

**THE USE OF RADIO AND TELEVISION AS EDUCATIONAL AND
INSTRUCTIONAL TECHNOLOGY IN THE TEACHING LEARNING
PROCESS OF HISTORY AND ENGLISH IN SENIOR SECONDARY
SCHOOLS WITHIN MAFIKENG DISTRICT OF THE NORTH WEST
PROVINCE, REPUBLIC OF SOUTH AFRICA**

BY

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OF SOUTH AFRICA**

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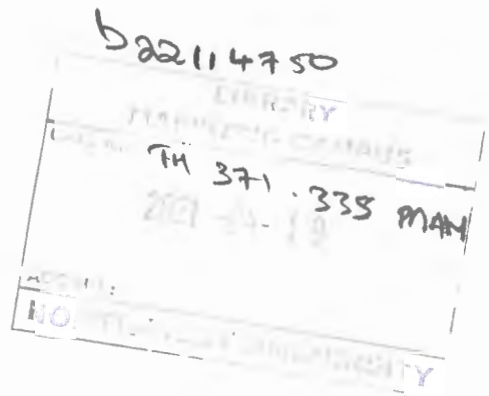
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DECLARATION

I declare that the dissertation for the degree of Master of Education at the University of North-West hereby submitted, has not previously been submitted by me for a degree at this or any other university, that it is my own work in design and execution and that all material contained herein has been duly acknowledged.

Whitaker

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CERTIFICATE OF ACCEPTANCE

This dissertation entitled “The Use of Radio and Television as Instructional Technology in the teaching-learning process of History and English in Senior Secondary Schools within Mafikeng District of the North West Province, Republic of South Africa,” written by **MPHO CELEST MAHLAKOLENG (Student No. 10163492)** of the Department of Teaching and Curriculum in the Faculty of Education, University of North-West, is hereby recommended for acceptance for examination.

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DEDICATION

In memory of M.A.B. Degenhardt (1982) who argued that "The utilitarians seem to be mistaken in supposing that a satisfactory theory of value can be based on the happiness criterion alone".

ACKNOWLEDGEMENTS

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These professionals, in their own right guided me (the researcher) with an open spirit and encouraged me in everything that I needed to be successful. The National Research Foundation (NRF) assisted me in funding this Research Project.

ACRONYMS

ABET	-	Adult Basic Education and Training
COLTS	-	Culture of Learning, Teaching and Service
NQF	-	National Qualifications Framework
NSA	-	National Skills Authority
OBE	-	Outcomes-Based Education
SAQA	-	South African Qualifications Authority
SDA	-	Skills Development Act
ETD	-	Education, Training and Development
SABC	-	South African Broadcasting Corporation
EDC	-	Educational Development Centre
NFER	-	National Foundation Education Research
ER	-	Educational Radio
ETV	-	Educational Television
ERT	-	Educational Radio and Television
DET	-	Department of Education and Training
INSET	-	In-Service Education and Training
ETDP	-	Education Training and Development Practices
FET	-	Further Education and Training
HET	-	High Education and Training
SETA	-	Sector Education and Training Authority
SDPU	-	Skills Development Planning Unit

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ABSTRACT

The main purpose of this study was to investigate the effective use of radio and television as instructional tools by History and English educators during presentations of their lessons, in senior secondary schools. It was an investigation into factors that influence the effective use and utilization of educational radio and television lesson delivery in selected high schools in Mafikeng.

The investigation involved 84 educators from ten senior secondary schools in Mafikeng District. Questionnaires, semi-structured interviews and lesson observation methods were used for data collection.

Results obtained showed that approximately 75% of the educators indicated their preparedness for and use of educational radio and television for lesson presentation. Senior secondary History and English educators were very willing to use radio and television in classrooms for their lesson presentations. Results also revealed a very significant relationship between educators' rating of radio and television use and learners' reaction towards usage.

However, a number of problems have been identified in relation to the use of radio and television. Educators face the problem of expertise and skills required for using them. Other problem areas are: time management, adequate teaching material, stress and tension. Results obtained on educators' attitude towards use of radio and television proved that most of the educators felt incompetent to handle and use these instructional tools. They indicated a strong desire for training in specific areas.

It was concluded that a comprehensive in-service programme for educators must be developed. Such a programme would include, not only training in the use of radio and television, but also motivation and encouragement for the self-development of educators. Secondly, support must be given to educators in order to create conditions that lead to the effective delivery of learner-centred approaches. Finally, the needs of educators at this point in time must include priority research into successful integration of technology in teaching at all levels of the school curriculum.

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Technology has come into education with a big bang and is likely to influence all aspects of education and training. According to Naidoo (1997), South Africa needs a whole new culture of education and training. Such a culture should be unpacked by a commitment to a flexible, learner-oriented approach that uses combinations of strategies that are appropriate to the needs, demands and circumstances of learners as well as education and training providers, groups from the community, industry and government. He further argued that technology could undoubtedly be used to improve the quality of education.

This study was directed to the usage of educational radio and television programmes for classroom lesson presentation in public schools within Mafikeng District of the North West Province, Republic of South Africa. As teachers strive to design lessons and use media to communicate their lessons effectively with students, they may be interested in what the students perceive as accountable and effective teacher- behaviour.



In a survey of teachers' utilization of media in elementary schools, Tiene (1996) investigated the status of instructional media and material utilization by teachers in elementary schools in the United States of America. He concluded that teachers do not use much instructional media in their teaching because of (i) lack of availability of instructional media, (ii) lack of prior training and (iii) lack of appropriate resources in schools, for example electricity.

This study then assumed that it might be similar to the case in South Africa, where most black disadvantaged schools lack facilities and educational resources (Naidoo, 1997: 3). In South Africa, the Department of Education is using technology enhanced learning environment as a catch all phrase to describe the use of technology in any teaching-learning environment for any educationally related purpose.

There are different types of technologies, which are predominantly of a wide range of information and communications technologies right through, from the print book and other printed materials to television and radio to multimedia computers and the Internet.

Technology, Naidoo (1997), says, can be used to redress the imbalances of the old education system and help in developing new teaching and learning strategies, and empower learners for participation in the democratic process. These, of course, can only happen if suitable organizational, curricular, and instructional decision-making processes are put in place.

People have constantly searched for means of passing information beyond the normal range of human vision and hearing for a long time. According to Symons (1989), the word tele is derived from the Ancient Greek for 'at a distance', while 'phone' means writing or drawing.

According to Steward (1978), educational technology can be inappropriate in developing countries due to dependence on the practices rather than the principles of educational technology. Practices have, inevitably, a cultural dimension, and it is proposed that the solution to the problem is the clearer identification of principles and the encouragement of educational technology to work from practices.

It is generally believed that audio and visual media play an active role in the transfer of knowledge and provide different types of motivation to the learner as suggested by Erickson (1965). The Edutel Programme for Education, according to Moses and Croll (1989), which was broadcast by the then Bophuthatswana Television in the early 90s, had the same educational objectives and aims to teach and reach audiences in numbers. Erickson further argued that when television was introduced in the field of education, two different views were strongly expressed by the academic community. One group anticipated advances in the style and standard of teaching and the other maintained that television involves a superficial treatment of topics and views. However, there was a consensus view that television could be used to supplement classroom teaching.

Since radio and television are thus regarded as powerful audio-visual tools in the teaching- learning process, one might expect that educators would use them in their own teaching duties, both to enhance their teaching and to model their use for their students. The approach adopted in this research, which includes teacher utilization of media in the classroom, allows teaching to be linked to learning outcomes in audio-visual literacy.

Although it is difficult and challenging to find new ways of teaching and organizing information, educational researchers and theorists like Erickson have suggested that pedagogy including how teachers use technology is beyond mere information giving.

Audiovisual media can develop an awareness of problems, open up possibilities for exploration, present meaningful preliminary information, and thus open up avenues to new activity. Teachers should be aware of other possibilities for developing readiness to learn (Erickson, 1965:22).

According to Bage (1997), attempts to construct a conceptual framework for education television and radio have been made before, starting from practical experience. The structure and content of the present framework are based on empirical evidence on learning and instruction. He further indicated that there is substantial survey evidence that almost three decades after the computer was first introduced in schools, it has not brought about a wide spread revolution in methods of teaching or in school structure and organization (Bage, 1997). Hence this study attempts to investigate how radio and television influence the teaching-learning process of History and English in senior secondary schools.

1.2 STATEMENT OF THE PROBLEM

Presently radio and television are being used by educators and researchers in our schools. Such media usage has been encouraged because of its effectiveness in lesson presentation as well as its success in specific outcomes of the learner in the pedagogy.

The question one may ask is whether our educators actually use these media effectively in their day-to-day work. Do History and English educators in senior secondary schools in the Mafikeng district use radio and television effectively in their daily teaching? This study aims to find out the frequency and the effective utilization of radio and television media as well as factors that may affect the use of these tools in senior secondary schools in the teaching of History and English around Mafikeng District.

1.3 RESEARCH QUESTIONS

The following key questions are regarded as important in determining the extent to which History and English teachers use educational radio and television (ERT) in their lessons. They also provide the focus of the study.

- (i) Does educational radio and television stimulate learners' interest and their attention?
- (ii) Are there any differences in using educational radio and television in History or English lessons and the traditional way of teaching?
- (iii) Are learners' skills and concepts enhanced when teachers use educational radio and television during lesson presentation?
- (iv) Can educational radio and television be effective tools for extending the curriculum?

1.4 PURPOSE OF THE STUDY

This study mainly focuses on the following problems:

- 1.4.1 To investigate the use of radio and television normal teaching of History and English, in senior secondary schools around Mafikeng District.
- 1.4.2 To determine the challenges and or problems which History and English teachers face in the use of radio and television in their lessons in senior secondary schools around Mafikeng District. Such determination may help establish radio and television as tools for extending the curriculum positively or otherwise.
- 1.4.3 To recommend, where possible, alternative ways of encouraging educators to use educational radio and television in the teaching of History and English in senior secondary schools around Mafikeng District, so as to stimulate learner interest in the classroom discourse.

1.5 RATIONALE

It is hoped that this study will highlight the effectiveness of using radio and television in the teaching of History and English in senior secondary schools within Mafikeng District. This might also raise educators' awareness about the importance of instructional technology in pedagogy.

1.6 LIMITATIONS

This study was conducted in senior secondary schools within Mafikeng District in the North West Province in South Africa. This sets a limit to the use of the results in an extensive manner.

1.7 DEFINITION OF TERMS

The practice of education is fraught with many concepts that often conjure more than one meaning or usage. Every term has a specific meaning and in order not to risk any misunderstanding, it is important that we start defining the meaning of educational technology, instructional technology, radio and television educational programmes, History and English, educators, lesson presentation, senior secondary schools, instructional tools, Mafikeng District, public schools, trained and untrained educators in the use of educational radio and television.

The term 'educational technology' is used as a generic descriptor and is intended to include other terms such as instructional technology, educational media, learning technology and other such variants (Robert and Donald, 1977).

1.7.1 INSTRUCTIONAL TECHNOLOGY

According to Robert and Donald (1997), instructional technology is the theory and practice of design, development, utilization, management and evaluation of processes and resources for learning.

As is evident in the definition, the field is described in terms of five-domains namely design, development, utilization, management, and evaluation. Its practical goal is the efficient utilization of every method and medium of communication, which can contribute in the development of the learner's full potential.

In its more familiar sense, instructional technology means the media born of the communications revolution that can be used for instructional purposes alongside the teacher and textbook (Robert and Donald, 1997). In the context of this study instructional technology refers to educational technology.

1.7.2 EDUCATIONAL TECHNOLOGY

Educational technology, according to Robert and Donald, is a complex integrated process involving people, procedures, ideas, devices and organization, for analyzing problems and deriving, implementing, evaluating and managing solutions to those problems, involved in all aspects of human learning. In the context of this study educational technology refers to instructional technology.

1.7.3 RADIO AND TELEVISION PROGRAMMES

Radio and television programmes are programmes which are presented by the South African Broadcasting Corporation (SABC) in different channels of communications whereas, educational radio and television (ERT) are educational programmes presented by the SABC in assisting the teaching-learning process in the education system in South Africa.

In the context of this study Radio and Television programmes refer to programmes presented by South African Broadcast Corporation for educational purposes.

1.7.4 HISTORY AND ENGLISH

According to the Department of Education (1997: 13), Republic of South Africa, in the Policy Document of Senior Phase (Grade 7 – 9), History is a taught subject and forms part of Human and Social Sciences learning area. In Human and Social Sciences, learners are expected to demonstrate a critical understanding of how South African society has changed and developed. English as a taught subject is, according to the Policy Document, Language, Literacy and Communication learning area. In Language, Literacy and Communication, learners are expected to understand the meaning of words and be able to apply that in communication.

1.7.5 LESSON PRESENTATION

Lesson presentation is a formal process of disseminating information to learners through various uses of resources and different approaches by educators.

1.7.6 EDUCATOR

A person whose work involves educating others at all levels of education in formal education or training context, for example teachers, lecturers, parents, youth counsellors. In this report, educator is used to mean teacher.

1.7.7 SENIOR SECONDARY SCHOOLS

Senior secondary schools refer to all public and non public schools ranging from grade 10 to grade 12 in terms of the South African Schools Act 1997. In the context of this study the senior secondary school refers to high schools, for example Kebalepile High School.

1.7.8 INSTRUCTIONAL TOOLS

Instructional tools are devices used by teachers to support the process of teaching and learning in the educational system for example radio, television, chalk-board, computers and so forth.

1.7.9 MAFIKENG DISTRICT

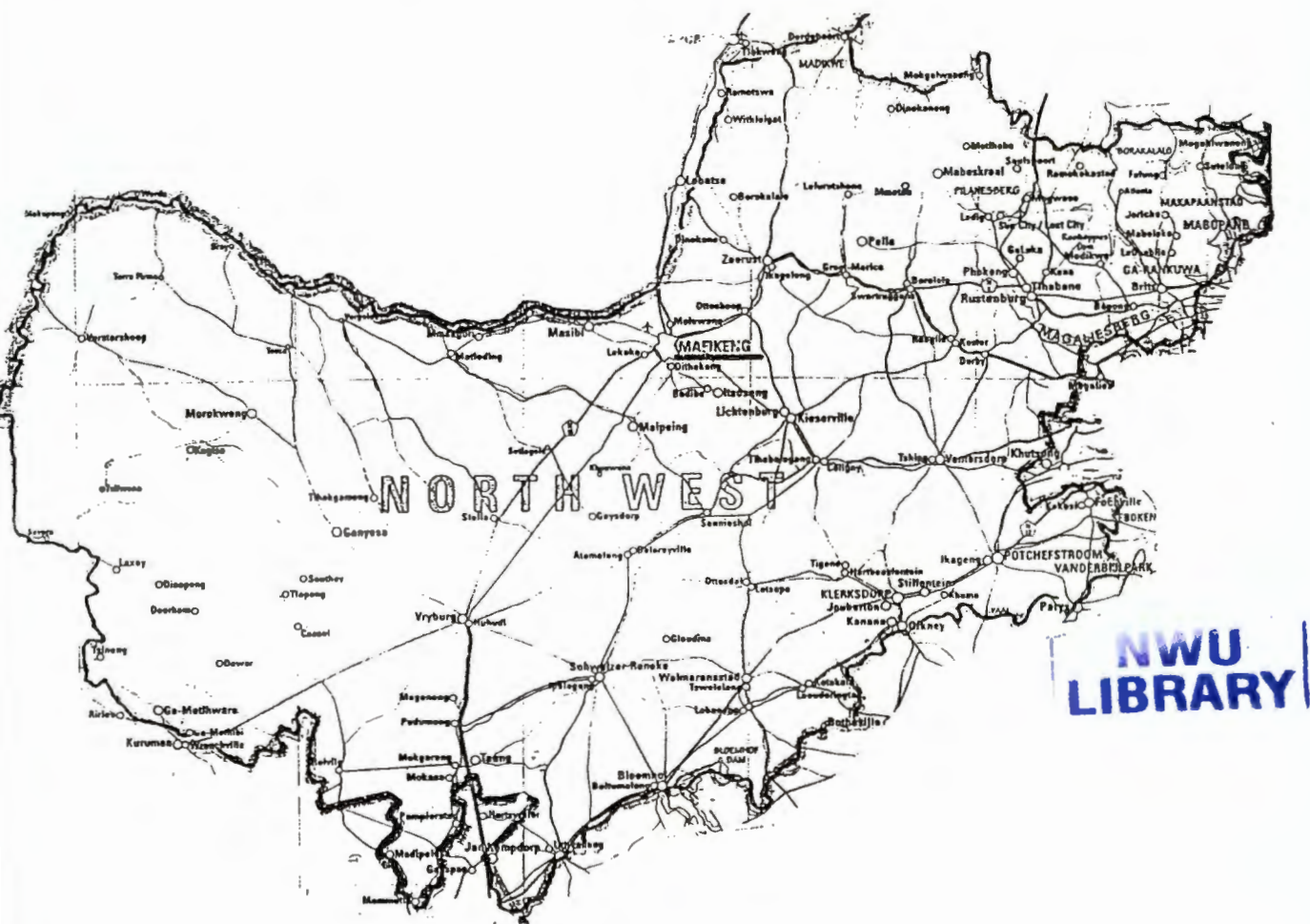
According to the Constitutional Assembly (1996), Mafikeng District is one of the districts in the North West Province. It is one of the biggest districts composed of rural areas, peri-urban and urban towns within the Mafikeng Municipality. Mafikeng City is the capital of the North West Province, Republic of South Africa. The diagram below (See Page 11) is a map of North West Province showing Mafikeng District.

1.7.10 TRAINED AND UNTRAINED EDUCATORS IN THE USE OF EDUCATIONAL RADIO AND TELEVISION

Training in radio and television as instructional tools is offered in different tertiary institutions in South Africa. The use of traditional methods and approaches in teaching can be referred to as "dead wood" which must be

removed from our day-to-day teaching of subjects. Teachers with technical knowledge of radio and television coupled with professional knowledge of instructional technology, teaching methodology and who have qualifications in that regard are set to be called trained educators in the use of educational radio and television. Whereas vis-a-vis those without training are called untrained educators, meaning that they have not received any form of technical training regarding the use of radio and television as instructional aids.

7.11 Map of North -West Province showing Mafikeng District.



1.1: Burkley, E. and Neshe, W. (1992)

1.8 ORGANISATION OF THE REPORT

The chapters and major headings of this study are organised as follows:

Chapter 1: Introduction to the study

In this introductory chapter the research discusses the background of the study and defining the statements of the problem. The research questions with regard to the field of study are also outlined together with the purpose of the study and definitions of the different terms used in the research are also explained.

Chapter 2: Review of Related Literature

In the second chapter the researcher broadly presents literature that is related to the use of radio and television for lesson presentation, e.g. History and English subjects in senior secondary schools. The chapter also outlines the key subject headings like, educational radio and television, media and pedagogic science, operational dynamics, teachers' attitudes towards radio and television, students' attitudes towards radio and television, as well as their implications for change in education in the Province.

Chapter 3: Research Methodology

The method used to collect data is discussed in this chapter. The sampling method and instrumentation are indicated in this chapter.

Chapter 4 : Data Analysis

Chapter 4 deals with the analysis of the collected data.

Chapter 5: Discussion and Recommendations

Chapter 5 deals with discussions of the findings based on the problem statement of the research and the recommendations thereof.

CHAPTER TWO

2 REVIEW OF LITERATURE

2.1 INTRODUCTION

Instructional aids cover instructional tools like white-board, chalkboard, overhead projector, textbooks, record players, television and others. They are used to supplement instruction that is otherwise given in fairly conventional format. They do much to enhance the quality of learning and teaching. A useful review of the background of instructional media research is discussed as follows.

Teachers need time for both professional and curricular development activities such as learning new skills, preview software, exploring available resources, creating new lessons, if success is to be achieved. For teachers to use technology well, multiple types of support are needed. In instructional development, one is often advised to take individual perceptual preference into account when designing audiovisual materials. Accordingly, in all models of instructional development the perception is to adapt one's design to the learner (Educational Development Centre: 1996).

For radio and television to be a force of change in education, their use must be conceived as part of a holistic educational process.

No amount of radio and television programming will, on its own, realize a system of lifelong education. It must fit into a restructured system of education and training in the teaching-learning process.

The perception in the report of this study is not about technology media instruction supporting education but it is about the effective use of radio and television as instructional educational technology.

2.2 EDUCATIONAL RADIO AND TELEVISION MEDIA AND PEDAGOGIC SCIENCE

2.2.1 Introduction

Learners are exposed to a wide variety of products and systems. The researcher is aware that learning is much more than gathering information in a well-designed teacher-centred environment. Learning is promoted when students pursue individual interests, when they build on prior knowledge and when they engage in hands-on and authentic activities. According to Robert and Donald (1997), most teachers today are quick to recognize the importance of using technology in their classrooms, but numerous barriers can block implementation efforts. These barriers range from personal fears (what will I do if the technology fails and my lesson cannot proceed? how will I gain the confidence I need?) to technical and logistical views. In view of that, the teaching-learning process involves knowledge of how people perceive communication and learning.

At present, according to Prinsloo and Cristicos (1991: 51), schools are not taking adequate care of this vital aspect in learners' education. Instead they cling to traditional modes of teaching, which are dominated by and emphasize a set of basic skills embodied in the three Rs - reading, writing and arithmetic.

These basic skills are seen as being fundamental to any learner's education, noting that the aural and visual material provides a rich and fruitful environment to children. For instance, learners must see and hear what an educator is explaining to them in order to be in a position to understand better what is communicated to them. The use of media has to be integrated into a system of teaching. It must be used with a purpose, which must be clear for both teacher and students. The emphasis placed on these skills is a conscious choice made to produce a specific educational result.

One of the main benefits of television is that it allows educators to teach students in a way that is familiar to them. "You're bringing them into the curriculum as interested thinkers who want to think critically and look at history, geography and language arts from a perspective", so says Jeppesson and Moss (1990: 5). In order to disseminate information to learners, the educators should ensure that there are no barriers.

For example, if the educator is not vocal enough to reach the learners, the aural part of the information will not get across.

We are not interested in sitting kids down to watch a two-hour movie instead of doing the work in school. What's important for me is not, don't read the book, see the movie, but rather, read the book, see the movie and think about what difference media does to a story. We want to show students that there is a connection between books and television. And some educators find that their students are more interested in reading a book if they have seen the movie version of the story first (Richards, 2000:2).

Most of those who are now in important decision making positions in education and development in the Third World were not educated by radio. The schools they went to did not use radio to supplement teaching.

Educators and parents in the United States of America have long lamented the relative lack of good television for kids, but what about radio? United States of America today reports that children are training in more than ever for entertaining and educational kids programming on radio (Richard, 2000:2).

In order to plan television for teaching, someone must know how to teach, someone must know what to teach and someone must be able to translate the what and how into television. Television on National Further Education Research survey for the BBC by Bage (1997), remains a highly significant and popular classroom resource for history and across the primary curriculum. When 39 regular users from across primary and secondary schools were interviewed by him, teachers identified how broadcasts contributed to pupils learning by:

- Bringing a subject to life for example recreating images from the past;
- Stimulating children's interest through use of media techniques, and their attention and motivation;
- Stimulating recall of factual information for example a dramatic landmarks account of London in 1665 - 66 was noted by one teacher after an inspection team visited the school and questioned the pupils about what they had learned in history. The teacher was pleased with the amount of information pupils were able to recall on the subject. I think it was because of the visual image they had from TV programmes;
- Enhancing skills and concepts for example Learning, demonstrating, questioning and teacher's credibility (Bage, 1997:2).

Such tacit knowledge about the perceived general benefits of using educational television, reflects the thoughts of experienced researchers into learning. It is true that attempts to construct a conceptual framework for educational television and radio have been made before, starting from practical experience. What is important is that the structure and content of the present framework be based on empirical evidence of learning and instruction (Bage, 1997:4).

2.2.2. PROBLEMS RELATED TO THE USE OF EDUCATIONAL RADIO AND TELEVISION

Lack of adequately qualified English and History educators in the use of educational radio and television has been a matter of great concern in developing countries (Steward, 1978). Educators who are not clear with regard to the use of radio and television as instructional tools are confusing and irritating to pupils.

It is, therefore, important that English and History educators should have suitable academic qualifications and remain students for as long as they are teaching. The potentially successful educator should therefore, have qualifications, which will determine his/her subject knowledge and teaching ability.

Oliver (1988: 96), mentions that teaching-learning problems could develop if educators have no knowledge of the theory and practice of the art and skill of education, with specific reference to the choice of teaching methods, teaching and learning aids and evaluation of students. The results of this study, as indicated in Tables 12 and 13, show that a less percentage both English and History educators do not use educational radio and television for their lesson presentation.

2.2.3 Operational dynamics

As the evolution of technology came about, educational and instructional media were innovated. Steward (1978), for example, has pointed out how in developing countries, an earlier emphasis on media and visual material has evolved into a new emphasis on objectives until the current state of educational technology could be said to be an objectives-based mediated instructional system. Such system could be developed by increasing and upgrading teachers.

This suggests that educational technology if used effectively creates a better learning situation for the learners and helps educators better and faster.

Bage's review of research on learning (1997) made fundamental suggestions. The perception that students have about a medium and the purposes they have for viewing, influence the amount of effort that they put into processing of the message and, consequently, the depth of their understanding of the story.

Bage's fundamental argument relates to how crucial it is for a teacher to explicate for his classes permissive reasons to view and to learn, as well as his role in contextualising the educational experience of watching television. To evaluate television in relation to other media of learning requires familiarity with the limitations and capabilities of each.

At the First Institute for Education by Radio, in 1930, Stavitsky (1993) argued that research was important for education broadcasters because sometime the other broadcaster will have to prove definitely to the teacher and the superintendent and ultimately to the taxpayer that the student has received something better by the radio than he/she could have had through the ordinary processes of the classrooms. Today's students have grown up with television, it has been a part of their lives even before setting foot in the classroom. The medium is familiar and accessible, and because of these attributes, some teachers are finding that television can be an important tool in their classes.

It is something the teachers have got to look at and make decisions regarding how they are going to use that in a classroom. Teachers are generally expected to do more than that, they are required to work (Bage, 1997: 9).

The researcher's experience is that most objectives can be achieved with different instructional media. Teachers are in a better position to choose whatever educational media they feel they understand better in their classroom teaching. The researcher has also learned from experience that learners' response becomes more exciting when a variety of educational media is used. The problem of individual instruction, for example, can be solved by using instructional media which would enable students to progress at their own pace and to increase interest in school work (Bage, 1997: 9:).

Mcanany and Jamison (1978:28), argued that almost from the time radio was invented there has been interest in its potential educational role, especially in the late 1920s and 1930s.

Though there is a substantial past history in the use of instructional radio, few studies of its effectiveness do exist. Research, according to Mcanany and Jamison (1978), clearly indicates that radio is effective in instruction. Experimental studies comparing radio teaching with other means of media have found radio as effective as the so called conventional methods. The conventional alternatives to present systems fall into several relatively simple categories, according to Mcanany and Jamison.

These are: (i) changes in teacher quality (that is, level of ability, education or experience), (ii) changes in the average number of hours per week and weeks per year the students stay in school, (iii) changes in the quality of books and other support material available per student and (iv) changes in the utilization rate of classroom.

Pupils' motivation levels can be altered by teachers. This is contrary to the views held by most teachers. What teachers do in class, does have impact on student motivation. According to Osborne (1991:4), motivation cannot be assumed, teachers must use interesting approaches and other means to raise motivation levels of pupils. He mentions that motivation increases as pupils become interested in the subject area and hold more positive perceptions of themselves and their teachers.

Therefore, teachers must work consciously to build pupils' self concepts, because readiness is a function of ability, previous experience, maturity and motivation.

Newcomb, Mc Cracken, and Warmbrod (1986:18-30) indicate that a student's motivation provides a base for making instruction interesting and useful and that readiness is a prerequisite for learning. Therefore the subject matter and learning experiences that begin where the learner is, should be provided.

Pupils exhibit their readiness for instruction through the interest and enthusiasm they show when a new instruction unit is introduced, and by the questions they ask, their level of achievement and how they act in the classroom and laboratory.

Teachers achieve more in the classroom when they pay attention to the comments and actions of their students which indicate that they lack the knowledge, skill, or experience essential if they are to achieve the teaching objectives for a particular course or instructional unit. When it is evident that they lack the prerequisite knowledge, skill, or experience, the teacher must provide or arrange for remedial teaching to make it possible for students to achieve the instructional objectives.

This incorporates organization of the lesson and the preparedness of the teacher. There should be clarity in the transition from one part of the lesson or activity to another. Teachers who are task-oriented easily convey the feeling that “we have important things to do, so let’s get to it” (Osborne, 1991:4).



Clarity in teaching requires giving many examples, asking clear questions, giving directions, providing models of performance, etc. Teachers who demonstrate clarity in their teaching explain concepts in a manner that can be understood by students, make points easy to understand and answer questions in an intelligent and complete manner (Newcomb et al, 1986:29, Osborne, 1991:4;).

Students of teachers who exhibit clarity in their teaching don't have to spend a great deal of time attempting to figure out what is going on. If they don't understand, they will ask a question which will result in an easy to understand explanation of the concepts being taught and how they relate to the world that is real to them (Newcomb et al, 1986:29).

Teachers have a number of opportunities to clarify the meaning, organization, and structure of the subject matter during the actual teaching of each instructional unit. Firstly, pupils should be aware of and accept enthusiastically rather than passively the learning outcomes to be achieved. Pupils should know and understand the instructional objectives being sought if they are to perceive the instruction meaningfully. Teachers should provide structure to subject matter by making it clear how the various topics or instructional units of the subject fit together, making it clear when one topic ends and another begins, as well as making evident the interrelatedness of topics, to enable pupils to see and understand the organization and meaning of subject matter (Newcomb et al, 1986:28). The use of relevant instructional materials, definitely brings about clarity, understanding and meaning in student learning.

Active learning implies involving pupils in reading, questioning, answering, performing, experimenting, and similar activities. On the other hand, passive learning involves sitting at a desk or standing in the laboratory and listening to a teacher or watching a demonstration with little or no interaction.

For both the learner and the teacher, learning is an active rather than a passive process because learning occurs when pupils through their own activity become changed in behaviour. Pupils should process what is to be learned in such a way that it is meaningful and understandable, so that it can be learned and retained (Newcomb et al, 1986:37; Osborne, 1991:4).

Through their own activity, study, and practice that is directed and supervised by the teacher, pupils acquire, retain and use knowledge, skills and attitudes. Therefore, a pupil's role/activity in learning should be constantly monitored by the teacher (Newcomb et al, 1986:37; Osborne, 1991:4;). Teachers should use a variety of teaching techniques and materials in a given class/period to maximize learning. The use of variety or variability is positively correlated with pupils achievement. Using a variety in teaching requires the provision of a broad range of activities and tasks so that pupils can be involved actively in the acquisition and application of knowledge and in the development, practice and use of skills(Newcomb, et al, 1986: 37-38).

According to Osborne (1991:4) the more active the pupils are as learners, the higher their motivation and performance levels. The enthusiasm of the teacher is an attribute that is considered to be a major factor contributing to the motivation of pupils. According to Newcomb et al (1986:31) complete involvement in teaching, dedication, commitment, and sincere concern for pupils and their achievement are attributes that pupils use to describe teachers who

model enthusiasm. Such attributes can be maximised with intensive use of media.

Newcomb and his colleagues further mention that teacher enthusiasm is a behaviour that research substantiates as being positively associated with the achievements of pupils. Teachers' movement, gestures and voice inflections are considered to be factors that pupils associate with teachers' enthusiasm.

Osborne (1991:4) again indicates that enthusiasm is a combination of teacher traits such as voice fluctuations and volume; facial expression; eye movements and contacts; gestures, use of highly descriptive words, acceptance of pupils' ideas, and overall energy level.

Furthermore, the motivation of learners is enhanced by teachers who are stimulating rather than boring, alert and active rather than apathetic and lackadaisical (Newcomb et al, 1986:31).

Finally, Osborne (1991:4), synthesized approximately three thousand research studies to identify teaching practices that have the most influence on pupils' learning. The factors that were found to enhance learning the most included reinforcement, providing advanced work for advanced pupils, teaching pupils how to read and scan resources, giving pupils homework and providing feedback, mastery learning, cooperative learning, and use of questions that require pupils to apply, analyse, synthesise and evaluate. All these as well as the extension of learners' experience in all spheres of learning achieve maximum

enhancement when instructional media becomes available most of the time.

2.2.4 Teachers' attitudes towards radio and television

It is reasonable to assume that teachers and students will be more favourable to educational radio (ER) and educational television (ET) if they feel a need for it. A student textbook, according to Newel (1995), on project skills, says that they have three interrelated components: technology, communication and management. Technology is the subject matter of the course. Communication is made up of writing and making oral and visual presentation, whereas management requires planning and time management. As a result teacher expectations of the school's television reflected stylistic conversations but also different perceptions of children's critical abilities. Bage (1997: 6) concluded that television is accessible for children who cannot read and who cannot use written words easily. Television adds to classroom experience achieved in a normal classroom situation.

2.2.5 Educational television stimulating history learning

According to Bage (1977), educational television supports learning by illustrating the discipline for children with special needs (SEN) who respond mainly to visual input. To him, television can provide quality historical images difficult to access locally, for example, if the learners' environment lacks Victorian houses but the emphasis is on

Victorian houses then video and photographs and books can provide such images as provision of visual evidence of history.

Some materials such as books, videos and photographs do reinforce teachers' explanations by tangibly clothing children's historical imaginations. Children most of the time want evidence of what happened. It is no good telling them, they want to see something. That something they want to see supports their observation of evidence. Bage (Bage,1997) believes that "You can show them (Roman toilets) and you can pause and point things out to them, it's much more alive". On the other hand learners can be shown dangerous reactions on television without any danger (Conradie, 1979:61). Teachers may also make recordings of selected aspects of a demonstration where close-up viewing is needed.

Osborne (1992:17), indicates that teachers should keep in mind that videotapes should not be used to replace first hand observation and interaction with actual material by pupils. Rather, teaching-learning aids should be used to supplement and enhance the use of actual materials in teaching. For example, videotape technology can be used to provide close-up shots of procedures and process that may be difficult to obtain during a live demonstration before a group.

Audio-visuals also play other significant roles in the effectiveness of lesson delivery. History videos for example, communicate and enliven historical information. They help to bring a subject to life within the classroom especially when providing costumes, artifacts,

and environments that are examined in sufficient depth to raise points through discussion.

In this regard, historical television should be “informative, lively showing things graphically that it would be difficult to do with still pictures, books and charts” (Bagge, 1997:4).

2.2.6 Economic Factors affecting the use of ER and ETV

When Tiene (1996) examined economic factors affecting the use of ER and ET he found a set of problematic issues. It was clear that the most significant problem was lack of sufficient funds for on- going operations. Money is usually required for maintaining or improving the quality of most professional enterprises, the quality of the equipment being used, the professionalism of the staff and the dynamism of the performers. Television demands a fairly high degree of expertise in a variety of different skill areas, including camera operation and administration. Tiene agrees that meeting all these operations can be difficult for an education television production department, especially when commercial producers can usually pay higher salaries for these types of jobs.

In the educational or school context, Naidoo (1997: 78) suggested that one of the economic factors regarding the use of ET might be the unavailability of electricity in schools. This is usually a condition that determines whether some media could be used in a particular school or not. However, the absence of electricity does not seem to prevent the use of radio and television because batteries and diesel or petrol generators can be used to operate the system. The successful use of

technologies into teaching and learning environments depends on high quality course materials.

Unfortunately, however, inadequate attention to time and money are generally devoted to the design and development of such course materials (Naidoo 1997).

In order to change this, Naidoo argues that it is necessary to redirect significant funds to course design and development processes. This requires new approach to planning, managing and allocating resources. He insists that money will need to be invested in a range of course design and development processes, in an effort to demonstrate the advantage of pooling resources and investing in the design and development of high quality course material.

2.2.7 Implications for change

In South Africa radio and television media approach has the potential to tackle critical problems of redress, access, flexibility and relevance. Currently there has been a lot of change in education in South Africa, as evidenced by Curriculum 2005 (Department of Education 1996), the new education policy and the entire restructuring of education.

Teachers' qualifications are being reviewed and most teachers are required to improve their qualifications to suit the change. Teachers now find themselves under pressure to cope with this change.

As suggested by Naidoo (1997: 9), teachers will become facilitators and managers of learning in situations where they are no longer the source of all knowledge.

Increasing proportions of their workload will include also interaction with learners, presentation of one way television broadcast and video conference that hooks up a number of remote sites. Teachers definitely will not only be delivering knowledge, but will also be acting as councillors, advisors, organizers, leaders and managers.

Bage (1997), emphasizes that teachers have to collaborate in the design, elaboration and production of tools for teaching. This is important because they will be genuine intellectual specialists in teaching and learning if they will be prepared to use the tools and be able to make informed choices of the most appropriate ones for them; but they will tend to avoid the use of instructional media if they are unable to select the appropriate media for a given task. In short, it is important that teachers acquire appropriate knowledge of how to go about selecting media for proper use.



In the formal schooling system, media can play a critical role in promoting a culture of learning and teaching. Media therefore, according to Prinsloo and Cesticos (2000), can make an immediate contribution to teacher development through radio and television programmes about new educational philosophers and methodologies. Furthermore this can happen through empowering teachers with quality learning resources they can use in the classroom.

Prinsloo and Cristicos (2000) for example, found that the South African Broadcasting Corporation (SABC) has extensive resources at its disposal and it has tended to play a positive and increasingly normal role in education. Radio airtime currently devoted to formal education purpose ranges from 2,5 hours per week for schools radio programmes to 5 hours per week for non-formal educational purposes.

According to the Department of Education and Training (DET,1997), the SABC educational broadcasting plan has been developed as a provision for an appropriate starting point for establishing a resource base in research and evaluation of technology-enhanced learning initiatives. The plan has a number of built -in evaluation, design for implementation using independent research agencies. The department also seeks to operationalize the functions outlined above as part of its process of reorganization. In this way, the Department of Education and Training (DET) and its agencies will be able to remain both cost-efficient and highly sensitive to emerging and changing learning needs.

2.2.8 Cultural considerations

It is a known fact that culture is not stagnant, it changes with time. The introduction of media also contributes in the change process of culture. The culture of learning is gradually changing as indicated by the Department of Education and Training (1997), in the Curriculum 2005 Policy Document.

Traditionally the teacher has been seen as the only knowledgeable person and what ever he/she says is perceived as correct. The teacher's approach has been a one-way communication process, which has now changed with time.

According to Frosslund (1991: 6), the amount of invested mental effort (AIME) depends on the different types of expectations, which the users build up on the basis of their experience of different media. Frosslund also found that low ability students performed better with televised story than with print.

Good use of school television might influence the home-viewing patterns even on non-educational programmes, so that people learn to gain more information from television. A teacher whose over-arching goals for students are the ability to think and clarify their own values represents another teaching style. The teacher's attitudes imply that television can teach and children can learn from watching it (Frosslund, 1991:7).

But it is important to distinguish teaching from learning. Being taught usually means suspending your own interpretation of the subject matter and reaching out to what the teacher means. Frosslund (1991: 8) argues that there are changes in the management of the classroom by using television programmes as a learning resource in small group work, rather than as a teaching aid assuming that learners need to construct personal understanding by controlling the delivery of information to suits their own learning style.

Teachers may avoid using radio and television because they are not willing to learn new ways and skills. According to Frosslund (1991: 5), teachers are often uncertain of their abilities and knowledge. New demands, for example, due to new legislated curricula, in Britain, make teachers ask for programmes as an aid in their teaching new subject and for in-service training methods. All these facts suggest that factors which influence the acceptance of radio and television will keep on differing according to society's value systems and beliefs.

2.3 HOW MEDIA (RADIO AND TELEVISION) IS CURRENTLY USED IN EDUCATION, IN THE NORTH WEST PROVINCE

It is a well known fact that in South Africa prior to 1990 all the education departments provided for the use of media, but provision was variable and skewed along apartheid lines (Department of Education and Training, 1997). Schools governed by the House of Assembly, House of Delegates and House of Representatives had considerably more resources than those falling under the Department of Education and Training (DET). For example, of the 1042 schools governed by the Transvaal Education Department, 981 (94%) had media centres. Out of 8,198 DET schools, only 416 (5%) had media centres.

Throughout the former homeland regions, media facilities were virtually non-existent in schools, with Bophuthatswana being a major exception. Bophuthatswana was a major exception in that its broadcasting division cooperated closely with its education authorities to expand solar powered television and video into schools (Department of Education and Training, 1997).

The situation has changed considerably since 1994. The DET for example, in 1995 produced over 400 videos for use in secondary schools and had plans to further produce 25 radio programmes per subject for primary schools.

In the formal school system media plays a critical role in promoting a culture of learning and teaching as in more specific campaigns like the Code of Conduct Campaign (Department of Education and Training, 1997).

Media can make an immediate contribution to teacher development through radio and television programmes about new educational philosophies and methodologies and about the changing education and training system.

For many, educational television is no more than an ideal, but a developing country like South Africa needs to find the financial resources to utilize this powerful medium. Programmes must meet the needs of South African pupils.

In this study the main concern was the use of radio and television as educational and instructional media in the teaching- learning process of History and English in senior secondary schools within Mafikeng District. To be able to put the technological programme into a teaching context the teacher needs to know the content of the programme even before its use in classroom.

That implies that the teacher must watch the programme in advance, or that he must get sufficient information about the content via colleagues or by some written information.

In conclusion, this study attempted to resolve problems related to effective use of radio and television in the teaching-learning process of History and English in senior secondary schools. It also discussed factors that affect the use of these tools for instructional purposes.

In the following chapter (Chapter 3) the researcher used collaborative empirical design procedures to assess the effective use of educational radio and television in the instruction of History and English in high schools within Mafikeng District, North West Province.

CHAPTER THREE

3. RESEARCH METHODOLOGY

3.1 INTRODUCTION

This section provides a description of the research method used in this investigation. Data collection techniques and measurement tools are discussed. Issues related to measurement, population sampling, reliability and validity are also included. The method used was the cluster sampling method. In cluster sampling the unit of sampling is not the individual but rather a naturally occurring groups of individuals. According to Borg, Gall, and Gall (1993), cluster sampling is used when it is more feasible or convenient to select groups of individuals than to select individuals from defined population. In the empirical investigation three methods were used by the researcher for the purpose of data collection namely, questionnaires, semi-structured interview and class visits/observations.

3.2 SAMPLING

The participants in this study were drawn from senior secondary schools in Mafikeng district of the North West Province. There are three categories of schools in the North West Province: primary, middle and senior secondary often referred to as high schools. Only one category, namely high schools (senior secondary schools) were chosen because the nature of the study required a certain level of cognitive ability.

The study also used data collection methods that were demanding in terms of time and human resource; namely lesson observation, interviews and questionnaires (See Appendix i, ii, and iii).

The selected schools represent the typical high schools in the North West Province in terms of size and character. These schools are found in three different types of environment that are part of the setting in the province namely; rural, peri-urban and urban settings. The total number of Mafikeng senior secondary schools is 30.

TABLE 1: CHOICE OF SCHOOLS AND RESPONDENTS:

SCHOOLS	NO. OF MANAGERS	EDUCATORS	LEARNERS
i. BAROLONG HIGH	1	9	3
ii. BATSWANA HIGH	1	3	3
iii. DANVILLE HIGH	1	9	3
iv. LAPOLOGANG HIGH	1	9	3
v. LETEANE HIGH	1	9	3
vi. MADIBA HIGH	1	9	3
vii. MAFIKENG HIGH	1	9	3
viii. MMABATHO HIGH	1	9	3
ix. ST MARY'S HIGH	1	9	3
x. ZM SEATLHOLO HIGH	1	9	3
TOTAL	10	84	30

Out of the 30 schools only 10 were used for the investigation

(See Table 1). These schools are (i) Barolong High, (ii) Batswana High, (iii) Danville High, (iv) Lapologang High, (v) Leteane High, (vi) Madiba High, (vii) Mafikeng High, (viii) Mmabatho High, (ix) St Mary's High and (x) Z M Seatlholo High.

The researcher conveniently selected the 10 schools equipped with both radio and television to participate in the study. From each of the selected schools, educators handling History and English were selected to participate in the project. Three learners studying History and English were also selected randomly from each school in the three grade levels (grade 10, 11 and 12) to participate in the exercise. For example grade 10 one learner, grade 11 one learner and grade 12 one learner.

The 10 Principals or Managers of the selected schools individually responded to a semi-structured interview schedule. From 9 of the schools the educator randomly selected 4 educators of English and 5 educators of History. From one school (Batswana High) he selected 3 educators of English and none for History because the school is a commercial school and does not handle History as a subject. This brought the total population of learners to 30, the total of educators to 84 and school managers 10 (See Table 1).

3.3 INSTRUMENTATION

A number of considerations were borne in mind in working out the size of the sample. In research, the size and representativeness of the sample are two major factors that have to be considered for validity and reliability. The sample must be large enough to draw a reliable generalization on the population from which it is taken.

If the size of the sample is large, it provides better estimate for generalizing results. However, the unique circumstances of each study, the resources available and the measurement tools, ultimately determine the number of participants that can be used (Tuckman, 1994).

In the empirical investigation the researcher used three methods in collecting data for the study namely; questionnaires, semi-structured interviews and class visits (See Appendix i, ii and iii). Each of these is explained below.

3.3.1 Questionnaires

For data collection the questionnaire method of investigation was used. Nine questionnaires were distributed to each of the selected secondary schools, (four questionnaires of English and five questionnaires of History) they were given to the principals. Only three questionnaires of English teachers were given to Batswana principal. They were collected by the researcher personally (see section on sampling above). All questionnaires were retrieved with 100% return rate because the researcher waited for questionnaires while the respondents filled them in. The advantage of this method is that all aspects of the questionnaire were covered.

This method was used because of the advantages found in it. The advantages of questionnaires as summarised by Oppenheim (1992) are (i) low cost of data collection, (ii) low cost of processing, (iii) avoidance of interviewer bias and (iv) ability to reach respondents who live at widely dispersed places or abroad.

However, they still have disadvantages because sometimes the wording or phrasing of a question may be understood differently by the respondent thereby giving unsolicited answer to a question.

As stated by Oppenheim (1992) other disadvantages are (i) generally low response rates and consequent biases, (ii) unsuitability for respondents of poor literacy, the visually handicapped, the very old or for children below the age of say ten or for people with language difficulties, (iii) no opportunity to correct misunderstandings or to probe or to offer explanations or help, (iv) no control over the order in which questions are answered, no check on incomplete responses, incomplete questionnaires or the passing on of questionnaires to others; and (v) no opportunity to collect ratings or assessments based on observations.

The researcher did not experience these difficulties. He was available when the questionnaires were completed and he was able to correct any misunderstanding and offered explanations or help where necessary. However, he did experience some problems with teachers who were not co-operative.

3.3.2 Questionnaire Format

The questionnaire was divided into three sections (See Appendix i and ii).
Section A - the purpose of this section was to gather biographical information about the respondents.

Section B - the purpose of this section was to gather information about the availability and usage of radio and television in the school as well as

to find out teachers' views about using the instructional media in their daily classroom teaching.

Section C - the questions in this section were designed to gather information about the problems experienced by teachers with the administration, as well as problems with students and senior management concerning the use of radio and television in the senior secondary schools. The questionnaires were administered well after permission was granted by both the principal and staff members.

3.3.3 Semi-Structured Interviews

The interview is used extensively as a data collection technique in educational research. It was chosen in the study to complement the questionnaire and observation method.

A total number of 30 learners and 10 principals (see section on sampling above) from the selected schools were interviewed for an estimated time of 15 minutes per principal and 10 minutes per learner. This enabled all questions to be carefully explained, hence reducing the possibility of respondents misunderstanding the questions.

This semi-structured interview was chosen because of its flexibility. According to Hitchcock and Hughes (1989), it is a data collection method, which tends to be most favoured by educational researchers since it allows depth to be achieved by allowing the researcher to probe

and expand the interviewee's response. There is room for negotiation, discussion and expansion of the interviewee's responses (see Appendix iv).

3.3.4 Class visits

Three Grade level (grade 10, grade 11 and grade 12) classroom visits were conducted by the researcher with the permission of the principal.

These visits enabled the researcher to check for himself whether television and radio were infact available and useable in the senior secondary schools, and also how the learners coped with these devices during lesson presentation.

The classroom visits were used as a data collection technique in this study for several reasons. Firstly, the class visits gave the researcher first hand access to data on aspects that may not be honestly or accurately recorded in a questionnaire or interview. Secondly, it allowed him to take note of behaviour as it occurs regarding the use of instructional media e.g. Radio and Television.

Classroom visits have three primary uses in research, namely: initial exploration of a problem, supplementary information in a study and primary data in a study. In this study, class visits were used to perform the secondary function in an attempt to establish whether it promotes the usage of educational radio and television ability in learners.

In order to check the reliability of the visits, the researcher used a pre-designed set of questions to assess classroom environments and teaching methods using identified pre-requisites for radio and television (See appendix iii).

The research methodology has been discussed in this chapter. The next chapter is a full presentation and analysis of the data obtained from the study and analysis of the findings.

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CHAPTER 4

4. DATA PRESENTATION AND ANALYSIS

4.1 INTRODUCTION

Based on data collected on the study of 10 sampled senior secondary schools (See chapter 2) this study focused on the effective use of radio and television in senior secondary schools' teaching-learning process in the Mafikeng District of North West Province, Republic of South Africa. In particular, attention was given to the effectiveness of the use of radio and television during English and History lessons.

In this chapter the researcher reports on the results of the empirical investigations conducted to determine the effectiveness of using radio and television for English and History lessons by educators.

4.2 DATA ANALYSIS

4.2.1 DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

The study sample was drawn from ten secondary schools in the Mafikeng District in the North West Province (See Table one). The Tables below give demographic details of eighty-four educators from the schools involved in the study.

TABLE 2: AGE DISTRIBUTION OF EDUCATORS

TOTAL SAMPLE 84		
	SAMPLE	PERCENTAGE
30 and Below	25	30%
31-40	43	51%
41-50	16	19%
51 and above	0	0
TOTAL	84	100

From Table 2 above, the analysis of the age of respondents shows that 25 educators (that is, 30%) were either thirty or below the age of thirty, 43 educators (i.e.51%) were between thirty-one and forty years of age, while 16 educators (i.e.19%) were between forty-one and fifty years of age. This is an indication that majority of the educators are fairly young professionals.

TABLE 3: GENDER DISTRIBUTION

GENDER DISTRIBUTION			
	HISTORY	ENGLISH	TOTAL
Male	17 (20%)	18 (21%)	35(42%)
Female	15 (18%)	34 (40%)	49(58%)
TOTAL	32 (38%)	52 (62%)	84(100%)

Table 3 above illustrates that there are 17 History male educators and 18 English male educators, whereas there are 15 female History educators and 34 female English educators in the 10 selected schools.

In total 38% of the sample teach History and 62% teach English. Genderwise, the males who teach History are 20% and those who teach English are 21%; females are 18% for History and 40% for English. In total 42% of the sample are males while 58% are females.

This gender distribution shows that there are more History male educators than female while there are more English female educators than male educators in the schools investigated.

TABLE 4: TEACHING EXPERIENCE OF RESPONDENTS

Teaching Experience	Frequency	Percentage
0-5 years	20	24%
6-10 years	41	49%
11-15 years	10	12%
15-20 years	8	10%
Above 20 years	5	6%
TOTAL	84	100

An analysis of the years of teaching experience of the respondents revealed that twenty-four percent (24%) have five years or less of teaching experience. Forty-nine percent (49%) have between six and ten years of teaching experience. One could say that about seventy percent (70%) of the respondents have up to ten years teaching experience. Twenty-three (23) educators, that is, approximately twenty-eight percent (28%) are educators with over ten years of teaching experience. In total therefore, 77% of the educators sampled have been in the classroom for over five years. This seems to be significant in terms of experience needed to be effective in the classroom.

4.2.2 PREPAREDNESS FOR, AND USE OF EDUCATIONAL RADIO AND TELEVISION.

Teaching and learning aids are the tools employed by educators to enhance the effectiveness of their teaching and to provide theoretical subject matter in concrete form. They help educators and pupils to achieve lesson objectives, maintain discipline and promote effective learning and internalization (Louw, 1987:26).

The review of literature indicated many factors affecting educators' readiness to use radio and television in their lesson presentation of English and History. These include operational dynamics, educational radio and television media, and pedagogic science. Some authors (Newcomb, et al, 1986:27) believe that learning proceeds more rapidly and is retained if the subject matter possesses meaning, organization and structure that is clear to pupils.

It is important therefore to note that even when there is lack of or inadequate teaching and learning aids and facilities, the educator is still expected to teach pupils using community resources such as field trips (excursions), simulations and other methods. Data in this study reveal that internal factors such as lack of resource centres, technical and operational skills as well as in-service training do impact negatively on educator use of instructional materials. The situation in the Mafikeng District high schools does not differ in any way from the findings of other researchers, as far as the availability of teaching and learning aids is concerned.

All principals and educators interviewed indicated lack of resource centres and inadequate instructional facilities as the main problems encountered in the teaching of English and History (See Appendix I, II & IV).

TABLE 5: EDUCATORS USING EDUCATIONAL RADIO AND TELEVISION IN THE INVESTIGATED SCHOOLS

Educational Media	History		English	
	No.32		No. 52	
	Responses	Yes %	Responses	Yes %
Radio	8	25	26	50
Television	18	56	10	19
No Media use at all	5	16	16	30

In all the sampled schools, radio and television are available for instructional purposes in any subject. What is noted in the data is how each of these is used by the educators of English and History. Table 5 shows that 56% (i.e. 18 out of 32) of educators of History use television for instructional purposes while only 19% (i.e. 10 out of 52) of educators of English do the same. It is also significant to note that 30% and 16% of English and History educators respectively do not use either form of media in their instruction.

According to data in Table 5 English educators use radio more frequently than their History counterparts. 50% (i.e. 26 out of 52) of educators of English use radio for lessons while only 26% (i.e. 8 out of 32) of educators of History use radio for the same purpose.

Preference in the use of both educational radio and television could create a problem if any educator avoids to use them. For instance, if English educators prefer to use radio rather than television, they may avoid using television even if it is available for them to use. Even though the cost of either radio or television could be another contributing factor which influences educators to prefer radio rather than television, this could not be the case here. Why? One may ask. All the sampled schools have both appliances, though there is only one of each in the 10 schools.

The operational dynamics of both media could also be another factor contributing to avoiding their use for lesson presentation. Perhaps, educators may choose radio because it is cheaper and easy to obtain or they may avoid using television because of its high cost .



Newcomb, et al (1986) believe that teaching is creative and challenging and that it results in pupils achieving a high level of mastery. Effective course mastery can be attained if the content of the course is subdivided into instructional units that clearly indicate the usefulness of what is to be learned. For pupils to learn effectively, they must see clearly how what is being taught contributes directly to the accomplishment of their goals, how it is and will be useful to them at present and in the immediate future.

It is, therefore, the responsibility of the educator to make sure that pupils understand what learning outcomes are to be achieved, what content will be taught and how the subject matter, will be useful. This has a great impact on the motivation and interest of pupils in the subject matter. All principals and educators interviewed in the study were of the opinion that their pupils see the value attached to the use of educational radio and television for both

History and English lessons. They also indicated that their pupils show interest and are more active when radio or television is being used during lesson presentation. The Tables below further reveal various aspects of educator training and effective use or otherwise of both radio and television in lesson presentation.

TABLE 6: QUALIFICATIONS OF SENIOR SECONDARY HISTORY AND ENGLISH EDUCATORS IN THE MAFIKENG DISTRICT

Qualifications of educators	HISTORY No = 32		ENGLISH No = 52	
	Responses	Yes %	Responses	Yes %
Std 10 plus 3 years degree	8	25	19	37
Std 10 plus 4 years degree	22	69	29	56
Std 10 plus 4 years degree plus Honours	2	6	3	6
Std 10 plus 4 years degree plus Honours, plus Masters	1	3	1	2
TOTAL	32	100	52	100

Table 6 shows that there is no teacher without Matric in the sampled schools. It also shows that the Junior Degree is the minimum qualification of educators involved in the study. It also indicates that a higher proportion of educators are educators with four years degree. These form 61% of all sampled educators, 26% in History and 35% in English. The details also show that 25% (i.e. 8 out of 32) of educators of History have Std 10 plus 3 years degree, and 69% (i.e. 22 out of 32) of educators of History have Std 10 plus 4 years degree, 6% (i.e. 2 out of 32) of educators of the same subject have Std 10 plus 4 years degree plus Honours, and 3% (i.e. 1 out of 32) of educators have Std 10 plus Honours plus Masters.

On the other hand 37% (i.e. 19 out of 52) of educators of English have Std 10 plus 3 years degree, 56% (i.e. 29 out 52) of educators of English have Std 10 plus 4 years degree, 6% (i.e. 3 out 52) of educators of the same subject have Std 10 plus 4 years degree plus Honours and 2% (i.e. 1 out of 52) of educators have Std 10 plus 4 years degree plus Honours plus Masters. In short, at honours level History has 2 educators and English 3 educators . Each subject area has one educator with a masters degree. With this high level of professional training one can expect an equally high level of exposure to the use of a variety of instructional materials.

TABLE 7: EDUCATOR EXPERTISE IN THE USE OF RADIO AND TELEVISION IN THE TEACHING OF HISTORY AND ENGLISH

QUE NO.	QUESTIONS		RESPONSES			
			MALE		FEMALES	
			YES	NO	YES	NO
1.	Did you obtain any pre-service training on usage of radio and television for teaching in class?	ENGLISH	8(15%)	10(19%)	12(23%)	22(42%)
		HISTORY	6(19%)	11(34%)	6(19%)	9(28%)
2.	Have you ever received in-service training concerning the use of radio and television for lesson presentation	ENGLISH	0	18(35%)	0	34(65%)
		HISTORY	0	17(53%)	0	15(47%)

Table 7, above shows the responses received from both male and female educators regarding pre-service and in-service training on the usage of radio and television for teaching in class. The questions were asked to find out whether educators received any pre-service and in-service training or not in using radio and television for lesson presentation in History and English.

The responses show that educators in both subjects received only minimal training the use of these tools. Of the 84 educators, only 32(38%) received pre-service training on how to use radio and television in class for instructional purposes. Majority or a large proportion did not receive such pre-service training. What is worrying is the fact that even though a small percentage of these educators received some pre-service training on the use of radio and television in teaching, it is evident that nothing has been done to help them during their normal duties as teachers. The Table indicates that not even one of them ever received any in-service training on the subject.

TABLE 8: FREQUENCY OF USE OF EDUCATIONAL RADIO AND TELEVISION

QUE NO.	QUESTIONS	RESPONSES			
			OFTEN	SELDOM	NEVER
1	How frequently do you use educational radio?	ENGLISH	26 (50%)	8 (15%)	18 (35%)
		HISTORY	18 (56%)	6 (19%)	8 (25%)
2	How frequently do you use educational television?	ENGLISH	30 (58%)	0 (0%)	22 (42%)
		HISTORY	24 (75%)	6 (19%)	2 (6%)

Table 8 is drawn to indicate the frequency of use of both Radio and Television f or instructional purpose. With regard to educational radio 50% of English educators use it often, 15% seldom use it while 35% have never used it. The usage by educators of History does not differ much. 56% of History educators use it often while 19% seldom use it and 25% have never used it. One may wonder whether educational television may fair better than radio. That is doubtful. While 58% of the English educators often use educational television, 42% have never used it.

The position is much better for History. 75% of history educators often use it while 19% seldom use it and only 6% have never used it. When the two subjects are put together, the situation becomes clearer. 53% of all educators often use educational radio, 17% seldom use it and 30% never use it. With regard to educational television, however, 64% often use it, 7% seldom use it and 29% never use it

4.2.3. EDUCATORS' AND LEARNERS' ATTITUDES TO THE USE OF EDUCATIONAL RADIO AND TELEVISION

Educators' attitude to radio and television use as instructional tools is, to a large extent, determined by the attitude revealed by the pupils. The responses from the subject of the sample in this study relate appropriately to what Newcomb et al, (1986: 37,) and Osborne, (1991: 4) say about the attitude of an educator to his/her subject (learning area) and pupils. They agree that educator attitude in this regard influences the performance of pupils in the subject or learning area. Truly a positive attitude on the part of the educators encourages a positive attitude on the part of pupils and enhances learning. The data in this study indicate that, the attitude of educators and learners towards the use of educational radio and television in English and History lessons and the art of teaching may be described as positive (See Tables 5, 9 and 11).

**TABLE 9: EDUCATORS' RATING OF GENERAL USAGE
OF EDUCATIONAL RADIO AND TELEVISION (ERT)**

ITEM	(N)	RATING					
		Poor		Fair		Good	
		HIS	ENG	HIS	ENG	HIS	ENG
RADIO	84	10 (12%)	9 (11%)	9 (11%)	15 (18%)	13 (15%)	28 (33%)
TELEVISION	84	6 (7%)	11 (13%)	8 (10%)	14 (17%)	18 (21%)	27 (32%)

In Table 9 the researcher tried to relate the attitudes of the 84 educators to the use of educational radio and television in their teaching. The general impression one gets from Table 9 is that majority of educators rated both radio and television positively. When asked to indicate their rating of these items under good, fair and poor, some interesting results came up. 33% of English educators gave “good” to radio and 32% gave “good” to television. At the same time 15% gave “fair” to radio and 17% said the same about television. 11% of English educators rated radio “poor” and 13% said television was “poor”.

On the other hand 15% and 21% respectively of History educators rated radio and television as “good” and 11% and 10% as “fair”. Only 12% and 7% respectively rated radio and television as being “poor”. Putting the positive attitudes (i.e. “fair” and “good”) together, one would conclude that a large percentage of English and History educators view both radio ($11+18+15+33=77\%$) and television ($32+17+10+13=72\%$) positively.

In both cases it is clear that the use of educational radio and television is satisfactory in the 10 sampled senior secondary schools within Mafikeng District, North West Province, Republic of South Africa. This data also shows that a higher proportion of English educators view educational radio and television more positively than History educators.

TABLE 10: EDUCATORS' RATING OF LEARNERS' REACTION TOWARDS THE USE OF EDUCATIONAL RADIO AND TELEVISION IN THEIR RESPECTIVE SCHOOLS

ITEM	(N)	REACTION									
		Very Negative		Somewhat Negative		Neutral		Somewhat Positive		Extremely Helpful	
		HIS	ENG	HIS	ENG	HIS	ENG	HIS	ENG	HIS	ENG
RADIO	84	0%	0%	5 (6%)	2 (3%)	4 (5%)	28 (33%)	15 (18%)	15 (18%)	8 (10%)	7(8%)
TELEVISION	84	0%	0%	5 (6%)	2 (3%)	4 (5%)	28 (33%)	15 (18%)	5 (6%)	8 (10%)	17(20%)

In Table 10 the data indicate that educators agree that learners do not have any negative attitude towards the use of educational radio and television in the classrooms. When educators were asked to rate learners' reaction towards the usefulness of radio and television in their respective schools. Their ratings indicated five extremes, namely, "very negative", "somewhat negative", "Neutral", "Somewhat positive", "Extremely helpful". Of the 84 educators both History and English, 36 responded positively that radio and television is extremely helpful for teaching.

Following this analysis, it can be concluded that there are more learners who view ERT as an effective method of educating. The reactions reveal that more than a third of learners view ERT as an extremely helpful form of education. Table 10 also reveals that 18% of both History and English

learners rated as somewhat negative as against ERT 60% of learners that perceive ERT as somewhat positive. More than half of the learners feel that ERT for both subject (History and English) is significant for teaching.

On the other hand, data shows 82% of both History and English learners as neutral towards using radio and television for teaching. While 0% rating of learners reaction was recorded in this study. It is worth noting that Table 10 clearly indicates educators agreeing that learners do not have any negative attitudes towards the use of radio and television in the classrooms (See Table 10). From the classroom interactions and interviews the 0% shown in both History and English learners views towards the use of educational radio and television is an indication that they are not totally against the use of instructional technology (radio and television).

TABLE 11: EDUCATORS' VIEW ON THE USEFULNESS OF EDUCATIONAL RADIO AND TELEVISION IN THE CLASSROOM

ITEM	(N)	REACTION							
		Hindrance		No Effect		Somewhat Positive		Extremely Helpful	
		HIS	ENG	HIS	ENG	HIS	ENG	HIS	ENG
RADIO	84	0%	0%	12 (14%)	18 (21%)	8 (10%)	18 (21%)	12 (14%)	16 (19%)
TELEVISION	84	0%	0%	15 (18%)	16 (19%)	10(12%)	19 (23%)	7 (8%)	17 (20%)

In determining the problems which educators encountered when using the educational radio and television for instructional purposes, the sampled educators were asked to indicate whether they agreed or disagreed with

certain stated problems. In concluding, when they were asked to rate the usefulness of both radio and television in the classroom, their rating indicated four extremes, namely, “hindrance” “no effect”, “somewhat helpful”, “extremely helpful”. Table 11 above shows the responses received from both History and English educators regarding the usefulness of educational radio and television for lesson presentation. Table 11 also indicates that both History and English educators strongly agree that educational radio is helpful in the learning and teaching process with 26% while some educators seem also to agree that television is helpful for lesson instruction 50%.

10 (from the positive score of 50% 30 History and 20% English) .. received from Table 11, one may conclude that since educators have a positive attitude towards usage of educational television, they are likely to find it more useful than the previous traditional teaching approach

(from Table 11, 76% of both History and English educators view ERT as “somewhat positive”. However, 49% of all educators still do not think that educational radio and television can create an environment for better achievement. The implication thus is that the usage of radio and television in teaching had no effect. Again in concluding, the scores of no effect in Table 11 show that educators do not think educational radio and television for instruction can promote effectiveness in teaching and learning. It is interesting to note that while educators Table 11, reaction–somewhat positive and extremely helpful) believe that radio and television can help in building self-confidence, no educator seemed to be hindered by using educational radio and television as indicated by 0% in the above Table 11.

TABLE 12: PROBLEMS WHICH EDUCATORS ENCOUNTER WHEN USING EDUCATIONAL RADIO AND TELEVISION IN THE CLASSROOM

PROBLEMS	Key			
	Agree		Disagree	
PROBLEMS ENCOUNTERED BY EDUCATORS USING RADIO AND TELEVISION	HIS	ENG	HIS	ENG
Availability of both radio and television for instructional purposes	25 (30%)	31 (37%)	7 (8%)	21 (25%)
Service training	29 (35%)	31 (37%)	3 (4%)	21 (25%)
Lack of time	27 (32%)	38 (45%)	5 (6%)	14 (17%)
Stress and tension	22 (26%)	39 (46%)	10 (12%)	13 (15%)
Shortages of equipment	19 (23%)	39 (46%)	13 (15%)	13 (15%)
PROBLEMS WITH STUDENTS				
Lack of sufficient time used for teaching	30 (36%)	31 (36%)	2 (2%)	21 (25%)
Much administrative work used for teaching	21 (25%)	39 (46%)	11 (13%)	13 (15%)
Inability to produce own instructional media and managing one's own time	25 (30%)	39 (46%)	7 (8%)	13 (15%)
School provides enough material for instruction	22 (26%)	31 (38%)	10 (12%)	21 (25%)
MEDIA AVAILABILITY AND USAGE				
Bring own radio to school for instructional media	22 (32%)	46 (55%)	10 (12%)	6 (7%)
Bring own television to school for instructional media	27 (32%)	46 (55%)	5 (6%)	6 (7%)
Principal encourages all teachers to use instructional radio and television in	19 (23%)	39 (46%)	13 (15%)	13 (15%)

Table 12 above contains very important information related to this investigation. It highlights the various problems encountered by the educators in their attempt to make the educative environment conducive to learning. These problems are analysed in relation to general usage, students or learners as well as how freely radio and television were available for use. The data reveals lack of facilities as a constraint in all the sampled high schools offering History and English in the Mafikeng District. (for example, 67% of History and English educators agreed to unavailability of instructional radio and television as a problem.

instructional radio and television as a problem.

However, it is not strange to note that 33% disagreed with that point of view. Though each school has the facilities, as has been noted already, the problem seems to be that the facilities are not available for all users when needed. During the interview with Principals (Appendix IV) it came to light that there were times when as many as 5 educators wanted to use television or radio at the same time. How could a school which had only one each of those appliances cope with the situation? The other main problem detected was that of in-service training. For example, 72% of all agreed that there was lack of in-service training to enable them use radio and television for instruction in classrooms. Of course this is understandable if one notes the facts contained in Table 7 on the issue.

A third problem was lack of time to use radio and television for teaching. Most educators (77%) agreed to this. Only 23% disagreed with that statement regarding time not being sufficient enough to use radio and television during lesson presentation. If these items were not readily available for teaching when needed and if in-service training for their use was minimal or non existing, stress situations could easily develop.

A total of 77% of the educators agreed to have had problem with stress and tension when attempting to use radio and television for teaching. This would decrease the number of educators willing to use these instructional tools. With regard to operational dynamics, 69% agreed that operating these tools for instruction was a problem, especially during lessons. This is understandable since very little or nothing is being done in the form of in-service training to assist the educators.

Other problems identified relate to learners. As many as 61 educators (72%) agreed with the problem of lack of sufficient time for teaching. The main source of this problem could rather be attributed to the statement “that too much time is used for administrative work than teaching”. The researcher is aware that the school timetable obviously allows limited time for practical sessions like showing video and playing radio cassette for instructional purposes. Therefore, it becomes difficult for educators to make provision for lengthy excursions of pupils. Most of the respondents felt that time allocation hardly allowed them to use these instructional tools. 71% of them did feel this way.

Table 12 also indicates that most of the educators (76%) agreed that they could not produce their own instructional media or manage their own time. However, the minority of educators (23%) responded positively disagreeing that the educators could not produce their own teaching aids. It is important to note that in spite of all the constraints, quite a substantial number of educators (64%) agreed that enough teaching material is provided by the school. Only a minority of 37% of educators disagreed with that point of view.

Part of the data in this Table sought to establish the possibility of educator willingness to use own resources for effective student learning. The figures indicate 87% agreeing that they often brought their own radio and television to school for lessons. Only 19% agreed that they never brought their own radio and television to school for teaching. Majority of these educators seem to acknowledge the importance and usefulness of radio and television when used for teaching. This is really a positive sign of educator willingness to maximize student learning.

The willingness of educators to help in this regard is also underscored by their agreement that their principals often encouraged them in the use of the equipment. 69% of the educators agreed to have received such encouragement to use these tools in class, while only 30% disagreed. If the attitude of both educators and principals is so positive, one wonders what the real problem was.

4.3 SUMMARY OF FINDINGS

From the above analysis as well as data gathered through observations, classroom interaction, and interviews of both learners and educators, the researcher concludes that problems which educators encounter when using radio and television seem to emanate from internal and external sources.

The internal factors can be identified as:

- Lack of resource centres
 - Lack of technical skills
 - Lack of operational skills
 - Non-availability of equipment (radio and television) when needed for use
 - Lack of in-service training or workshops
- (See Appendix I and IV)

The external factors include:

- Government support (Department of Education)
- Capacity building
- Budget for educational or instructional technical device (radio and television). (See Appendix I and IV)

The findings of this research project indicate among other things that the schools lack basic technical and learning aids. Radio and television as instructional media are not available in quantities that encourage their positive use. The schools do not have media centres that could help in this regard. Even though educators seem to have positive attitude towards these pieces of equipment and are willing to use them, the in-service support does not seem strong enough to bring out very positive results.

The findings also indicate lack of the support from the government and other relevant educational stakeholders, as a problem hindering effective use of radio and television. Since positive support is not readily available, that human empowerment which allows easy use of radio and television also diminishes and the ultimate effect is weakness in the teaching-learning process.

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CHAPTER 5

DISCUSSION AND RECOMMENDATIONS

5.1 DISCUSSION OF THE FINDINGS

The purpose of this study was to determine the effectiveness of educational radio and television in the teaching-learning process of History and English in senior secondary schools around Mafikeng District, in the North West Province, Republic of South Africa.

5.1.1 In the findings summarized in Chapter 4, there are indeed problems facing educators in the sampled high schools with regard to the availability and effective use of educational radio and television (ERT) for lesson presentation. The use of educational radio and television as related in Chapter 2 is aimed at enhancing the teaching-learning process in classrooms.

However, this study found that ERT are not being used effectively because of some problems experienced by educators in their schools as summarised in Table 11. Several factors have been identified as contributing to this state of affairs. These factors vary from lack of operational skills for using radio and television during lesson presentation, educator's attitude, stress, tension and time management. Educational radio and television have been shown to be a good tool for extending the curriculum. The problem seems to lie with educators who do not have the skills to use ERT effectively.

Most of the educators did not receive any formal training concerning the use of radio and television (Table 7), nor have they received any in-service training, which could equip them with the skills to use these tools (radio and television) in their teaching. The amount of use of ERT is, of course, very much dependent on the number of educational radio and television sets available for teaching purposes. Each sample school is equipped with ERT but ERT in a school does not guarantee such media being easily available for use at one any specific time. What happens if two or more educators request the use of the equipment at the same time when only one is available and its use is not subjected to any scheduling?

5.1.2 Another major factor contributing to the non-usage was lack of adequate support material, such as availability of ERT facilities to operate the equipment. Some of the schools have electricity but power was not readily available for operation or working the pieces of equipment.

5.1.3 Results obtained however, reveal that History and English educators have positive attitude towards the use of radio and television in their presentations of lessons. 75% of the respondents showed their preparedness for and use of educational radio, and 76% also indicated the same for television.

The usage of radio and television is required in the teaching-learning process in senior secondary schools. The education system currently in South Africa requires new effective teaching approaches, such as media integration.

The value of radio and television use for lesson presentation can hardly be over emphasised. Radio and television education can offer positive, useful and effective results in the execution of the teaching-learning process. They can be valuable instructional materials for History and English. But, educators must be willing and innovative enough to want to develop their technical skills in using them. This willingness has been found to be available. However, it needs to be directed to the channel which can result in educator innovation for effective learning.

5.1.4 Results also revealed a significant relationship between educators' rating of radio and television use and learners' reaction towards usage more positive. More English educators rated radio as a good method than History educators. While History learners' reacted more positively towards radio and television use than their English counterparts.

5.2 CONCLUSION

On the whole one can state positively from this study that there are indeed problems concerning the effective use of ERT media by educators in their classroom presentations. The main factors affecting the effective use of radio and television derive from internal (stress and tension) and external (time management and in-service training for use) sources.

For example, educators experience stress and tension when using radio and television for lesson presentation of History and English. Many educators do not have the necessary technical skills to operate these media effectively and therefore could not derive very positive results from their use. Positive solutions to ameliorate the problem demand

practical procedures which isolate the problems and map out practical means of overcoming them. In conclusion, this research wants to emphasise ERT use in lesson presentation as a progressive methodology of teaching. South Africa education is undergoing radical change and needs radical approaches. During the interview conducted with students (Appendix III), these students agreed that they enjoyed being taught using radio and television. To them it was fun because it stimulated their interest. What better testimony than this do we need ?

5.3 RECOMMENDATIONS

5.3.1 According to the research findings, the ability to empower educators of History and English in senior secondary and high schools around Mafikeng District to acquire the appropriate skills to operate ERT in their classrooms is an achievable task challenging our Department of Education and the teaching profession. This study sees how to achieve this task as encapsulated in the following:

5.3.1.1 The acquisition of knowledge, both its theoretical and practical aspects, by educators is a great requirement in the use of ERT. Educators need to be given the opportunity to acquire necessary skills in using a variety of media to enable them to communicate ideas with ease and successfully. It is therefore important that ERT be sufficiently emphasized in all pre-service programmes on teacher education. This should be complemented by the necessary in-service training while educators take up their assignment as teachers. The researcher strongly suggests that this training on the use of ERT must be of a very high standard in the tertiary training centres or colleges.

5.3.1.2 Educator upgrading programmes in the use of radio and television is considered to be critically important because technical skills received in this programme will assist such educators positively in the using of ERT. Table 5 says it all: none of the educators in this investigation ever received any in-service assistance in this regard.

If the shift from traditional teaching methods to technology teaching approaches is to be realised, apart from in-service training, educators need enough time during their lesson presentation that will enable them to execute their duties using radio and television effectively.

5.3.1.3 There is a need for the Education Department to support and respond to schools' needs in respect of educational technology and instructional materials. A comprehensive funding for all senior secondary schools would go a long way in changing educators' attitudes and boosting their morale in the use of radio and television in education.

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As a first step, educators may have to begin incorporating questions about ERT use into their routine work plans including use of programmed lessons of History and English. These tools (radio and television) enable students to examine their media use habits and allow educators to focus on areas of concern and offer support.

Advice to educators may include the following:

- * encouraging careful selections of programmes to view
- * co-viewing and discussing content with students.
- * teaching critical viewing skills.
- * avoiding use of ERT as an electronic baby-sitter

In the school set-up, principals should be seen supporting, encouraging and providing the necessary knowledge and skills needed by educators in order to function without stress and tension.

5.3.1.4 Perhaps ERT programme designed by the SABC Education to improve educator's professional skills for the presentations of their subjects and empowering them with "quality" teaching resources can be used use in the classroom. The researcher feels that ERT production by SABC Education has proved to be particularly a useful activity in fostering the development of common teaching skill competencies.

Therefore before educators could be expected to use ERT they should receive full training. Their maximum commitment to ERT has to be aimed at, that is, their involvement in both the planning and the implementations of the programme so as to find the training relevant, essential and meaningful. The most essential aspect of all these is the need to incorporate ERT into the OBE Curriculum and its various daily lessons.

It is recommend that further research on the use of ERT be conducted in order to respond to or eliminate the entire problem as indicated in the findings. A positive step in this regard has been taken by SABC when the SABC Education invited Tender through advertising in City Press Business dated April 1 2001, for research on effective use of School TV for intermediate phase (Grade 4-6, 9-12 year olds) “Invitation to summit tenders for school TV research.

This invitation to tender for school TV research by SABC Education was made in order to define the success of school TV as an effective learning resource. Research along similar lines will do the teaching profession a lot of good.

Perhaps someone needs to take a very comprehensive look at media use in the primary and secondary schools in the North-West Province. Such investigation can bring to light the effectiveness or otherwise of the operations of our classrooms with regard to instructional materials.

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APPENDIX I: QUESTIONNAIRE FOR ENGLISH TEACHERS

The purpose of this questionnaire is to gather information about the effectiveness of using radio and television as instructional media in the teaching-learning process of History and English in senior secondary schools within Mafikeng District of the North West Province, Republic of South Africa. Please answer honestly and completely. The questionnaire will be of no use unless you give your honest views.

NB: All the information obtained from this will be treated with strict confidence.

- A. Kindly respond to the following questions by making a cross X on the appropriate block.

BIOGRAPHICAL INFORMATION

1. Your age category in years

1.1	Below 30	
1.2	31-40	
1.3	41-50	
1.4	51-60	
1.5	Above 60	

2. Sex

Female	
Male	

3. Highest academic qualifications

3.1	Std 10	
3.2	Std 10 plus 3 years degree course	
3.3	Std 10 plus 3 years degree course plus 1 year on Honours	
3.4	Std 10 plus 3 years degree course plus Honours plus Masters	
3.5	Others, specify	

4. Highest professional qualifications

4.1	Junior secondary teachers certificate	
4.2	Senior Secondary teachers diploma	
4.3	University education diploma (Diploma in Education)	
4.4	Higher Diploma in Education (PGDE)	
4.5	Others specify (BA.Ed, etc)	

5. Indicate the area in which your school is located

5.1	Rural	
5.2	Peri-urban	
5.3	Urban	

6. Subjects which you teach

6.1	History	
6.2	English	

7. Number of years Teaching Experience (this year included)

7.1	0 - 5	
7.2	6 - 10	
7.3	11 - 5	
7.4	16 and over	

B: Please tick Yes or No

1. Did you obtain any pre-service training on usage of the radio and television for teaching in class?

Yes	No
-----	----

2. If no, have you ever received any in-service training concerning the use of television and radio for lesson presentation?

Yes	No
-----	----

3. Do you have educational television in your school?

Yes	No
-----	----

4. Do you have educational radio in your school?

Yes	No
-----	----

5. How frequently do you use television? (If available)

Often	Seldom	Never
-------	--------	-------

6. How frequent do you use radio? (If available)

Often	Seldom	Never
-------	--------	-------

7. How would you rate the usefulness of television in the classroom?

Hindrance	No effect	Somewhat helpful	Extremely helpful

8. How would you rate the usefulness of radio in the classroom?

Hindrance	No effect	Somewhat helpful	Extremely helpful

9. How would you rate the student's reaction towards television usage?

Very negative	Somewhat negative	Neutral	Somewhat positive	Extremely helpful

10. How would you rate the student's reaction towards radio usage?

Very negative	Somewhat negative	Neutral	Somewhat positive	Extremely helpful

11. How is the general usage of radio at your school by English teachers?

Poor	Fair	Good

12. How is the general usage of television at your school by English teachers?

Poor	Fair	Good

C: Please indicate how serious a problem of each of the following has been in your case

Key

1. Problems in the classroom using educational radio and television	Agree	Disagree
Experience stress and tension when using radio for instructional purposes		
Experience stress and tension when using television for instructional purposes		
Unavailability of educational radio and television used for teaching		
Operation of educational radio and television used for teaching		
Equipment (radio & television) in an unworking condition		
2. Problem with students	Agree	Disagree
Lack of sufficient time used for teaching		
Administrative problems		
Too much administrative work used for teaching		
Unable to produce own instructional media		
Managing one's own time		
The school provides enough material for instruction		

3. Media availability and usage		
I often bring my own radio to school for instruction media		
I often bring my own television to school for instruction media		
The principal encourages all teachers to use instructional radio and television in school		

APPENDIX II: QUESTIONNAIRE FOR HISTORY TEACHERS

The purpose of this questionnaire is to gather information about the effectiveness of using radio and television as instructional media in the teaching-learning process of History and English in senior secondary schools within Mafikeng District of the North West Province, Republic of South Africa. Please answer honestly and completely. The questionnaire will be of no use unless you give your honest views.

NB: All the information obtained from this will be treated with strict confidence.

- A. Kindly respond to the following questions by making a cross [X] on the appropriate block.

BIOGRAPHICAL INFORMATION

1. Your age category in years

1.1	Below 30	
1.2	31-40	
1.3	41-50	
1.4	51-60	
1.5	Above 60	

2. Sex

Female	
Male	

3. Highest academic qualifications

3.1	Std 10	
3.2	Std 10 plus 3 years degree course	
3.3	Std 10 plus 3 years degree course plus 1 year on Honours	
3.4	Std 10 plus 3 years degree course plus Honours plus Masters	
3.5	Others, specify	

4. Highest professional qualifications

4.1	Junior secondary teachers certificate	
4.2	Senior Secondary teachers diploma	
4.3	University education diploma (Diploma in Education)	
4.4	Higher Diploma in Education (PGDE)	
4.5	Others specify (BA.Ed, etc)	

5. Indicate the area in which your school is located

5.1	Rural	
5.2	Peri-urban	
5.3	Urban	

6. Subjects which you teach

6.1	History	
6.2	English	

7. Number of years Teaching Experience (this year included)

7.1	0 – 5	
7.2	6 – 10	
7.3	11 – 5	
7.4	16 and over	

B. Please tick Yes or No

1. Did you obtain any pre-service training on usage of the radio and television for teaching in class?

Yes	No
-----	----

2. If no, have you ever received any in-service training concerning the use of television and radio for lesson presentation?

Yes	No
-----	----

3. Do you have educational television in your school?

Yes	No
-----	----

4. Do you have educational radio in your school?

Yes	No
-----	----

5. How frequently do you use television? (If available)

Often	Seldom	Never
-------	--------	-------

6. How frequent do you use radio? (If available)

Often	Seldom	Never
-------	--------	-------

7. How would you rate the usefulness of television in the classroom?

Hindrance	No effect	Somewhat helpful	Extremely helpful

8. How would you rate the usefulness of radio in the classroom?

Hindrance	No effect	Somewhat helpful	Extremely helpful

9. How would you rate the student's reaction towards television usage?

Very negative	Somewhat negative	Neutral	Somewhat positive	Extremely helpful

10. How would you rate the student's reaction towards radio usage?

Very negative	Somewhat negative	Neutral	Somewhat positive	Extremely helpful

11. How is the general usage of radio at your school by History teachers?

Poor	Fair	Good

12. How is the general usage of television at your school by History teachers?

Poor	Fair	Good

C: Please indicate how serious a problem of each of the following has been in your case

Key

1. Problems in the classroom using educational radio and television	Agree	Disagree
Experience stress and tension when using radio for instructional purposes		
Experience stress and tension when using television for instructional purposes		
Unavailability of educational radio and television used for teaching		
Operation of educational radio and television used for teaching		
Equipment (radio & television) in an unworking condition		

2. Problem with students	Agree	Disagree
Lack of sufficient time used for teaching		
Administrative problems		
Too much administrative work used for teaching		
Unable to produce own instructional media		
Managing one's own time		
The school provides enough material for instruction		
3. Media availability and usage		
I often bring my own radio to school for instruction media		
I often bring my own television to school for instruction media		
The school manager encourages all teachers to use instructional radio and television in school		

**APPENDIX III: A SEMI-STRUCTURED INTERVIEW SCHEDULED FOR
LEARNERS OF 10 SELECTED SENIOR SECONDARY
SCHOOLS FROM GRADE 10, 11 AND 12**

Question: In your school, have you ever been taught in your lessons (English) using radio and television?

Question: Do you understand better when radio or television is being used in class for your lessons?

Question: Would you agree that if teachers can use radio or television in their English or History lessons learners can stimulate interest in their schoolwork?

**APPENDIX IV: A SEMI-STRUCTURED INTERVIEWS QUESTIONS FOR
THE PRINCIPALS OF 10 SELECTED HIGH SCHOOLS.**

- Question: How have the educators in your school acquire the skill of using educational radio or educational television for teaching purposes?
- Question: Do you as a school manager find educational radio and television useful in enhancing the process of teaching and learning in your school?
- Question: Do you have a resource centre in your school?
- Question: How do you handle cases where your educators show interest in using radio or television for instructional purposes when such device are not available?
- Question: In your school do you have electricity power supply or generator to operate radio or television?

**APPENDIX V: SABC EDUCATION INVITATION TO SUBMIT
TENDER FOR SCHOOL TV RESEARCH**



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INVITATION TO SUBMIT TENDERS FOR SCHOOL TV RESEARCH

SABC Education Television invites research organisations with the appropriate expertise to tender for a major research study in order to define the success of School TV as an effective learning resource. The research is to be conducted over the period April 2001 to June 2001 and the final report is due on 31 September 2001.

In January 2001 School TV extended its service to include the intermediate phase (Grades 4-6; 9-12 year olds). The objective is for an extensive research programme needs to be carried out with our Customers i.e. the Educators and the Learners.

The following objectives needs to be met:

- > Establish a research database of information
- > Define who we are reaching
- > Identify our customer profile, demographics, psychographics and groups
- > Conduct a needs analysis
- > Pre-testing and testing of our products

The brief has been divided into two parts:

PART 1

1. Draw up profiles for the Foundation Phase, Intermediate Phase and Senior Phase Learners
2. The Learner profiles
3. Establish who we are reaching

PART 2

1. An analysis of all reply cards from Print Resource Packs from June 2000 - June 2001 and Educator Questionnaires to all Primary Schools countrywide
2. Establishing an ongoing research database that defines utilisation of the School TV service in school

Copies of the research brief will be available from 12:00 on Wednesday 28 March 2001 and may be collected from Ignacia Kubuzie at SABC Education Television, 10th Floor Room 1013N, SABC Television Block, or Artillery Road and Henley Road, Auckland Park.

The research brief contains details on the nature of the research envisaged and criteria for the assessment of proposals.

The closing date for proposals is Friday, 6 April 2001. No late submissions will be considered.

Short-listed agencies must be available for interviews on Thursday, 12 April 2001.

For enquiries please contact the Research Co-ordinator, Lebo Pulumo, on (011) 714-5473 or e-mail pulumolm@sabc.co.za