentary, dramatized scene, or in any other form of literary art. It can make the learners meet renowned specialists and experts, personalities from the cultural, artistic, social and political world. It can bring into educational process images and sounds of contemporary life in all its manifestations occurring in all parts of the world. Radio broadcast to schools can draw on events of the past by bringing in preserved original material and documents or by reproducing situations in an historical sound of fictitious manner. It can use the necessary technical devices to reveal the natural world in a more comprehensible manner than through direct acquaintance. Live broadcasting gives a sense of actual participation in these events.

Radio broadcasting is more flexible to the educational process enabling speed adaptation to changing conditions. Broadcasting can respond immediately to changes in curriculum and in living conditions, to new developments in science and technology and to reactions of people.

Broadcasting can rapidly introduce into the educational process material which was not yet available in print form. It can provide the newest knowledge and ideas using the most rapid means of the widest diffusion.

Educational broadcast programmes can be produced in a variety of ways to evoke and retain interest, to stimulate efforts in learning, to challenge curiosity and intellect, to affect emotions and attitudes. This gives radio an enormous potentiality for motivating less 'captive' audience for evoking and sustaining interest in learning. These programmes give to the less experienced teachers. guidance and proper work-rhythm.

2.5 The class size

The size of class is a big contributing factor to the efficiency of instruction in class; this is because very large classes in most cases are found to have much indiscipline cases than small classes. Odera (2005) observes that since the introduction of FPE in the year 2003, the enrolment went up. This brought a big challenge to many public primary schools because they did not have classrooms. Some schools have over crowded classes while others have more than two streams. So some times when the teacher is talking in front of the class, other learners could either not to be clearly getting what the teacher is saying or they could be doing other things.

2.6 language factor

In Kenya English as a subject is not just part of the curriculum, it is also the base on which the whole curriculum stands. From class four to the highest level of learning all other subjects apart from Kiswahili are taught in English. However many pupils in rural schools lack proper command of the English language.

The government policy on language of instruction in schools state that the language of instruction is English, but a provision is made for teachers to use the language of the catchments areas in lower classes or where the learners find themselves in difficulties, for example where they are unable to understand a concept in class. In case of radio teachers who only use English in their programmes because they address pupils from different cultural backgrounds, pupils who lack proper command of the instructional language may fail to benefit much from the radio programmes if class teacher fail to provide proper guidance. This also makes the radio teachers obliged to use a simpler language.

Pupil's personal development stems from his ability to speak, read and to write; learning to speak relies on listening. Much of learning takes place through listening. Hayter (1974) argues that radio broadcast to schools develop the listening skills in learners hence contributing to the process of learning.

2.7 Summary of literature review

Most of the studies carried in this field were carried almost 20 years ago; in addition most of the scholars who have done studies on radio broadcast to schools did not view it from the administration point of view.

2.8 Theoretical framework

This study was carried out within the framework of general administrative theory as advanced by Fayol. This theory is relevant to this study because it regards education administration as the process of

acquiring and allocating resources for the achievement of predetermined educational goals.

In the case of this study education administrators who in our case are the public primary school head teachers, are charged with the responsibility of acquiring, organising and mobilising of the resources to ensure the pre-determined organizational goals are achieved. Primary school head teachers have three types of resources, that is, the human resources who are teachers and other workers, the physical resources which include teaching and learning materials, buildings and desks among others and the third type of resource is finances which comes from different sources. Primary school head teachers must ensure that teachers discharge their duties effectively.

In regard to radio broadcast to schools, head teachers should make sure their schools have functional radios. They should also make sure that teachers are encouraged to make use of radio programmes for both teachers and pupils. Since radio broadcast to schools is a resource that is assist teachers to perform their duties, head teachers ought to play a role in ensuring that the challenges facing radio broadcast to schools are overcome.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter focuses on the research design, target population, sample and sampling techniques, research instruments, instrument validity, instrument reliability, data collection procedure and data analysis, each of these will be discussed separately.

3.1 Research design

The researcher used a descriptive survey research design in this study. The purpose of this research design was to help him study the factors that make primary school teachers use or not use Radio broadcast to schools. This method is a self reporting study, which brings quantifiable information from the sample Mugenda and Mugenda (1999). The researcher concerned himself in finding out the challenges facing teachers in public primary schools as they use radio broadcast to schools to promote learning. Questionnaires, interview schedules and observation guides were used to collect data. The data collection instruments are discussed below in details.

3.2 Target population

According to Gall and Borg (1989) population is all the members of real or hypothetical set of people, event or objects to which a researcher wishes to study. Tharaka North division of Tharaka district has 59 public primary schools. All the 59 head teachers in these schools formed the targeted population. All the class seven and eight class teachers and their pupils also made the population. The researcher targeted about 118

teachers and 2569 pupils of classes seven and eight. The researcher also involved the Tharaka District education officer.

3.3 Sample size and sampling technique

Mugenda and Mugenda (1999) define 'sample, as a small group obtained from the accessible Population. each member in a sample is referred to as a subject. Sampling is the process of selecting a number of individuals for a study in such a way that the individuals selected represent the larger group from which they were selected.

Mugenda (1999) argues that a researcher can take either 10 or 20 percent of the population. because of the distance from one school to another of schools in Tharaka North Division: the researcher preferred to use 10 percent of the population, which were 6 randomly sampled public primary schools in Tharaka North Division. It was from these sampled schools that research respondents were drawn from. From this sample, one school was randomly selected where a pilot study was conducted: this school was not used again in the study. Through purposive sampling 12 class teachers were sampled for the study. The researcher used stratified random sampling to sampled the classes to be involved in the study hence classes seven and eight pupils were sampled, this was because it was assumed that they were mature enough to respond to the research instruments accurately. From the sampled schools the researcher involved 5 pupils from classes seven and eight which was equivalent to 60 pupils, the 60 pupils were randomly selected.

3.4 Research instruments

The researcher made use of three instruments, these instruments were questionnaires, interview and observation schedules. The three research instruments were as described below: -

(a) Questionnaires

The researcher constructed two types of questionnaires; a questionnaire for the pupils and the second one for class teachers. Each of these questionnaires had two sections. section A in both questionnaires started with instructions to the respondents. The same section targeted respondents who had radio used to teach while section B targeted respondents who never used radio before. Open ended and structured items were found useful; the open ended items were preferred to give room to the respondents to give their views.

The pupils questionnaire contained seventeen items while the class teachers' questionnaire had twenty three items. This research instrument was preferred in the study because all those who took part were assumed to be literate. therefore capable of responding to the items without making errors.

(b) Interview schedule

The researcher developed interview guides to help him interview the District Education Officer and head teachers. Both education officer and the head teachers were interviewed at their convenient time in their offices. This instrument was used to supplement other

research instruments; it was also preferred because it would allow free expression of opinions by the school administrators regarding the subject of the study.

(c) Observation schedules

The researcher constructed observation guide schedules, this instrument had specific items to be observed as teachers used radio programmes to teach.

3.4.1 Instrument validity

Mugenda (1999) argues that validity is the accuracy and the meaningfulness of inferences, which are based on the research results. To increase the instrument's validity, a pre-test (pilot study) was conducted on the population similar to the target population. The pilot study was conducted in 1 public primary school. After piloting each research item was revised to assess its suitability, clarity, and relevance for the purpose of the study. The reasons behind pre-test was to assess the clarity of the instrument items so that those items found to be inadequate in measuring the variables could either be discarded or modified to improve the quality of the research instrument hence increases its validity.

3.4.2 Instrument reliability

Reliability of a measuring instrument is the consistency with which it measures whatever it is meant to measure. Mulusa (1990) states that a reliable research instrument is one that consistently produces the expected results or data after a repeated trial, however reliability in a

research is affected by random errors. the pre- test helped the researcher to identify the most likely source of error hence responded to before the actual study.

Errors might come about as a result of inaccurate coding, ambiguous instructions to the respondents. interview fatigue and interview bias. The researcher in designing and administering of his instruments took care to avoid these errors. The researcher employed split half technique to verify instrument reliability.

3.5 Data collection procedure

A research permit was obtained from the Ministry of Education. There after Tharaka District Education Officer was contacted before the start of the study in the sampled primary schools. The researcher first contacted the head teachers to make arrangement for a convenient date and time to carry out the research in the schools. The class teachers assisted in the administration of questionnaires to the pupils. The interviews with head teachers and District education officer was done in their offices at their convenient time. The researcher filled the observation guide in every school he visited.

3.6 Data analysis techniques

Data obtained from the questionnaires, lesson observation guides and interview schedules was organized and analysed using descriptive statistics. Pie charts and bar graphs are also used. Statistical Professional Social Sciences (SPSS) computer package was used to compute these statistics.

CHAPTER FOUR

Data Analysis, Interpretation and Discussions

4.0 Introduction

This chapter deals with data analysis, interprets and discusses of the results obtained. The data was analysed case by case for the said research questions in order to achieve the objectives of the study. Both observed and percentage frequencies were obtained.

4.1 Research Instruments Return Rate

Questionnaires were administered to sixty pupils and twelve class teachers in seven public primary schools in Tharaka North division, the seven schools from which research respondents were drawn from Kirigicha, Kagurini, Mukothima, Irunduni, Thiiti and Thanantu primary school. All the administered questionnaires were completed and returned which translated to 100 percent return rate. Head teachers from the same schools and the education officer were interviewed and their responses recorded.

Various excuses were given by class teacher to be exempted from being observed as they taught using radio broadcast programs to schools; however observation was possible in 43 percent of the sampled schools.

4.2 Data Analysis and Interpretation

Out of the sixty pupils who were involved in the study 85% of them reported that they had been taught using a radio but only 15% who

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4.2 Data Analysis and Interpretation

Out of the sixty pupils who were involved in the study 85% of them reported that they had been taught using a radio but only 15% who

reported not to have been taught. Below the researcher used statistical professional social sciences computer package to compute the statistics.

Interview schedules and observation guides were organised and analysed using descriptive statistics. Below is a presentation of data got from the research instruments.

A. PUPILS QUESTIONNAIRE

4.2.1 Ever Taught Using Radio Program?

85% of the respondents reported they had been taught using a radio, Table 4.2.1 shows the summary of the frequency distribution of the number of the students ever taught using the radio program. 15 % represents the fraction of the pupils whose school had never used the radio program.

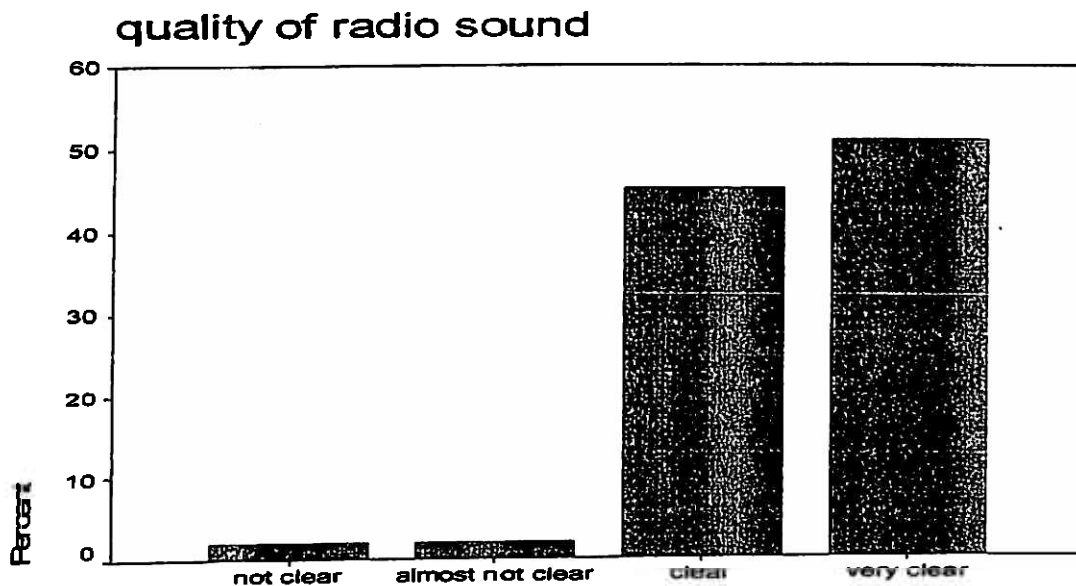
Table 4.2.1: Percentage distribution of student ever taught using the radio program.

		evertaught			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	51	85.0	85.0	85.0
	no	9	15.0	15.0	100.0
	Total	60	100.0	100.0	

4.2.2 Clarity of the Radio Sound

The clarity of the radio sound indicates how well the pupils received the radio waves in the locality. A bar chart 4.2.2 shows the perception of students on the rating of the quality of the radio sound.

Fig 4.2.2: A bar chart showing percentage pupils' perception of the quality of radio sound



The table shows that 2% reported that radio sound was not clear, 2% reported that radio sound was almost clear, 45.1% reported that radio sound was clear and 51% reported that the radio sound was very clear. The majority of teachers shows that the radio sound was clear.

4.2.3 Language of the Radio Teacher

Language of communication is a very essential element in learning. Pupils were asked to rate the language used by the radio teacher from the bench mark of their classroom teacher. The results are shown in Table 4.2.3.

Table 4.2.3: Percentage distribution of perception of radio teacher language

rate radio teachers' language

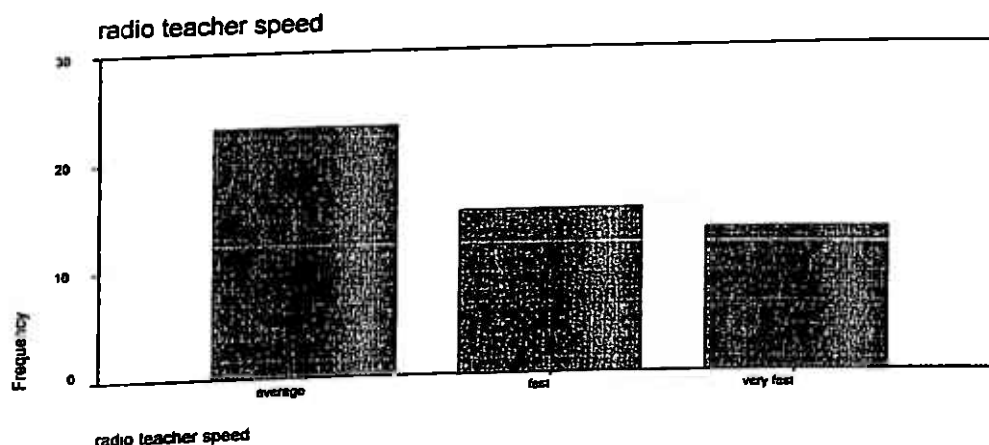
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very difficult	3	5.9	5.9	5.9
	difficult	7	13.7	13.7	19.6
	fair	8	15.7	15.7	35.3
	easy	21	41.2	41.2	76.5
	very easy	12	23.5	23.5	100.0
	Total	51	100.0	100.0	

The percentage of the pupils who reported that the language used by the radio teacher was very difficult, difficult, fair, easy and very easy are 5.9% 13.7%, 15.7%, 41.2% and 23.5% respectively.

4.2.4: Speed of the Radio Teacher

The speed of the teacher is another vital factor in learning. Slow speed may be boring to fast learners whereas fast speed may be discouraging to slow learners. Pupils were again asked to rate the speed of the radio teacher. The results are shown in a bar chart 4.2.4 below.

Fig 4.2.4: A bar chart showing percentage pupils' perception of the speed of the radio teacher.



From the table the percentage of the pupils who reported that the radio teacher's speed was average, fast and very fast is 45.1%, 29.4%, and 25.5% respectively.

54.9% of the pupils involved in the study shows that the radio teacher was fast to them while only 45.1% of the pupils were comfortable with the radio teacher's speed.

4.2.5 Ever Taught Disaggregated by Subjects

This item sought to find out whether there were any subject differentials in the use of radio programs to teach. Table 4.2.5a - Table 4.2.5e show the percentage distributions of those who had ever been taught individual subjects using radio program.

Fig 4.2.5a: A pie Chart showing the percentage distribution of pupils ever taught English using radio program.

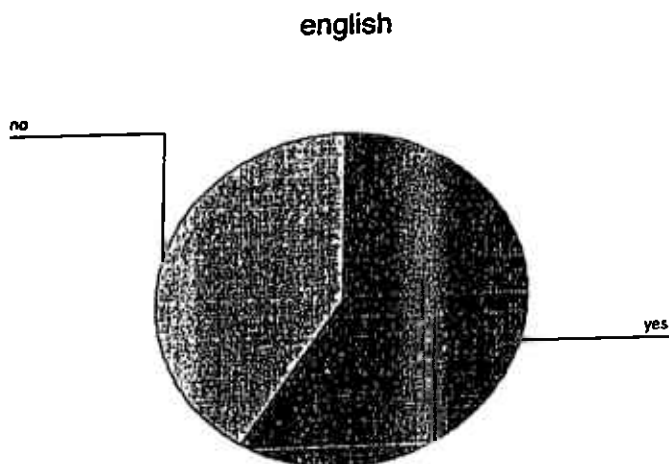


Fig 4.2.5b: A pie Chart showing the percentage distribution of pupils ever taught Kiswahili using radio program.

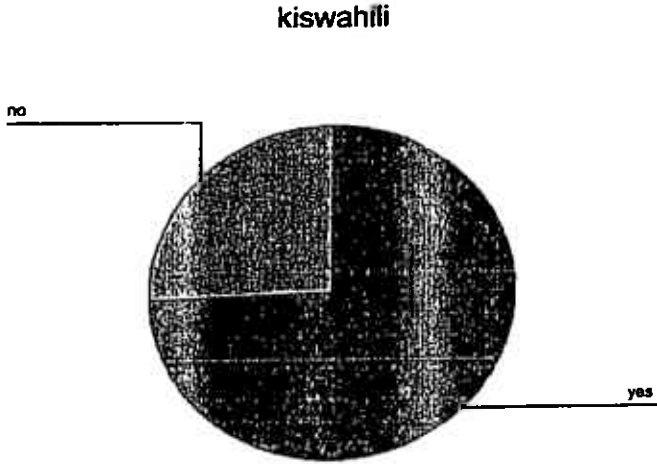


Fig 4.2.5c: A pie Chart showing the percentage distribution of pupils ever taught mathematics using radio program.

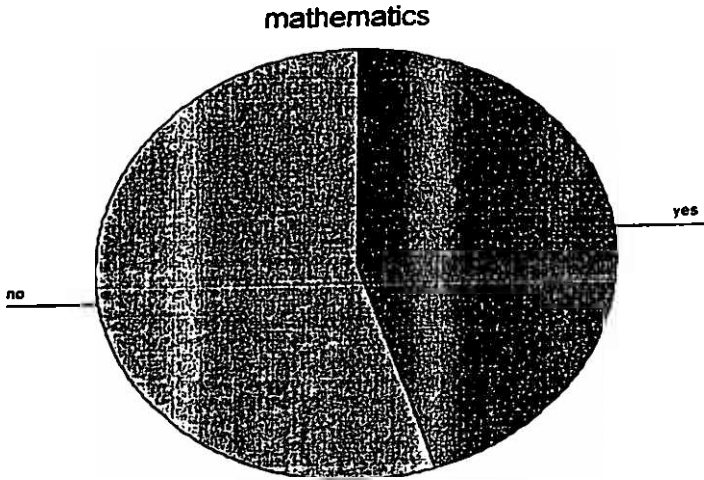


Fig 4.2.5d: A pie Chart showing the percentage distribution of pupils ever taught social studies using radio program.

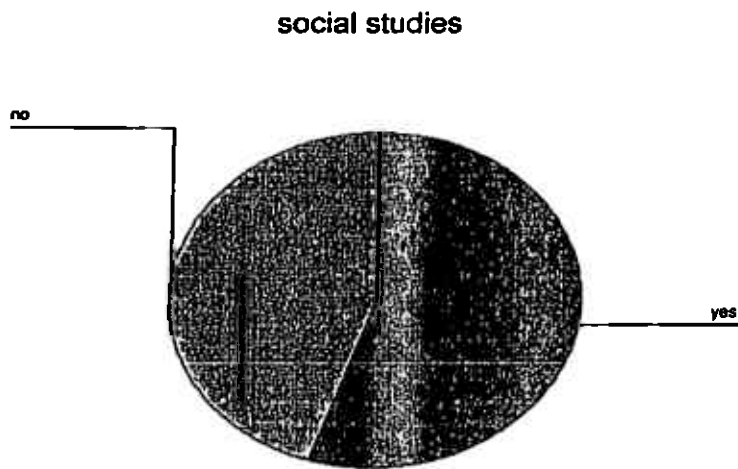
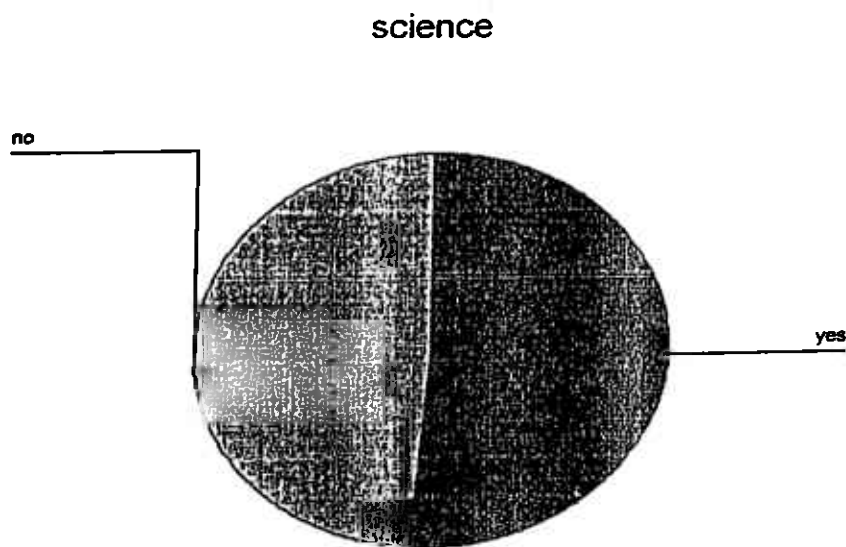


Fig 4.2.5e: A pie Chart showing the percentage distribution of pupils ever taught science using radio program.



58% have ever been taught English using radio program. Similarly 74.5%, 45.1%, 54.9% and 51% were taught Kiswahili, Mathematics, Social studies and Sciences respectively using radio program. This

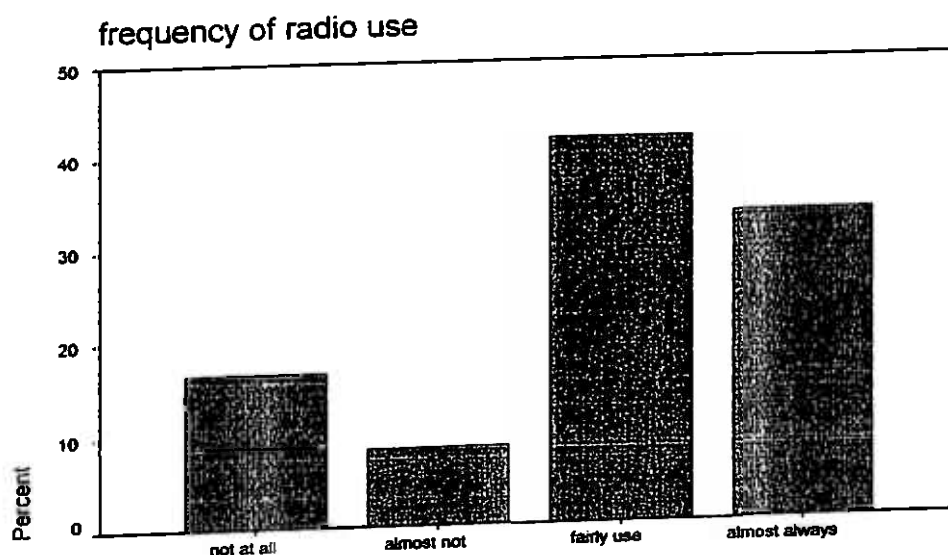
shows that radio lessons in social studies were more utilized and those of mathematics were least utilized.

B. TEACHERS' QUESTIONNAIRE

4.2.6 Frequency of the radio use

The frequency of the radio use measured how often the teachers made use of the radio lessons. The results are shown in Table 4.2.6 below. A bar chart presentation of these results is shown in figure 4.2.5 below.

Figure 4.2.6: A bar chart showing the frequency distribution of the use of the radio program by teachers



25% of the teachers have almost not used the radio program in teaching. The percentage of teachers who used the radio program fairly was 41.7%. The percentage of teachers who used radio programme often is 33.3%.

4.2.7 Support material

All the respondents (100%) reported that they had not got any radio broadcast support materials for the last several years. The only item they got regarding radio programs was the radio lesson time table which some respondents indicated that they got the time table in March 2008.

C. INTERVIEW SCHEDULES

I. The District Education Officer

The respondent reported that the district office lacked enough manpower to have all the Teacher Advisory Centres operational. According to him the district had not done much to make the teachers utilise the resource (radio broadcast to schools). He confirmed that KIE had not been sending support materials to schools. He also reported that all the schools had operational radio which had been donated to schools by the Plan International (NGO).

II. Head teachers' interview

All the respondents (100%) reported that they had not incorporated the radio program time table into their school block time tables. 80% reported that they had not done anything to make teachers use radio to teach while 20% encouraged teachers to use radio once in a while to promote the pupils language. 100% of the head teachers reported that they got programme time tables after the they had drawn their school time tables.

D. Observation schedules

The researcher observed that the 100% of the teachers observed never schemed or planned for the radio lessons; it was also observed that although some classes had many pupils the radios were powerful enough to be clearly heard by all the pupils in the class. Many pupils were seen to be taking simple notes as the lesson continued. 100% of the teachers observed did not introduce their lessons but after the lesson they summarised the lesson using notes they had been taking on the chalk board as the radio teacher taught.

The researcher noted that the pupils enjoyed the radio lessons, many attempted answering questions from the radio teacher and they seemed disappointed when the lessons ended.

4.3 Findings

1. KIE did not provide teachers with radio broadcast support materials, this discouraged many teachers from using the radio programmes.
2. KIE did not send radio programmes time table early enough to allow schools incorporate programme time table, into their block time table.
3. Teachers never planned for the radio lessons, even those who used the radio to teach they just went to the class not knowing what they were going to teach. This led to lack of effective use of radios in the classrooms.
4. Education administrators had not done much to encourage teachers use radio programmes.

5. Teachers at the grass root had no way of giving feed back and suggestions to KIE and if it there they were not aware.

4.4 Discussions

From table 4.2.1 it is evident that a good proportion (15%) of the pupils in public primary schools in Tharaka North have never been taught using radio program. This represented the percentage of the pupils whose schools did not use radio programs. This is because the school administration had done little to encourage the teachers to use radio programs; secondly it could have been, because KIE had not sent support materials and the teachers could not prepare the lessons.

The clarity of the radio sound was a perception by the pupils. Table 4.2.2 shows that most of the pupils (over 96%) receive the radio sound quiet clearly. This is from the fact that the radio program was aired through the normal KBC radio studios.

In terms of the language used by the radio teacher, a large proportion (35.3%) of the pupils reported that it was at least not easy for them. This is shown in table 4.2.3. This is a great challenge since listening which contributes to the process of learning (Hayter 1974) is a function of the level of the language used by the facilitator. This implies that it is not easy for this proportion of the pupils to grasp the concepts from the radio teacher.

A similar challenge to the language used by the radio teacher, but in a bigger magnitude, was the speed of the radio teacher. Over 74%

(Table 4.2.4) of the pupils reported that the radio teacher was at times fast for them. This again implied that it was difficult for a large number of pupils to get the concepts taught by the radio teacher due to the speed.

Table 4.2.5a - Table 4.2.5e compared the utilization by the radio program by subjects. Clearly the results indicated that there existed a difference in utilization (reception of the radio program by the pupils) by subjects. Mathematics radio lessons were least utilized with 45.1% and Kiswahili is most utilized (74.5%). This problem of the difference in utilization of radio lessons by subjects due to a number of factors including lack of support material and the ability of the teacher to tell what topic the radio teacher would be tackling at what time.

The analysis of how often the teachers used radio lessons in relation to the provided schedule are given in Table 4.2.7 above. From the results only 33.3% of the teachers used the radio program almost always as indicated in the schedule. The rest (66.7%) fairly used, almost not used or did not use the radio program at all. A greater number of teacher using radio programmes is expected to be big if the school administrators encourage them. Odera (2005) notes that head teachers play a key role in the use of radio programmes in schools.

Support material was another challenge to the classroom teacher and a challenge to the whole program. Teachers require support material in time to enable them not only scheme for the radio lessons also adequately plan for the lesson. The efficiency of radio broadcast to

schools can only be realised if there is proper planning for the radio lesson, so that he can switch on the radio for a lesson which he has already planned. The more a teacher knows about a coming radio lesson, the more one is likely to effectively use radio broadcast.

CHAPTER FIVE

Summary, Conclusion and Recommendations

5.0 Introduction

The objective of this study was to establish the challenges facing the implementation of the radio programme in public primary schools in Tharaka North Division. The specific objectives of this study were;

1. To determine the challenges faced by the pupils in implementation of the radio programme in terms of the;
 - i) Clarity of the radio sound received
 - ii) Language used by the radio teacher
 - iii) Speed of the radio teacher
2. To examine if there were subject differentials in implementation of the radio programme.
3. To determine the challenges faced by classroom teachers in implementation of the radio program in terms of the;
 - i) Schemes for radio lessons
 - ii) Support materials
4. To establish what the school administration was doing to help overcome the challenges.

5.1 Summary of the Study

The objectives of this study were to be achieved by answering the following research questions:

1. What are the challenges faced by the pupils in implementation of the radio program in terms of the;
 - i) Clarity of the radio sound received
 - ii) Language used by the radio teacher
 - iii) Speed of the radio teacher
2. Were there any subject differentials in implementation of the radio program?
3. What were the challenges faced by classroom teachers in implementation of the radio program in terms of the;
 - i) Schemes for radio lessons
 - ii) Support materials
4. What was the school administration doing to help overcome the challenges?

5.2 Conclusions

From the analysis of the data in chapter four the clarity of the radio sound presented no challenge. Over 96% of the pupils received the radio sound quite clearly (Table 4.2.2). However the language used by the radio teacher and the speed of the radio program presented a great challenge to pupils in the division and thus to the programme. In terms of the language used by the radio teacher, a large proportion (35.3%) of the pupils reported that it was not easy for them (Table

4.2.3). Similarly over 74% of the pupils reported that some of the radio teachers were at times fast for them (Table 4.2.4).

Differentials in subjects in utilization of radio program were also evident. Radio lessons in mathematics were least utilized with 45.1% of the pupils reporting that they had at least been taught the subject using radio programme. On the other hand 74.5% of the pupils reported that they have ever been taught Kiswahili using radio programme. The percentage of the pupils who reported to have ever been taught English was 48%. social studies was 54.9% and a science was 51%.

Schemes for the radio lessons and support materials were challenging issues in implementation of the radio program to schools in Tharaka North Division, none of the teachers schemed for the radio lessons 100% of the teachers had not received any support material.

5.3 Recommendations

For the radio broadcasting to schools to be effectively used in public primary schools the researcher recommends the following:-

1. Kenya Institute of Education should send program time tables in towards the end of third term so that at the beginning of the year teachers can incorporate the radio programmes time table with their school block time tables.
2. Kenya Institute of Education should prepare and distribute support teaching materials in time. This will help teachers to tell what topic

will be covered when and plan for it.

3. Kenya Institute of Education should consider offering induction courses to teachers; this will enable all teachers to effectively make use of radio programmes hence reaping maximum benefit from the broadcasts.
4. Primary school head teachers should ensure teachers supervise their classes during the educational radio lessons
5. Head teachers should make sure that teachers plan for the radio lessons.
6. The District Educational officers to work in teacher advisory centres

5.4 Suggestions for Further Research

The researcher suggest:-

1. This study was done in Tharaka North Division and the results of the study may not be generalized to the entire country. Therefore a similar study on a large scope is recommended to help generalize the results.
2. The study showed that there was difference in utilization of the radio program by subjects. However the factors influencing such differentials were not the focus of the study and thus they were not established. I would therefore recommend a further study into these factors for effective intervention.
3. The study also showed that teachers faced the problems of scheming for the radio lessons and do not receive the support

materials in time. Thus an in depth study to establish the factors influencing reception of support material is recommended.

4. This study is among the few of its kind since the re-introduction of radio broadcast to schools in 2003. It therefore provides a platform for in depth studies from a very general perspective of the challenges facing the use radio broadcast to schools. In future an in depth study may focus on effectiveness of the radio program in improving the performance.

BIBLIOGRAPHY

Bako G (1983), Programme schedule, Federal Radio Corporation Education Service, Ikoyi, Lagos

Bishop G (1993) Innovation in Education, The Macmillan Press Ltd, London.

Daily Nation (28th June 2003)

David H and John R. (1985) Organizing Educational Broadcast, UNESCO Press.

Dance F. (1976) Broadcast Training Techniques, The UNESCO, Press, Parish

Edwin Nyutho (June 2007) The Curriculum Watch; Educational Broadcasting In Kenya, (pg 16, 17 and 21) official journal of the KIE, Volume 1, Nairobi.

Emile G and John K. (1980) Fundamentals of Education Planning: Communication Media in Education for low Income countries; UNESCO international institute for Education Planning.

Gall M and Borg W, (1989): Educational Research; an Introduction, 5th Edition. New York, Long man.

..... (1974), Educational Television and Radio in Britain, Central Office of Information, London.

Hayter G (1974) Using Broadcast in Schools, A study and Evaluation. The Broad water Press Ltd, Welwyn Garden City, Hertfordshire.

Ignacy w, (1972), Broadcasting for Adult Education, UNESCO, Parish.

Jamison, Dean T. et al (1978). Radio for Education and Development, Beverly Hills, Long: Sage Publishers.

Kenya institute of education Handbook, Nairobi, Kenya

Kenya institute of education (2001) Pilot study on, the broadcast to Schools on the world space satellite (Afristar).

Mialaret G, (nd) The psychology of Audiovisual aids in Primary Education, George G Harrap and Co. Ltd London Toronto Wellington Sydney and UNESCO, Parish.

Miles L. (1973) Radio production, A basic handbook for training, Kenya. EALB

Ministry of Education and Human Resource Development (1999), School Management Guide, Jomo Kenyatta Foundation, Nairobi, Kenya.

Ministry of Education, Science and Technology (2005), Sectional Paper No1, Nairobi, Government printers.

Ministry of Education Science and Technology (2005), Kenya Educational Sector Support Programme 2005- 2010. Government Printers, Nairobi, Kenya.

Mugenda M and Mugenda G. (1999) Research Methods. Nairobi, Kenya, Acts Press

Mulusa T, (1990). Evaluation Research for Beginners, Bonn, Federal Republic of Germany, Germany Foundation of International Development.

Nzioka M (Sep 1984) The Educator KIE Journal, Nairobi, Kenya.

Odera F (2005) Using World Space Radio to Improve Quality of Primary Education in Kenya at Distance, (un published research)

Okumbe J (2001) Human Resource Management: An Education Perspective, Educational Development and Research Bureau, Nairobi, Kenya.

Philip O and Sonia (1990), The World of Telecommunication, USA, Butterworth publishers

Schramm W (1977) Big media, Little Media, sage Publication
Richard A. (1971) A Manual for Training Radio Programme
Production, Paris, UNESCO

Sydney W Head (1974) Broadcasting in Africa, A Continental Survey
of Radio and Television, (Ed) Temple University Press, Philadelphia,
USA.

UNESCO (1974) New Media in Education, London. Martbrough
House.

APPENDIX A

University of Nairobi

Faculty of Education

Department of Educational Administration and Planning,

P.O. Box 30197

Nairobi.

Dear respondent,

I am a post graduate student pursuing a master's degree in Educational Administration and Planning at the University of Nairobi. I am conducting a research for my final year project which is a requirement of the degree programme. The research topic is **"the factors affecting the use of radio broadcast to schools in public primary schools in Tharaka Division; Tharaka District in Kenya."** The findings in this study will enlighten teachers, parents, educational planners, the Staffs of KIE who are involved in the preparation of the radio programmes for schools, the government and other stakeholders in education and probably put measures to improve the use of EMS in schools.

I there-fore kindly requested you to spare few minutes to fill in this questionnaire. The information obtained will be purely for the purpose of this research and will be treated as strict confidential. in order to ensure utmost confidentiality do not write your name or the name of your school any where in the questionnaire.

Thank you for your cooperation and assistance.

Abraham Mugambi N.

(M. ed student, U.O.N)

APPENDIX B

Head teachers' Interview Guide

1. Does your school have a radio?

Yes No

2. How this radio is used?

A) For news and entertainment

B) To teach through KIE radio programmes

C) It is not used currently

3. Are you aware of the KIE radio programmes to schools?

Yes No

4. If yes, when did you learnt about it?

A) Last year b) This term c) not sure

5. From what source did you learn about it?

A) From the education officials

B) It was a circular from the ministry

C) Fro other teachers

D) From radio advertisement

6. If you did not learn about it from the Ministry of Education, have you got any communication regarding radio broadcast to schools?

Yes No Not sure

7. Have you got any materials from the KIE in relation to radio broadcast to schools? Yes No

8. b) If yes, where were these materials corrected?

A) From the zone education office

b) From the Doe's office

c) They were brought

9. Do teachers use radio programmes to teach?

Yes No

B) if, are these radio lessons in the block time table?

Yes No

10. Does your school have the programmes time table from the KIE?

Yes No

B) If it is there, when was acquired?

a) Just the other day

b) The beginning of the year

c) In the middle of the term

11. Are these programmes of any value to the teacher

a) Yes b) Not sure

12. As the head teacher how do you encourage teachers to use radio programmes?-----

13. What challenges face radio broadcast programmes in your school?

A).....

b).....

c).....

14. What is your office as the head teacher doing to help teachers to overcome the challenges?

a).....

b).....

15. What do you think as the head teacher should be done to overcome the challenges?

a).....

APPENDIX C

Interview Schedule for the District Education Officer

1. Do all the schools in your division have radios?

Yes No

2. How do KIE radio programme materials reach the schools in your division?

a) Head teachers come for them

b) Head teachers make their initiative to collect the from KIE

c) I don't know

3. Are you aware of any challenges facing teachers as they use radio programmes to promote the quality of learning in schools?

Yes No

4. Has your office held any session with teachers to orientate them on how to effectively use radio programmes to teach?

Yes No

5. Have done any effort to evaluate the effectiveness of radio broadcast to schools in your division?

yes No Planning to

APPENDIX D

Pupils Questionnaire

Instruction

This questionnaire is intended to help in an investigation of factors that affect the use of radio broadcast to schools in primary school in Kenya. You are kindly requested to complete this questionnaire by indicating your honest response. Respond by writing or putting a tick (✓) where required. All information will be treated with strict confidentiality; do not therefore write your name or the name of your school.

1. Have you ever been taught by your teacher using a radio this week?

Yes No

2. If no, would you like your teacher to teach you using a radio?

Yes No I don't know

3. If you have been taught using a radio, what subject(s) were you taught using a radio?

English

Kiswahili

Mathematics

Social studies

Science

4. How did you like the radio lesson?

Very much much fair not very much
not at all

5. How was the speed of the radio teacher?

Too fast fast Average slow
very slow

6. How do you rate the language of the radio teacher?

Very Difficult difficult Fair easy
very easy

7. Generally how clear is the quality of radio sound?

Very clear clear fair almost not clear
Not clear

8. Was the teacher in class?

Yes No

9. If yes, did the teacher make explanations after the radio lesson?

Yes No

10. How do you rate the duration of the radio lesson?

Very short short Fair long very
long

11. How often do you think your teacher should use radio to teach you?

Always often fair almost not at all
not at all

12. What happens during the radio lesson?

All the pupils listen and write notes
Some pupils listen and write notes
All pupils seat and relax
Some pupils just seat and make noise

13. How do you rate the radio teacher?

Very good Good Fair Poor
very poor

SECTION B

If your teachers have never taught you using radio please answer the following questions.

13. How often do you listen to a radio programme?

Every day almost every day fair almost never
never

14. Whose radio do you use?

I have mine Family radio Friends

15. Which of these stations do you listen to more often?

KBC Kiswahili station

KBC English service

Citizen radio

Vernacular station

16. Have you heard of a radio programme that teaches what you learn in schools?

Yes no

17. From what you have heard about the programmes, do you think your teacher should use radio programmes to teach you?

Yes no

APPENDIX E

Teacher's Questionnaire

Instructions

This questionnaire is intended to help in an investigation on factors that affect the use of radio broadcast to schools in public primary schools in Tharaka North Division. You are kindly requested to complete this questionnaire by indicating your honest response. Respond by either writing or putting a tick (✓) where required. All information will be treated with strict confidentiality; do not therefore write your name or the name of your school.

1. Are you aware that KBC is broadcasting programmes for schools?

Yes

No

2. Does your school have a radio?

Yes

No

Not aware

3. How often do you use radio programmes?

Always almost always fairly used almost not
not at all

4. If yes, how often do you scheme for the radio lessons?

Always almost always fairly schemes almost not
not at all

5. How often do you receive support materials to accompany radio lessons in time?

Always almost always fairly on time almost
not at all

6. How do you rate radio broadcast to schools?

Very Good Good Fair good poor
very poor

7. How do you rate the clarity of the radio sound?

Very Good Good Fair Poor
very poor

8. According to you, how informative are the radio programmes to the pupils?

Very informative informative fair
Not very informative not informative at all

9. How do you rate level of language used by the radio teacher?

Very simple simple fair difficult
very difficult

10. Do you think school administration has a significant role to play to enhance the effectiveness of radio broadcast to schools?

Very significant significant fair significant
almost not significant Not significant at all

11. Do you think radio broadcast to schools has been of value to your teaching?

Very valuable valuable fairly valuable
not valuable Not valuable at all

12. How many streams is your class?

One stream

Two streams

Above three streams

13.If your class has more than one stream, where do you meet your pupils when you are using the radio programme to teach, briefly state where you meet your pupils?

.....
.....
.....

14.Specify any aspect of the radio broadcast to schools that radio teachers need to work on to improve the quality of radio lessons.

A).....
B).....

SECTION B

If you have never used the radio programmes to teach please fill in the following simple questions.

18.Have you ever seen any other teacher in your school using the radio to teach?

Yes No

19.What about teachers in the neighbouring schools?

Yes No

20.If yes, what has been their feeling concerning the radio programmes?

Very resourceful resourceful fairly resourceful
Not resourceful not resourceful at all

21.Have you privately listed to the radio broadcast to schools?

Yes

No

22.If yes, how did you rate the quality of the programme?

Useful to teachers only

Useful to both teachers and pupils

No sure

23.Generally how do you rate the quality of radio sound?

Very good Good fair poor very poor

APPENDIX F
OBSERVATION SCHEDULE

	<i>Item to observe</i>	<i>observation</i>
1	Before the lesson does the teacher ensure all pupils are comfortably seated and ready prepared for the radio programme?	
2	If the class has more than one stream have the classes been combined?	
3	Does the teacher make the introduction of the radio lesson before the radio lesson?	
4	Who is operating the radio?	
5	On what location has the radio been placed in class?	
6	How clear are the radio signals?	

7	Are students making own notes are attentively listening?	
8	Are all the pupils attentive or some are making noise?	
9	Does the teacher seem to be taking notes of any word that may be need explaining after the lesson?	
10	How quickly are pupils responding to questions asked by the radio teacher?	
11	Has the teacher made any summary after the radio lesson?	