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GNLO
MONO

MEDIA TRAINING OF STUDENT-TEACHERS IN VENDA

by

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DISSERTATION

Submitted in partial fulfilment of the
requirements for the degree of

MASTER IN EDUCATION

in

EDUCATIONAL MEDIA

in the

Faculty of Education

at the

RANDSE AFRIKAANSE UNIVERSITEIT

Supervisor: Dr. W.J. Hollander

November 1991

ACKNOWLEDGEMENTS

My sincere thanks and appreciation is extended to:

1. Dr. Wim Hollander, my supervisor, for his enthusiasm, support, patience and his expert guidance. I have gained invaluable knowledge through him. I wish to express a special word of thanks to his family for their time he sacrificed.
2. Prof. Erna Fourie for her interest in my progress.
3. Dr. N. Roets for editing the manuscript.
4. The Department of Education and Culture in Venda for granting me study leave and for their permission to conduct the research.
5. Rectors of Colleges in Venda, the Dean of the Faculty of Education, lecturers and student-teachers in Colleges and at the University of Venda.
6. My friend, Mr. Alex Mutshekwane, and his family for their encouragement and material help.
7. Miss C.B. van Wyk, who typed the manuscript.
8. My parents for their interest and encouragement in all the years of my studies.
9. My wife, Matamela, and my children, Tlou and Refilwe, for the time they spent alone.
10. Our Heavenly Father who gave me the power and courage to go on.

(ii)

Dedicated to my parents,
Matamela, Tlou and Refilwe

SUMMARY

The training of student-teachers in media selection, integration and utilization in Venda is not done according to expectations. To investigate this problem it was necessary to identify problem areas in the theoretical and practical training of media of teachers in Venda.

In order to reach possible solutions to the set problem in confirmation of the purpose of the study, a literature survey on teacher education with special reference to pre-service education and media training was undertaken. An empirical study was also conducted which included four groups of respondents, namely:

- Rectors of Colleges and the Dean of the Faculty of Education at the University.
- Heads of Departments at these institutions.
- Lecturers at these institutions.
- Final year student-teachers at colleges and the university.

The research as stipulated above yielded the following results:

- * The lecturer of student-teachers in training cannot use the available teaching media at the College/University because he himself has not been trained in the use of available teaching media in the didactic situation.
- * The training programme of student-teachers is congested, which limits the time for training in and practising of the use of media in didactic situations.
- * The student-teacher completes his training without enough knowledge on how to use teaching media in a teaching-learning situation.

- * The rejection of using teaching media by lecturers and student-teachers is a result of lack of knowledge on how to use teaching media.
- * There is no in-service training for lecturers and teachers to update them in teaching media.
- * Mainly three teaching media can be used by student-teachers, lecturers and teachers, that is Chalkboard, Maps and Wall Charts.
- * Schools where student-teachers do teaching practice have a lack of audiovisual materials and other equipment.
- * The period of teaching practice is not enough to practise the teaching media in the real teaching-learning situation, that is, where some of the teaching media are available.
- * Teachers at schools cannot offer guidance to student-teachers in the use of teaching media during practice teaching.
- * Student-teachers have a good theoretical knowledge but no practical knowledge of using teaching media in the didactic situation.

OPSOMMING

Die opleiding van onderwysstudente in mediaseleksie, -integrering en -benutting word in Venda nie na verwagting gedoen nie. Om hierdie probleem na te vors was dit nodig om probleemareas in die teoretiese en praktiese mediakundige opleiding te identifiseer.

Om tot moontlike oplossings te kom vir die bogenoemde probleem, in ooreenstemming met die doel, is 'n literatuurstudie oor onderwysopleiding onderneem, met spesiale verwysing na voordiens- en mediakundige opleiding. Hierna is 'n empiriese studie geloods waar vier groepe respondente, naamlik rektore van Onderwyskolleges in Venda en 'n dekaan van die Fakulteit Opvoedkunde aan die Universiteit van Venda, hoofde van departemente aan voorafgaande instansies, dosente en finalejaarstudente inligting oor mediakundige opleiding verskaf het.

Uit die navorsing, soos hierbo uiteengesit, is die volgende gevolgtrekkings gemaak:

- * Dosente aan die Kolleges/Universiteit is nie bevoeg om media in hulle lesings te benut nie, aangesien hulle nie in die seleksie en integrering van media opgelei is nie.
- * Die opleidingsprogram van onderwysstudente is oorvol, wat die beskikbare tyd vir die opleiding in mediakundige aspekte verkort.
- * Die onderwysstudent voltooi sy opleiding sonder die nodige kennis oor die benutting van media in 'n onderrig-leersituasie.
- * Die teenkanting vir die benutting van media deur dosente en studente is in reaksie op die onkunde oor die wyse waarop media in 'n didaktiese situasie benut kan word.

- * Daar bestaan geen indiensopleiding vir dosente en onderwysers in mediabenutting nie.
- * Daar kan hoofsaaklik drie tipes media deur studente, dosente en onderwysers benut word, naamlik die skryfbord, kaarte en plakkate.
- * Skole beskik oor min oudivisuele media.
- * Dit blyk dat die beskikbare tyd van skoolpraktikum nie genoeg is sodat studente genoegsame praktiese ervaring in mediabenutting kan opdoen nie.
- * Onderwysers kan nie begeleiding oor mediabenutting aan studente tydens praktiese onderwys aan skole bied nie.
- * Studente ontvang 'n deeglike teoretiese opleiding, maar die praktiese inoefening daarvan ontbreek.

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CHAPTER 1

GENERAL ORIENTATION, STATEMENT OF THE PROBLEM, MAIN CONCEPTS AND PLAN OF THE STUDY

1.1 GENERAL ORIENTATION

According to the literature, teacher education includes pre-service, induction and in-service training (Hall, Hord & Brown, 1980:105-112). Pre-service teacher education is the training of student-teachers who have presented themselves to become teachers before entering the profession (Hall, Hord & Brown, 1980:110-113). Induction is the formal introduction, after the pre-service training, of new teachers into the profession. Induction occurs during the first year of service (Hall, Hord & Brown, 1980:157-158) whereas in-service training of teachers is an on-going process where more is learned of the profession during practice of the profession (Cawood & Gibbon, 1981:12). Better teaching and effective learning are the goals of in-service training for teachers. For the purpose of this study only the pre-service training of teachers will form the focus of the study.

The pre-service training of teachers consists of theoretical, practical and professional components (Hollander, 1989:257). According to Hollander (1989:257) the theoretical component consists of: the part-disciplines of education (example: Didactics and Empirical Education), the school subjects in which a teacher will teach (example: Geography, Accounting and Biology) and the formative subjects (example: English, Afrikaans, Bible and Philosophy of life).

The practical component consists of all training where the application of the theoretical knowledge in practice is done. The practical component of teacher training can again be divided into the institute and the school practicum.

The professional training of teachers includes both the theoretical and practical components (Hollander, 1989:250). This means that the acquisition of theoretical knowledge together with the practical application thereof in the didactic situation become professional training once the student-teacher has learned to act in a professional way in the didactic situation. The professional training is intended for the professional efficiency of the student-teacher in the teaching-learning situation.

Media Science training of teachers is also placed in the theoretical, practical and professional components which lie within the total training of teachers.

Briel (1976:3) defines a few problems in teacher training and especially training in media when he states that during teaching practice many teachers do not use audio-visual aids while teaching, which might give a wrong impression to student-teachers that it is not necessary to use audio-visual media when teaching. This could be attributed to the following:

- The time of teaching practice is very short and as a result student-teachers do not get enough time to practise the use of media in the didactic situation (Hollander, 1984:2-5).
- There is a lack of trained teachers in the use of teaching media (Van Zyl, 1985:5).
- Many lecturers in most disciplines have not been trained (Van der Merwe, 1989:478) and as a result they reject the use of media in the didactic situation. According to Kok (1989:99) lecturers succeed in giving the theory to student-teachers but do not help student-teachers in a practical way to find personal meaning in the information.
- There is also a problem in the accommodation of media training: that is, whether it should be treated in Subject didactics or in Teaching Science.

- There is a lack of teaching media at schools to be used where student-teachers do teaching practice (Tuata, 1982: 6).
- There is too much theory in media training than practical training and student-teachers want more practical work in the final year (Nel, 1987:130-131).

One is inclined to think that, concerning the problem stated by Briel (1976:3), which is the subject of this study and which is also one of the problems in teacher education, most of the student-teachers seem to be untrained in media usage.

According to Linton & Linton (1971:1) teachers who cannot introduce teaching media in the learning situations have problems in achieving the expected results.

It is surprising that, despite the fact that authors such as AECT (1979:14-16); Briggs, Campeau & Gagne (1967:8); Krüger & Müller (1987:102); Hollander (1984:64); Hollander (1989:141); Engelbrecht, Yssel, Griesel & Verster (1987:10); Freysen, Briel, Potgieter, Van Graan & Van Niekerk (1989:39) agree that by using appropriate instructional materials and technology available, the effectiveness and efficiency of instruction in classes can be increased, but available media are still not utilized.

Piek and Mahlangu (1990:246) state clearly that the use of teaching media in the teaching-learning situation demands thorough planning by the teacher. Planning will involve selection, preparation, integration and evaluation of educational media. Krüger and Müller (1987:122) support this by saying to select and integrate teaching media successfully demands systematic and logical thinking. Because student-teachers are involved with evaluation of media, they must be trained in selection, preparation, integration and evaluation of media.

When Robert de Kieffer studied the percentage of college gra-

duates who had had at least one course in educational media, he found only 28% (Moldstad, 1975:2). Lack of knowledge of how to use materials effectively and lack of both in- and pre-service education in the use of technology were major deterrents in a survey conducted by Moldstad (1975:2). The position in under-developed countries like Venda could be worse.

1.2 STATEMENT OF THE PROBLEM

The training of student-teachers in media selection, integration and utilization in Venda is, as in other countries, not done according to expectations. This becomes evident when student-teachers in Venda Colleges of Education and the University of Venda do not use media when they do teaching practice. This situation leads to the situation where student-teachers would not be able to use media when entering the teaching profession.

1.3 PURPOSE OF THE STUDY

This study will identify the problems hindering media training of student-teachers in the teaching-learning situation in Venda Colleges of Education and the University of Venda and will come to conclusions on possible ways to overcome the above-mentioned problem.

1.4 CLARIFICATION OF MAIN CONCEPTS

1.4.1 Education

According to Van Rensburg and Landman (1986:307) "... Education may be defined as a conscious purposive intervention by an adult in the life of a non-adult to bring him to independence ...". Whereas Van den Aardweg, E.M. and Van den Aardweg, E.D. (1988: 71) say that education which is a universal phenomenon limited to human beings is a process in which the practice of education is involved where a responsible adult leads, helps, supports and accompanies a child to self-actualisation and adulthood. For the

purposes of this study education will be a conscious purposive association between the teacher and the pupils so that the child must benefit intellectually.

1.4.2 Teacher education

Teacher education includes pre-service, induction and in-service training of teachers (compare 1.1), whereas Page & Thomas (1977: 337) see teacher education as the professional education training of teachers usually consisting of course-work with supervised teaching practice and the in-service course. Teacher education will mean all the activities that take place from pre-service education, induction up to in-service training.

1.4.3 Educational media

Educational media include (but are not limited to) print and non-print items such as audiotapes and cassettes, books, pamphlets, the computer, models and a variety of these and others (AECT, 1979:16). However, Freysen, Briel, Potgieter, Van Graan and Van Niekerk (1989:3) see educational media as any person or object which is used objectively to transfer learning content within the didactic situation. In most cases educational media consist of apparatus and programmes, for example, a transparency and an overhead projector. For the purposes of this study educational media will mean anything that can help the teacher teach as well as helping the child to learn. Therefore, educational media, media and teaching media will be taken to mean the same thing.

1.4.4 Lecturers

According to Good (1973:334) a lecturer is a member of a faculty who is usually without professional status and who is employed for a limited time to instruct a group of students who is not meant to carry out all the functions of an employed member of the faculty. On the other hand, Page and Thomas (1977:203) see a

lecturer as a teacher usually in further education and higher education who teaches through the lecture and seminar or tutorial techniques. For the purposes of this study lecturers will be described as teachers who are employed by the Department of Education and Culture and the University of Venda who teach and guide student-teachers who are taking the Secondary Teachers Diploma and Bachelor of Arts in Education in order to become teachers.

1.4.5 Student-teachers

Student-teachers are the people who have presented themselves for training with the aim of becoming teachers (Hall, Hord & Brown, 1980:112-113). On the other hand Page and Thomas (1977: 329) see a student-teacher as a trainee teacher, especially when engaged in practice teaching in schools. Therefore student-teachers will be people who have presented themselves for pre-service teacher training to become teachers and must receive theoretical and practical training in order to become professionals.

1.4.6 Media training

Media training is the training of student-teachers in the didactical ways to select and integrate media in the didactic situation (Hollander, 1989:232). Here both the theoretical knowledge and practical skills of how to select and integrate media in the didactic situation is taught to the student-teacher. Media training is thus supervised training to develop functional skills and knowledge (Hawes, G.R. & Hawes, L.S., 1982:234) in media selection, integration, preparation and evaluation.

1.5 METHOD OF STUDY

The survey on the above-mentioned problem will firstly be conducted by doing a literature study on aspects of teacher education, media training and possible limitations which might occur

in media training worldwide. The literature study would provide a theoretical background to conduct an empirical study by means of questionnaires and interviews by which conclusions can be reached on the specific media training situation in Venda.

1.6 PLAN OF THE STUDY

In chapter one a brief reflection of the problem, purpose of the study, main concepts and the method of study were done.

Chapter two will be devoted to a literature survey on pre-service teacher education and specifically on media training. Here all problems will be covered according to the literature on media training, not only in South Africa, but also worldwide.

In chapter three the empirical research method of investigation and sample groups will be dealt with. An analysis of data accumulated will be done.

Lastly, chapter four will be devoted to the findings, conclusions and recommendations stemming from the research.

CHAPTER 2

PRESERVICE TEACHER EDUCATION AND MEDIA TRAINING

2.1 INTRODUCTION

The child of today is making an appeal to his teachers and educators to guide him in an era marked by technological awareness (Kachelhoffer, 1989:150) so that he can best adjust and learn in this fast developing world. It is therefore important that student-teachers should not only be given a sound knowledge in aspects of teaching but also teaching media in the teaching-learning situation. With the technology-, knowledge- and population explosion, teaching media play an important role because pupils need more of the teacher's attention and effort to grasp the complexities of life. The tempo at which development takes place implies that there is an increasing demand on the adult which again has an implication for the teacher in the classroom. In this connection Cropp (1990:226/227) says that teaching media are an important teaching component for the teacher, and that all teacher education institutions should require minimal understanding of it prior to initial certification of the teacher. The question arises as to the place and form of media training in teacher education.

2.2 THE COMPONENTS OF PRE-SERVICE TEACHER EDUCATION

2.2.1 The theoretical component

Hollander (1989:257) asserts that the theoretical component consists of the part-disciplines of education, the school subjects, and the formative subjects.

Krüger and Müller (1987:8) say the part-disciplines of education that contribute meaningfully to teacher-training are: Philosophy of Education, Didactic Education, Historical Education, Comparative Education and Orthopedagogics. Francia and Johnson (1989:6)

confirm this view when they say that to become effective teachers, student-teachers should have a strong background in education as a discipline. This background should include the relation of schools to society, the roles of teachers and student-teachers in classrooms, an understanding of the learning process, the curriculum, instruction and the teaching-learning environment necessary to help maximise pupil learning.

The theoretical knowledge of the school subjects is needed to facilitate the student-teacher's need to know the subject he has to teach. These subjects in Venda (Department of Education and Training) are in group II subjects and are named: Academic Subject A, and Academic Subject B. Seven periods per week of forty minutes each respectively are allocated to teaching the content of school subjects. According to Kok (1989:103), "Kennisbesit is geen waarborg dat 'n persoon dit sal gebruik nie". McFarlane (1987:27) says that the theoretical knowledge in the practical teaching situation in a classroom is the hallmark of a true teacher.

Theoretical knowledge about appropriate teaching media and technology available must also form part of the theoretical component of teacher training. This would mean that the teachers should have a theoretical knowledge of instructional material and technology available, how to select, prepare and integrate them in a specific didactic situation. This theoretical training can increase the effectiveness and efficiency of instruction in the classroom. One of the problems is that lecturers in most disciplines have little experience with technology (McNeil, 1989:58-59) and as a result cannot train student-teachers in the use of media.

It is important to note that all part-disciplines of education, the major subjects and the formative subjects contribute meaningfully to the training of the teacher. According to Hall, Hord and Brown (1980:113) "they are expected to take a non-teacher and transform him into a teacher". The question arises as to which one of the part-disciplines of education is

specifically responsible for the theoretical foundation of teaching media? According to Krüger and Müller (1987:8) Didactic Education, Teaching Science and Subject Didactics have been cited as the most important part-disciplines for the theoretical as well as the practical grounding of teaching skills. The theoretical and practical utilization of teaching media form one of the aspects of these disciplines. In the Department of Education and Training Structure for Secondary Teachers Diploma, media form an integral part of teacher training to be done.

The question might be asked that while Teaching Science and Subject Didactics cater for the training of teaching media, which content should form the theoretical aspect of media training?

2.2.1.1 Theoretical content in media training

According to Krüger and Müller (1987:8) media selection, preparation, integration and evaluation form part and parcel of the theoretical and practical training of teachers in media training. For the purpose of this study media selection, preparation and integration will be discussed under the topic of theoretical training but will be considered in the practical component of training as an integral part thereof as well.

a) Media selection:

Briggs, Campeau and Gagne (1967:15-16) state that there are no simple acts or rules which can be stated in cookbook fashion for deciding which medium is the most relevant in a given instance and go on to say that matching media with objectives in order to specify the forms in which the instructional material should be presented is the answer (Gardner, 1970:263).

According to Freysen, Briel, Potgieter, Van Graan and Van Niekerk (1989:24-26) there are different kinds of teaching

models. Not all of them provide guidelines for the selection of teaching media. Krüger and Müller (1987:173) give a structural-functional model for media selection.

For the purposes of this study this model will be considered because it shows exactly the phase for which a medium will be selected and integrated, namely the aim, objective, entry situation, content, strategy, and learning activities. This model further shows the mutual connection between the teacher, media, learning content and the learner. These components work as an entity and they are mutually inclusive (see figure 2.1).

STUDENT:		SUBJECT:		STANDARD:	
LESSON THEME:					
1. Pupil's entry situation. 2. a) Aims b) Objectives					
Planning of Teaching- Lesson learning Procedu- situa- dural tion moments	LEARNING CONTENT	TEACHER ACTIVITIES	PUPIL ACTIVITIES	MEDIA (SELECTION)	
Arouse & direct	"	"	"	"	
Instruction	"	"	"	"	
Functionalisation/ Accompaniment	"	"	"	"	
Evaluation of objectives	"	"	"	"	
Summative evaluation:					

Figure 2.1 Lesson design schedule: Krüger & Müller, 1987:173

i) Pupils' entry situation

During the phase when a lesson is planned the teacher must anticipate the entry situation of the pupil (Bullough, 1978:6), for example, the personal, social and environmental factors. The question must be asked whether media fit in with the pupils' entry situation.

ii) Aims and objectives

To teach well one must plan properly and Freysen et al. (1989:30) say planning centres on the aims and objectives of the lesson. De Corte, Gresse, Guilford, Bloom and others tried to structure the objectives of learning. Freysen et al. (1989:30) are of the opinion that when formulating the objectives an outline should be given of what must be delimited and it must be analysed with the specific nature of the learning content. In the final analysis one must be able to say media will contribute positively towards the aims or objectives.

iii) Learning content

According to Bullough (1978:5) in selecting media for teaching, the teacher must decide exactly what the students are to learn and then select the most appropriate types of media for the task. The teacher uses the selected learning content to open up reality to the learner. The choice of the learning content is determined by the objective and ultimately media must be part of the learning content.

iv) Strategy

Krüger and Müller (1987:81-82) mention three modes of teaching, that is, the address mode, conversation and assignment modes.

In the address mode the teacher does all the talking or at least most of it. The conversation mode is characterised by two-way communication. The assignment mode is the giving of assignments and thus pupils learn by doing. The modes play a very important role when media are being selected (Krüger & Müller, 1987: 81-82).

On the other hand, every teacher has his own teaching style, his interest, motivation, subject knowledge, insight and these must be taken into consideration when selecting media.

v) Pupils' activities

The teacher should create opportunities for learning which the pupils will learn to the best of their ability. (Krüger & Müller, 1987:26). The media that are chosen must involve pupils in the learning activity. Therefore a question such as: Which pupil activities might be started by using a particular medium? must be asked.

b) Media attributes

The selection of media for a specific objective is influenced by different factors. Media selection is not done in isolation but it is done with an eye on the teaching-learning situation (Freysen et al., 1989:26). Therefore, the selection is always done with the aim of achieving a specific objective, that is to enhance learning.

Although all didactic aspects (teaching strategy, situation analysis, components of the lesson) are taken into consideration during media selection, media attributes are important in indicating which medium is the best for a particular didactic situation (Freysen et al., 1989:26).

Briel (1983:124) says to understand the concept educational media, the emphasis should be put on the different media attributes. In this respect, Hollander (1989:191) asserts that the student-teacher must be able to discuss the attributes of each medium and must be in a position to consider it as a factor in media selection. In their definition Fleming and Levie (1978:248) describe media attributes as "the potential of a given message vehicle to present information of a certain kind."

When attributes to teach particular content are indicated, the best medium for this is selected. Sometimes only a visual or auditive medium is involved in receiving information. In other cases an audiovisual medium or more than one sense organ is involved (Freysen et al., 1989:27-29).

c) Media preparation

After selection has been done the specific instructional sequence must be identified which is to be presented by the various media and these specifications serve as guidelines (Briggs, Campeau & Gagne, 1967:51). There must be an empirical try-out of the procedures to be followed before the products are used generally (Briggs et al., 1967:51-52). It is of no use to select and not to try out the material beforehand; sometimes it may not work the way it has been planned. Some materials need to be prepared before one can use them, for example, drawing a map, making the realia available and this, according to Bowers (1983:4), requires "a high degree of skill".

Preparation of media thus implies the application of theoretical knowledge on different ways of making media. Without the knowledge it is impossible to prepare media.

d) Media integration

To integrate media successfully in a lesson demands proper planning. Krüger and Müller (1987:108) say initial planning and preparation of suitable media in a lesson can be time-consuming; but media that have been thoroughly planned once can save a lot of time afterwards.

According to Krüger and Müller (1987:123) the integration stage will include: arouse and direct, instruction, functionalization/accompaniment and evaluation.

i) Arouse and direct

The illustration, graph or slide must arouse the full attention of the pupils and must direct their learning intent. Media usage must play an important role (Krüger & Müller, 1987:124).

ii) Instruction

The medium (table or transparency) must contribute to instruction. Media must explain the content (Krüger & Müller, 1987:124).

iii) Functionalization/Accompaniment

Can the media be used during functionalization? Can the pupils understand the table or illustration? (Krüger & Müller, 1987:124).

iv) Evaluation

Can teaching media be used at the end of the lesson to see whether the objectives of the lesson have been achieved (Krüger & Müller, 1987:124)?

e) Summative evaluation

Can the media selected be used for evaluation, for example when one gives homework?

After the theoretical component of teacher training has been discussed it is necessary to see where media training can be placed within the practical component of teacher training.

2.2.2 The practical component

Van der Linde (1987:6) defines "Practice Teaching" or "The Practicum" as the opportunity that the student-teacher has to participate in the actual teaching-learning situation. It is an experience in which the student-teacher gets guided teaching and takes on more and more responsibility for directing the learning of a group of children over a set period of time (Van der Linde, 1987:6). According to media training this means that the student-teacher should get the opportunity to select, prepare and integrate teaching media in a teaching-learning situation. According to Stones (1984:139) the lecturer cannot expect student-teachers to do this unless he himself has gone through the same kind of experience as his student-teachers.

Practicum can be done at the college (Institute Practicum) and the school (School Practicum).

2.2.2.1 The Institute Practicum

The institute practicum is all the practical experiences in the teacher's educational programme which are experienced at the training institution. Student-teachers are given the opportunity to experience the realm of teaching in the College or University. Many forms of practical experience are found in the institute, for instance micro-teaching, simulation, games, preparation and interaction analysis.

During teaching skills practice (micro-teaching) student-teachers get the opportunity to practise specific media skills in a didactic situation (Department of Education and Training Structure Teaching Practice Syllabus, 1990:4-5).

According to Hall, Hord & Brown (1980:19) one of the most vexing problems in teacher training is that they do not have a common product because institutions maintain several different teacher training programmes. This becomes a problem even in the application of teaching media because there is no core curriculum in the training of teachers in the utilization of media (Kachelhoffer, 1989:151). On the other hand teacher-educators succeed in giving the theoretical information to the student-teachers but do not help student-teachers in a practical way to find personal meaning in the information (Kok, 1989:99). This means that they do not show the student-teachers the practical application of media usage.

Most of the aspects dealt with in the first year of study in Venda Colleges and the University are theoretical in nature, with the exception of chalkboard work and the teaching skills practice (micro-teaching). Theoretical aspects of visual media, audio media, audio-visual media and other educational media are dealt with (compare 2.2.1). Student-teachers are also introduced to material and equipment which can be used in the making of educational media.

In the second and third year the training in educational media consists of the continuation of first year work, with an emphasis on the use of educational media (including chalkboard). Furthermore, each student-teacher must make at least four (4) sets of educational media per annum.

From the above-mentioned it is clear that the practical training of student-teachers in media usage consists of media selection and integration. Furthermore the preparation of media forms an integral part of the curriculum. Other forms of institute

practicum except micro-teaching apparently are not being done, which poses a question in respect of media training in Venda.

2.2.2.2 The school practicum

The logical phase to follow after the institute practicum, is the school practicum. The strategies adopted in the institute practicum, for example microteaching, were just a precursor to the real practical situation at school. Institute Practicum is not an end in itself but a means to the realisation of the objective in the school situation. Vaughan (1984:6); Lasley and Applegate (1985:221); Hollander (1984:68) and Lombard (1988:16) say that field experiences provide time for student-teachers to see how it is done in the real situation and what to expect. In this study it means that the student-teacher must see how teaching media are prepared, integrated and evaluated in the real lesson situation. Furthermore, the student-teacher should have practical experience to select, prepare and integrate teaching media himself. This means that the theoretical knowledge as well as the practical part taught at college should be a foundation to selection, preparation and integration of teaching media at schools. However, there are certain problems which hinder this exercise. The period for the school practicum in the first year is ten (10) school days and twenty (20) school days for the second and third years respectively (Department of Education and Training 1990:2). The period of training for the profession is very short as compared to the training of professionals in other professions, for example, medicine: six (6) to seven (7) years (Hollander, 1984:2). This means that the period of training in the use of teaching media is very little and therefore the practical application of teaching media leaves much to be desired.

A second problem is that student-teachers are often unguided when they do teaching practice at schools and the experience sends them back to College "disillusioned" (Hollander, 1984: 4). Moreover according to Eraut, Connors and Hewton (1980:6)

"Supervision of teaching practice is an entirely new role for College teachers, especially when it involves types of schools in which they have never taught ..." and hence the selection, preparation and integration of teaching media becomes a problem since no one guides them as to the how, when and why of the teaching media.

Thirdly, the student-teacher's involvement is limited to the teaching-learning situation and therefore he lacks a "conceptual framework" with which to grasp its complexity and therefore plan its development (Hollander, 1984:4). On account of this he often is not aware of the resources available in the school to enhance pupils' learning.

Fourthly, there is a shortage of teaching media in schools and the teacher is not well trained to use the material (TUATA, 1982:6). This implies that student-teachers have no materials to use when they are doing their school practicum and have no one to consult when they experience problems. Sometimes the practical education programmes become ineffective owing to the failure of some schools to cooperate with the training team (Sharpe, 1988:85). When this happens, the student-teacher finds himself in an embarrassing situation and consequently does not get the necessary training (Jacobs, 1989:29).

2.2.3 The professional component

According to the findings of the study conducted by Hollander (1989:257), the professional training of teachers has a theoretical and practical component. To master the practical aspects of teaching means that the theoretical content must be mastered as well (Hollander, 1989:257). Therefore, for one to master the practical aspects of the teaching media one must master its theoretical content. Krüger and Müller (1987:10) say "a teacher can only act professionally when he commands knowledge, skills and a positive attitude towards his tasks". The problem is that the student-teacher may have entered the programme in order not

to expend too much time or intellectual energy and also have security in the form of a teaching certificate (Hall, Hord & Brown, 1980:112-113). Since the production and preparation of the teaching media is a time-consuming affair, such an attitude may not promote professionalism.

To be able to select, prepare and integrate teaching media in practice, all the above must be acquired during the period of training.

2.3 RESISTANCE TO THE IMPLEMENTATION OF TEACHING MEDIA

There are many reasons why teachers offer resistance to the use of teaching media. Some of the reasons are that teachers:

- lack an understanding of the different teaching media which are available, and lack expertise (Briel, 1976:157-170; Moldstad, 1975:1);
- do not have an interest in different teaching media and lack the initiative (Briel, 1976:157-190; Muller, 1989:77);
- reject new teaching methods and strive to keep the traditional methods because they always see themselves as the good old teachers (Briel, 1976:157-170);
- believe that they are satisfied with the methods they are using (Briel, 1976:157-170);
- have unfortunate experiences with teaching media, for example, a projector breaks down when the lesson is in progress (Briel, 1976:157-170, Muller, 1989:76-77);
- do not have accommodation for the teaching media (Briel, 1976:157-170) and what they have, is unsuitable for effective media use (Van der Merwe, 1989:476);

- have a lack of technical knowledge and support systems, that is lack of management support systems including logistics on a day to day basis (Metrowich, 1989:179);
- are sceptical about decision-makers regarding the use of teaching media and a consequent lack of commitment as well as a desperate lack of adequate cooperation and coordination (Muller, 1989:76-77);
- feel that the rapid pace of technological development inhibits real commitment (Muller, 1989:76-77);
- have unrealistic expectations and some still seek panacea in technology (Muller, 1989:76-77);
- have poor motivational strategies for media applications (Muller, 1989:76-77).

2.3.1 Resistance to media use by lecturers

It is easy to say that student-teachers do not use teaching media, but what should be asked is, how far can lecturers of student-teachers accept technology and innovation? According to Jean Dennee (1990:35) "pre-service education is the answer to effective use of technology. Teacher educators must serve as active role models for pre-service teachers". Student-teachers tend to imitate those who taught them. The only way for lecturers to model these teaching techniques is to use technology in the presentation of instruction (Dennee, 1990:35; Floden, 1985: 22). Student-teachers must be taught in the way lecturers expect them to teach and the lecturer must practise the kind of teaching behaviour he expects the student-teacher to use in his teaching (Dennee, 1990:35). The following are some of the reasons why lecturers resist media:

- Van der Merwe (1989:287/288) and Van der Merwe and Nel (1990:81) agree that teaching media make learning easier but require greater effort from the lecturer.
- Some lecturers believe that media will replace them and that innovation will mechanise the teaching process (Van der Merwe, 1989:476; Van der Merwe & Nel, 1990:81).
- Meyer (1978:81) says that resistance is a natural insurance against replacement and the teacher is basing this assumption on misconception, fear and even laziness.
- Some feel that lecturing is an individual activity and resist the use of media because in their opinion a less personal relationship between them and students is created (Moore & Hunt, 1980:143).
- According to Van der Merwe (1989:477) when the physical teaching environment is remodelled for more effective media use and where new lecture rooms are planned media specialists should be consulted.
- Fear of equipment failure during presentation contributes to resistance. Lecturers do not want to be "humiliated" in front of their student-teachers (Van der Merwe, 1989:478) and therefore a good supporting system and training are necessary.
- Many lecturers in most disciplines have little experience with technology and their institutions do not encourage them to use it (McNeil, 1989:58-59) and this suggests what Hawkrige, Jaworski and McMahan (1990:75) say, namely that the "human resource must be trained".

So far attention has been paid to problems, resistance and the reasons for resistance, but attention will be paid also to possible ways in which these problems can be resolved.

2.3.2 The possible elimination of resistance

Media will more than ever before continue to have an impact on education and therefore it is necessary to eliminate these resistance by means of the following (Van der Merwe, 1989:478; Criticos & Beard, 1990:80-82):

- lecturers should be trained in the selection and use of media;
- advantages and disadvantages of media and their use should be clearly stated;
- lecturers should have access to colleagues' classes where media is effectively integrated;
- lecturers should be encouraged to do research on the use of media and their use should be clearly stated;
- all obstacles causing the development of resistance should be eliminated by an effective support service;
- the lecturer of the student-teacher must not be neglected (Muller, 1989:74-76) and this can be done by inservicing the lecturers in new media.

It has been said earlier on that teacher education is the way to train teachers to fulfill their jobs effectively. When the above-mentioned problems and resistances are categorised, it is clear that teacher education and more specifically media training must be done in such a way as to overcome these problems before student-teachers go to schools. More so, the lecturers should be educated in media training before they train student-teachers.

Therefore, it is necessary to have a look at media training to see possible implications by which the problem areas in media

training can be overcome.

2.4 TENDENCY IN MEDIA TRAINING

In a study conducted by Moldstad (1975:1) it was discovered that teachers desired to use different types of audio-visual material and that they were held back by a variety of good reasons.

When Robert de Kieffer studied the percentage of college graduates who had had at least one course in educational media, he found only 28% (Moldstad, 1975:2). Jean Dennee (1990:35) supports this by saying "less than one-third of all recent graduates from our business teacher education institutes consider themselves prepared to teach appropriately with new technologies ...". To use educational media in the teaching-learning situation demands planning by the teacher (Piek & Mahlangu, 1990:246) and as Krüger and Müller (1987:122) put it, "to select and integrate media successfully in a lesson demands systematic and logical thinking and acting" and on account of this teachers must be well trained in the use of teaching media.

According to Van Niekerk (1987:20) it is impossible to select the best medium if the teacher is not aware of the possibilities of different media. Hence, teachers should be trained in media usage.

In a survey conducted by Faris and Moldstad, respondents indicated lack of time to prepare material as the greatest deterrent to an expanded use of facilities and lack of knowledge as the second greatest deterrent. On the other hand, television teachers cited lack of knowledge as the greatest deterrent (Erickson, 1968:368-9).

"Lack of knowledge of how to use these materials effectively to improve instruction was a major deterrent and there was a definite lack of both in-service and pre-service education in the use of technology ..." (Moldstad, 1975:2). Already in 1955,

Haas and Hacker (1955:300) were of the opinion that the finest film, or charts, could not survive poor handling by a lecturer who has not been thoroughly trained in the skilful use of the particular teaching medium. While Ferguson (1975:300) says "even inferior instruments in the hands of a master may produce something of worth and beauty, while sophisticated apparatus handled by unskilled people may give rise to results not worth writing home about". Stoker and Robertson (1989:374) argue that the quality of education depends on the quality of the teaching force. The question is: to what extent is the media teacher trained to teach in the technologically developing world? This suggests that the training of media teachers can no longer fulfill the practical needs of education (Kachelhoffer & Louw, 1989:276).

According to Van Zyl (1985:5) "In Suid-Afrika word nog te min gedoen ten opsigte van opleiding in die onderwysmediakunde ...". This was supported by Criticos and Beard (1989:76) that there are few appropriate training programmes for educational media in Southern Africa. Kachelhoffer and Louw (1989:15) add that lecturers in media science have identified the fact that there is no coordinated core-curriculum for the training of media teachers.

As already stated earlier on (compare 2.4) teachers desire to use a variety of audio-visual material but the most important hindrance is the lack of knowledge to use the material. Thornton Jr. and Brown (1968:9) allege that even speech and the printed word are misused; then the situation should be worse with the recent teaching media.

2.5 CONCLUSION

In the teaching profession the task of teaching effectively will also depend on the extent to which the teacher is media literate. This will depend to a large extent on how teachers in training are being trained in media usage. Unwin (1969:135) puts

it aptly when he says "... we train teachers in the horse age but live in the car age", and therefore the teacher training institutions will have to pay more attention to the training of teachers in media usage and to accept technology and innovation as inevitable.

In this chapter the components of pre-service teacher education have been dealt with in context with media training of student-teachers. A variety of problems which are associated with pre-service and some of the reasons for resistance to media implementation were discussed. The reasons for resistance to media selection and integration by lecturers and the possible solutions for the elimination of such resistance were discussed, after which some guidelines on how to select and integrate media were dealt with.

Chapter three will be an empirical study on the level of media training and possible problems of Venda Colleges of Education, including the University of Venda. Here the empirical study will be discussed whereafter the results will be given.

CHAPTER 3

THE EMPIRICAL RESEARCH AND GATHERING OF DATA

3.1 INTRODUCTION

In the light of the literature survey relevant to media training and usage by student-teachers, it was considered important by the investigator to find out empirically what the present position is at Venda Colleges of Education and the University of Venda.

The researcher decided to use interviews with Rectors, a Dean, heads of departments and lecturers because they know more about the current training of student-teachers. The interviews will afford them the opportunity to expand, contribute and also give reasons why certain things are happening the way they are. Although the interview demands a lot of time, another contributing factor is that only three (3) Rectors, one Dean, sixteen (16) heads of departments and forty (40) lecturers will be interviewed and as a result the numbers will be manageable. The questionnaire will be given to student-teachers because the number is of such a kind that individual interviews would be impossible. The questionnaires will be used to evaluate the present training of student-teachers in media selection, preparation and integration, as well as the level of performance of student-teachers in media usage in the teaching-learning situation.

The interview method was chosen because an interviewer can follow up ideas, probe responses and investigate motives and feelings which a questionnaire cannot do. The way a response is made can provide information that a written word would conceal. The problem is that it is time-consuming, subjective and the wording is demanding. However, if conducted by a skilful interviewer it can be most rewarding. According to Borg and Gall

(1983:415) the questionnaire can be a very valuable research tool in education with careful planning and sound methodology. The questionnaire was chosen because it has some measure of objectivity, validity and reliability. However, the problem is that the respondents' views cannot be established.

3.2 COMPILATION OF INTERVIEW SCHEDULES

The researcher compiled three different interview schedules. Interview Schedule A for Rectors and a Dean consists of four questions; interview Schedule B comprises five questions and interview Schedule C has eleven questions. Interview Schedules B and C consist of structured as well as open-ended questions.

3.2.1 Interview Schedules A, B and C

The three groups of respondents play a vital role in the training of teachers in media usage.

- Rectors were included because they are in a better position to see the overall problems of the College and are aware of the resources within the colleges of education.
- Heads of departments were included because they are involved with the training of student-teachers and they also offer guidance to lecturers.
- Lecturers are continually in contact with student-teachers and as such they know what student-teachers can do and what they cannot do.

The interview schedules were carefully structured to obtain the relevant information. The following were the things the interview schedules wanted to investigate (see Appendix A, B and C).

- a) Resources available at the college.

- b) Whether the media resources are being used.
- c) If the media are not being used, the possible reason/s therefor.
- d) Whether lecturers could use specific teaching media in didactic situations.
- e) Whether student-teachers are capable of using teaching media in a didactic situation.
- f) Whether lecturers were ever trained in selection, integration and preparation of teaching media which must be used by student-teachers.
- g) Whether schools have materials and equipment to be used by student-teachers in didactic situations.

3.3 COMPILATION OF QUESTIONNAIRE

The researcher also compiled a questionnaire consisting of twenty-six questions which were put to the student-teachers. Student-teachers being the recipients of the media training provided by the lecturers will know what has been taught, what skills they have and have not mastered. In this study, therefore, the student teacher's response to relevant questions on training in the usage of teaching media in a didactic situation is of paramount importance. The literature study dealt with in chapter two contributed towards the compilation of the questionnaire.

This questionnaire sought to measure the theoretical and practical training and knowledge of the student-teachers in the utilization of specific teaching media. It was divided into three sections:

A. General information (Question one to question seven)

These were introductory questions intended to measure the sex of the respondents, major school subjects they are doing, whether media training is done in subjects such as media science, teaching science or any other subject. Even the attitude of respondents was measured towards the use of teaching media in didactic situations (see Appendix D).

B. Theoretical component

Questions eight to fourteen were intended to measure theoretical training of the respondents in teaching media (see Appendix D).

C. Practical component

I. Questions fifteen to twenty-two assessed the extent of practical training in media at the institute (see Appendix D).

II. Questions twenty-three to twenty-six looked at specific teaching media found at schools, media used by teachers and student-teachers. Focus was also put on the major problems student-teachers encounter in the use of teaching media.

3.4 PILOT STUDY

All data gathering instruments should be tried out on a group similar to the one that will form the population of the study. For this reason a feasibility study was conducted at Tshisimani College of Education. This College, which caters for primary teachers, was not included in the study because the study focused on the training of secondary teachers in the use of teaching media. The changes that were made came as a result of this initial study.

3.5 SAMPLING

3.5.1 Stratified random sampling

3.5.1.1 Rectors

All the three Rectors of the Colleges and one Dean of the Faculty of Education at the University of Venda were included in the sample. The idea was to get a more representative view from all institutions.

3.5.1.2 Heads of departments

All the heads of departments in all the institutions were to be interviewed. The idea was to include all the views of different heads of departments on different subjects in all the institutions.

3.5.1.3 Lecturers

According to Mulder (1982:58) "to ensure that a sample will be representative of a population ... the population can be divided up into subgroups". In this study all lecturers were divided into the subjects they teach at the College or University. One lecturer was selected randomly from each subject in a College or University to ensure that all subjects were represented. The prime concern was to ensure representativeness.

3.5.1.4 Student-teachers

The sample of student-teachers was drawn randomly from the population of 722 (seven hundred and twenty-two) final year student-teachers from Colleges of Venda and the University of Venda. Of the 180 (one hundred and eighty) questionnaires 177 (one hundred and seventy-seven) were returned to the researcher.

3.5.2 Sample size

The smaller the sample, the greater the chances that it will not be representative of the population. This does not mean that a larger sample will yield better results, but the chances of getting better results are just improved (Mulder, 1982:59). In this study, where possible, the sample size has been made as large as possible to improve the chances of better results.

3.5.3 Localization of respondents

The four groups of respondents in this study were easily accessible since they were all found at the Colleges or the University. It was easy to draw a sample and there was a distinct advantage in that questionnaires were handed to subjects personally. On account of this it was easy to explain the purpose of the study and questionnaires were completed immediately and handed back to the researcher. But factors such as absenteeism, willingness of student-teachers in some colleges served as obstacles. However, most staff members were willing to be interviewed.

3.6 PROBLEMS ENCOUNTERED DURING THE INVESTIGATION

3.6.1 Problems encountered during interviews

- It was difficult to interview lecturers who felt that their positions were being threatened by the questions.
- Some, instead of answering, would ask what the researcher thought should be done.
- Others did not want to be interviewed but wanted the researcher to give them the interview schedule so that they could fill it in themselves.
- The study was expensive since the researcher had to travel

from Johannesburg to Venda to interview the respondents.

- In some cases even though appointments had been made with the College, they could not be interviewed because the staff and student-teachers were at loggerheads.

3.6.2 Problems encountered with the questionnaire

- Student-teachers in some cases thought filling in the questionnaire would subject them to victimization and they were therefore not always willing to give the true information.
- Some student-teachers refused to take questionnaires because they said they did not want to cooperate with anybody who came through the Rector.
- The questionnaire was filled in one week before the internal examinations were due to start and some student-teachers felt it was wasting their time.
- In one college the student-teachers were involved in a court case against the Rector and because of this no random sample could be drawn. Only those who wanted to were invited to come and fill in the questionnaire and thirty-two respondents (15,1% of the population) filled in the questionnaire.

3.7 DATA OBTAINED THROUGH THE INTERVIEWS

3.7.1 Data obtained through the interviews with Rectors/Dean (see Appendix A)

QUESTION 1 (see Appendix A):

All Rectors agreed that at least most of the mentioned media are available although one Rector stated that they do not have a library as yet.

QUESTION 2 (see Appendix A):

Three answers were given, namely that student-teachers:

- a) cannot use most of the media available;
- b) are shy to use media; and
- c) even if they can use some of the media they cannot use them properly.

QUESTION 3 (see Appendix A):

A variety of reasons were given, namely that:

- a) teacher preparation does not provide the usage of these teaching media;
- b) the lecturer did not have these in his training and therefore understood them vaguely;
- c) more weight has been given to theory than practice;
- d) student-teachers lack the knowledge of teaching media;
- e) the programme is congested and there is no time to practise these teaching media.

QUESTION 4 (see Appendix A):

Responses to the question were as follows:

- a) The relevant expertise should be sought by getting visiting lecturers to train lecturers in the use of teaching media.
- b) Curriculum should be restructured and more attention should be given to practical work.
- c) Teaching Science and Subject Didactics lecturers should work

hand in hand (that is, the integrated teaching approach).

- d) Change the attitude of lecturers.
- e) Adequate room space must be available.

It seems that all Rectors agree that student-teachers cannot use most of the teaching media available at Colleges/University. They attribute this mainly to lack of training on the lecturers' part. They also blame the crammed programme which does not allow time to practise the use of teaching media. The Rectors suggested a variety of ways to overcome the problem of lack of knowledge and skills in media training by lecturers which boils down to in-service training, curriculum development and specific subjects to account for the training.

3.8 DATA OBTAINED THROUGH THE INTERVIEWS WITH HEADS OF DEPARTMENTS

QUESTION 1 (see Appendix B):

A variety of subjects were mentioned, namely, Accounting, Afrikaans, Agriculture, Biology, Business Economics, English, Geography, Guidance, History, Luvenda, Mathematics, Technical Drawing, Physical Science and Economics.

QUESTION 2 (see Appendix B):

All sixteen respondents felt it was necessary to use teaching media in the subjects in the departments they are heading.

QUESTION 3 (see Appendix B):

Few can; they cannot; "Hulle kan nie". The majority use only the chalkboard, maps and charts; they use mostly the chalkboard.

QUESTION 4 (see Appendix B):

Responses:

- lecturers have not been trained in media use (especially the Black staff);
- there is no time for hands on experience and some blame strikes that carry on for months;
- student-teachers were taught by people who did not use teaching media on the secondary level and lecturers also undermine teaching media because they demand preparation;
- the programme is crammed and on top of that lecturers lack interest.

QUESTION 5 (see Appendix B):

Responses:

- the human resource must be trained to use the different teaching media available at the Colleges and the first group should be lecturers;
- The programme must be flexible enough to allow for tutorials for teaching media;
- material must be bought since teaching material has been budgeted for;
- lecturers must also read widely in their subject fields.

From the above information it is clear that heads of departments believe that student-teachers cannot use the different teaching media, although they can use the chalkboard, maps and charts to a certain extent. The reason seems to be that lecturers have not

been trained and they blame the crammed programme as well.

3.9 DATA OBTAINED THROUGH THE INTERVIEWS WITH LECTURERS

The following are the views expressed by the lecturers concerning the efficiency of student-teachers in the use of the teaching media.

QUESTION 1 (see Appendix C):

Response: Subjects mentioned by the forty (40) respondents were Accounting, Afrikaans, Agriculture, Home Economics, English, Geography, History, Luvenda, Education, Technical Drawing, Typing, Physical Science and Economics.

QUESTION 2 (see Appendix C):

Response: It would appear that most of the respondents have taught their subjects from five to eight years; thirty (75%) of the respondents have five to eight years and ten (25%) have eight to ten years experience. In the researcher's opinion the experience is enough and there is, therefore, no cause for concern as five (5) years is long enough to know most of the aspects of the subject.

QUESTION 3 (see Appendix C):

Response: All forty (100%) respondents think it is important to use teaching media for the following reasons:

- to motivate pupils; because students understand the subject matter better if teaching media are used; to consolidate the subject matter; to simplify the lesson and make it more understandable.

QUESTION 4 (see Appendix C):

Response: (See Table 3.1 on next page)

Table 3.1 The possibility of using teaching media in a practical way by student teachers

	YES		NO	
	TOTAL	%	TOTAL	%
CHALKBOARD	40	100,0	-	-
MAPS	23	57,5	17	42,5
WALL CHARTS	37	92,5	3	7,5
OVERHEAD PROJECTOR	6	15,0	34	85
TELEVISION & VIDEO	3	7,5	37	92,5
COMPUTER	-	-	40	100,0
RECORD PLAYER	2	5,0	38	95,0
16mm SOUND PROJECTOR	-	-	40	100,0
BULLETIN BOARD	8	20,0	32	80,0
FLANNEL BOARD	13	32,5	27	67,5
MODELS	18	45,0	22	55,0

In table 3.1 the chalkboard, maps and wall charts are teaching media which can be used by student-teachers as shown by the percentage which is one hundred per cent (100%), fifty-seven and a half per cent (57,5%) and ninety-two and a half per cent (92,5%). respectively. The others appear to be a problem when it comes to the practical application of the teaching media, for

example, overhead projectors, television and video and computer.

QUESTION 5 (see Appendix C):

Responses:

- Lecturers cannot train student-teachers because lecturers do not use media in teaching.
- The student-teacher teaches the way he has been taught.
- Student-teachers have not been trained at all and mass classes are also a problem.
- There is too much theory compared to practice.
- Staff do not have the experience in the training of teaching media.

QUESTION 6 (see Appendix C):

Response:

- They are mostly given the theory of how to use teaching media.
- They also use the trial-and-error method until they discover how they are used.
- By showing them how to operate them.
- By observation during demonstration lessons.
- Video and television are common, so they can be used.

QUESTION 7 (see Appendix C):

Response: (see next page)

Table 3.2 Lecturers' training in teaching media

	YES		NO	
	TOTAL	%	TOTAL	%
CHALKBOARD	40	100,0	-	-
MAPS	20	50,0	20	50,0
WALL CHARTS	39	97,5	1	2,5
OVERHEAD PROJECTOR	3	7,5	37	92,5
TELEVISION & VIDEO	5	12,5	35	87,5
COMPUTER	1	2,5	39	97,5
16mm SOUND PROJECTOR	6	15,0	34	85,0
BULLETIN BOARD	10	25,0	30	75,0
FLANNEL BOARD	12	30,0	28	70,0
MODELS	16	40,0	24	60,0

From table 3.2 above it appears that forty (100%), twenty (50%), thirty-nine (97,5%) and sixteen (40%) of the lecturers were trained practically in the use of the chalkboard, maps, charts and models respectively. The other media appear to be a problem when it comes to the practical use thereof.

QUESTION 8 (see Appendix C):

Response:

Table 3.3 Presence of teaching media at schools

	YES		NO	
	TOTAL	%	TOTAL	%
CHALKBOARD	40	100,0	-	-
MAPS	20	50,0	20	50,0
WALL CHARTS	15	37,5	25	62,5
OVERHEAD PROJECTOR	2	5,0	38	95,0
TELEVISION & VIDEO	6	15,0	34	85,0
COMPUTER	-	-	40	100,0
RECORD PLAYERS	-	-	40	100,0
16mm SOUND PROJECTOR	-	-	40	100,0
BULLETIN BOARD	6	15,0	34	85,0
FLANNEL BOARD	7	17,5	33	82,5
MODELS	12	30,0	28	70,0

Forty (100%) of the respondents mentioned that the chalkboards are available at schools while only twenty (50%) are of the opinion that maps are available at schools. It would appear that in general, schools do not have teaching media such as wall

charts, overhead projectors, television and video, computers, record players, 16mm sound projectors, bulletin boards, flannel boards and models.

QUESTION 9 (see Appendix C):

Response: Of the forty respondents, thirty (87,5%) thought that the period of teaching practice is not enough for student-teachers to practise the use of teaching media in the teaching-learning situation.

QUESTION 10 (see Appendix C):

Response: Thirty-one (77,5%) of the respondents thought student-teachers lack guidance in the use of teaching media at schools.

QUESTION 11 (see Appendix C):

Responses:

- Electricity must be made available to schools in rural areas.
- There should be more practical work done than academic training in the use of teaching media.
- Colleges should employ properly trained and well-qualified lecturing staff with the relevant know-how to teach and impart practical knowledge in educational media.
- Adequate supply of equipment must be made available to all the schools.
- There should be a media centre where student-teachers can learn and practise the use of teaching media.
- Lecturers should become involved in the use of these teach-

ing media and allow student-teachers to handle them.

- In-service training for lecturers in the use of teaching media should be given from time to time.
- More time must be allocated to teaching practice and for the preparation of teaching media.
- Teaching media should be easily accessible for use by lecturers and student-teachers.

3.10 DATA COLLECTED THROUGH QUESTIONNAIRES TO STUDENT-TEACHERS (SEE APPENDIX D)

After administering the questionnaire, the following was extracted:

SEX OF RESPONDENTS (see Appendix D):

One hundred and five (59%) of the respondents were males whereas seventy-two (41%) were females.

QUESTION 1 (see Appendix D):

From table 3.4 it is clear that the larger the subject group, the higher will its percentage be. Many student-teachers take Luvenda (29,4%) as their major subject while the smallest groups are English, Economics and Home Economics.

Table 3.4 Subjects represented in the sample

	TOTAL RESPONDENTS	%
Accounting	11	6,2
Afrikaans	8	4,5
Agriculture	18	10,2
Biology	27	15,3
Business Economics	15	8,5
English	21	2,8
Geography	30	11,8
Guidance	22	16,9
History	29	12,4
Human Movement	5	16,4
Home Economics	7	2,8
Luvenda	52	29,4
Maths	41	23,2
Technical Drawing	9	5,1
Typing	5	2,8
Physical Science	25	14,1
Economics	5	2,8

QUESTIONS 2 (see Appendix D):

Respondents who had Media Science training are one hundred and three (58,4%), whereas seventy-four (41,6%) of the respondents did not.

QUESTION 3 (see Appendix D):

One hundred and forty-two (80,2%) of the respondents claim that they had Teaching Science as a subject in their training. It seems apparent that the majority had Teaching Science as a subject in their training.

QUESTION 4 (see Appendix D):

As many as one hundred and twenty-one (68,4%) of the respondents had teaching media as a component in Teaching Science and only fifty-six (31,6%) respondents did not have it as a component in Teaching Science.

QUESTION 5 (see Appendix D):

One hundred and twenty-one (62,7%) respondents had training in teaching media in other subjects as well. Those who had training in teaching media in other subjects as well mentioned the following subjects (see Question 6):

(in) QUESTION 6 (see Appendix D):

Physical Science, Biology, English, Afrikaans, Mathematics, Physical Education, Geography, History, Guidance, Home Economics, Technical Drawing, Agriculture, Luvenda, Accounting and Business Economics.

QUESTION 7 (see Appendix D):

One hundred and seventy-six (99,4%) of the respondents felt it was necessary to use teaching media in their subjects. The reasons given by those who felt it was necessary to use teaching media were the following:

- They wanted to make the abstract concrete.
- They wanted to make teaching interesting and to motivate pupils.
- Pupils learn faster when teaching media are used.
- Students understand the subject matter better when teaching media are used.
- They understand more when they see.
- Students develop abstract thinking when teaching media are used.

- Teaching media consolidate the subject matter taught.
- Teaching media help to correlate theory and practice.
- Teaching media help to emphasize key points.
- Teaching enhances learning.
- Teaching media simplify the lesson and make it more understandable.

QUESTION 8 (see Appendix D)

From the data given in table 3.5 it is apparent that many of the respondents have a theoretical knowledge of the chalkboard.

Table 3.5 Theoretical knowledge of teaching media

	YES		NO	
	TOTAL	%	TOTAL	%
CHALKBOARD	168	94,9	9	5,1
MAPS	110	62,1	67	37,9
WALL CHARTS	158	89,3	19	10,7
OVERHEAD PROJECTOR	138	78,0	39	22,0
TELEVISION & VIDEO	121	68,4	56	31,6
COMPUTER	36	20,3	141	79,7
RECORD PLAYERS	95	53,7	82	46,3
16mm SOUND PROJECTOR	43	24,3	134	75,7
BULLETIN BOARD	91	51,4	86	48,6

Table 3.5 (continued)

	YES		NO	
	TOTAL	%	TOTAL	%
FLANNEL BOARD	85	48,0	92	52,0
MODELS	114	64,4	63	35,6
OTHERS	32	18,1	145	81,9

The response was: Chalkboard (94,9%), maps (62,1%), wall charts (89,3%), overhead projector (78,0%), television and video (68,4%), record player (53,7%), bulletin board (51,4%) and models (64,4%), whereas a lack in the following was shown: theoretical knowledge in computers (20,3%), 16 mm sound projector (24,3%) and flannel board (48,0%). Those who have a theoretical knowledge of using other teaching media mentioned: the microscope, electricity kits, episcope, language laboratories, typewriters, pictures, puppets, slide film, newspapers, cartoons, tape recorders, radio, realia, transparencies and slide projectors.

QUESTION 9 (see Appendix D):

Respondents who claim that they had handled teaching media in their theoretical training were one hundred and fifty-nine (89,8%) and those who did not were only eighteen (10,2%). This is questionable as will be clear in Question 10 (Appendix D).

QUESTION 10 (see Appendix D):

Response:

Table 3.6 Teaching media handled during theoretical training

	YES		NO	
	TOTAL	%	TOTAL	%
CHALKBOARD	158	89,3	19	10,7
MAPS	88	49,7	89	50,3
WALL CHARTS	134	75,7	43	24,3
OVERHEAD PROJECTOR	101	57,1	76	42,9
TELEVISION & VIDEO	60	33,9	117	66,1
COMPUTER	10	5,6	167	94,4
RECORD PLAYER	53	29,9	124	70,1
16mm SOUND PROJECTOR	22	12,4	155	87,6
BULLETIN BOARD	53	30,0	124	70,0
FLANNEL BOARD	51	28,8	126	71,2
MODELS	88	49,7	89	50,3
OTHERS	20	11,3	157	88,7

In table 3.6 above, apart from the chalkboard, maps, wall

charts, overhead projector and models, all the other teaching media are taught entirely on a theoretical basis. Practical handling of media is lacking and therefore training equals theory with the exception of a few teaching media.

QUESTION 11 (see Appendix D)

Table 3.7 Theoretical knowledge of teaching media

	YES		NO	
	TOTAL	%	TOTAL	%
MEDIA SELECTION	108	61,0	69	39,0
MEDIA INTEGRATION	65	36,7	112	63,3
MEDIA PREPARATION	122	69,0	55	31,0
MEDIA EVALUATION	86	48,0	91	52,0
OTHERS	14	7,9	163	92,1

In table 3.7 it is reflected that theoretical training focuses on media selection and preparation while media integration and evaluation are neglected.

QUESTION 12 (see Appendix D)

Table 3.8 Theoretical ways of media training

	YES		NO	
	TOTAL	%	TOTAL	%
LECTURES	159	89,8	18	10,2
DISCUSSION IN GROUPS	136	76,9	41	23,1
DEBATE	73	28,8	104	71,2
SPEECHES	77	43,5	100	56,5
SYMPOSIA	23	13,0	154	87,0
PANEL DISCUSSION	39	22,0	138	78,0
OTHER	14	7,9	163	92,1

Table 3.8 shows the ways in which the respondents received their theoretical training in media use. It would appear that many of the respondents received their theoretical training through lectures (89,8%) and through discussion in groups (76,9%). This means that very little training is received through debates, speeches, symposia, panel discussions and others. However, fourteen (7,9%) of the respondents received their training

through reading, meetings, observation and self-discovery.

QUESTION 13 (see Appendix D):

Response: (see next page)

Table 3.9 Knowledge on selecting teaching media

	YES		NO	
	TOTAL	%	TOTAL	%
SITUATIONAL ANALYSIS	122	68,9	55	31,1
LEARNING ENVIRONMENT	151	85,3	26	14,7
QUALITIES OF THE TEACHER	89	50,3	88	49,7
OBJECTIVES	165	93,2	12	6,8
LEARNING CONTENT	158	89,3	19	10,7
MEDIA ATTRIBUTES	97	54,8	80	45,2
AVAILABILITY OF MEDIA	145	81,9	32	18,1
MODES OF TEACHING	145	81,9	32	18,1
PUPIL'S ENTRY SITUATION	148	83,6	29	16,4

Table 3.9 depicts the theoretical knowledge on selecting teaching media. It is apparent from the table that the student-teachers have a theoretical knowledge of selecting teaching media.

QUESTION 14 (see Appendix D):

Response:

Table 3.10 Theoretical knowledge on integrating media

	YES		NO	
	TOTAL	%	TOTAL	%
STRUCTURE OF THE LESSON	159	89,8	18	10,2
SITUATIONAL ANALYSIS	118	66,7	59	33,3
AIMS AND OBJECTIVES	165	93,2	12	6,8
LEARNING CONTENT	157	88,7	20	11,3
PUPIL'S ENTRY SITUATION	143	80,8	34	19,2
MODES OF TEACHING	135	76,3	42	23,7
AVAILABILITY OF MEDIA	146	82,5	31	17,5

Table 3.10 shows some of the aspects which must be considered when integrating teaching media. The statistics in table 3.10 compare negatively with table 3.7, which shows that 36,7% of the respondents received theoretical training in integration. The average choice of table 3.10 for media integration is \pm 82%. Perhaps one would be inclined to think that student-teachers have a theoretical knowledge of media integration since they know the components of media integration.

QUESTION 15 (see Appendix D)

Response:

Table 3.11 Practical training in the use of teaching media in a lesson

	YES		NO	
	TOTAL	%	TOTAL	%
CHALKBOARD	165	93,2	12	6,8
MAPS	85	48,0	92	52,0
WALL CHARTS	153	86,4	24	13,6
OVERHEAD PROJECTOR	90	50,8	87	49,2
TELEVISION & VIDEO	56	31,6	121	68,4
COMPUTER	5	2,8	172	97,2
RECORD PLAYERS	64	36,2	113	63,8
16mm SOUND PROJECTOR	20	11,3	157	88,7
BULLETIN BOARD	63	35,6	114	64,4
FLANNEL BOARD	54	30,5	123	69,5
MODELS	82	46,3	95	53,7
OTHER	17	9,6	160	90,4

In table 3.11 the teaching media in which many teachers were

trained in a practical way are the chalkboard (93,2%) and wall charts (86,4%). Those trained in the use of maps (48%) and models (46,3%) show a tendency of having been trained practically. The low percentage could be attributed to the fact that not all respondents take subjects that use maps and models. In the others there is very little practical training at the College.

QUESTION 16 (see Appendix D):

Response:

Table 3.12 Place of training in the use of teaching media

	COLLEGE		HOME		OTHER		NOT TRAINED	
	TOTAL	%	TOTAL	%	TOTAL	%	TOTAL	%
CHALKBOARD	160	90,4	2	1,1	6	3,4	9	5,1
MAPS	91	51,4	3	1,7	15	8,5	68	38,4
WALL CHARTS	143	80,8	1	,6	8	4,5	25	14,1
OVERHEAD PROJECTOR	85	48,0	1	,6	3	1,7	88	49,7
COMPUTER	19	10,7	10	5,6	1	,6	147	83,1
RECORD PLAYER	37	20,9	35	19,7	1	,6	104	58,8
16mm SOUND PROJECTOR	33	18,6	1	,6	1	,6	142	80,2
BULLETIN BOARD	65	36,7	1	,6	-	-	111	62,7
FLANNEL BOARD	56	31,7	-	-	2	1,1	119	67,2
MODEL	90	50,8	2	1,1	4	2,3	81	45,8

From table 3.12 it would appear that many respondents who receive training in the use of teaching media at the College get it in the chalkboard (90,4%), maps (51,4%), wall charts (80,8%) and models (50,8%). This indicates that of the many respondents who do not receive training in teaching media at Colleges or University will never receive it elsewhere.

QUESTION 17 (see Appendix D):

Response:

Table 3.13 Practical ways of handling teaching media

	YES		NO	
	TOTAL	%	TOTAL	%
MICRO-TEACHING	139	78,5	38	21,5
PREPARATION OF TEACHING MEDIA	131	74,0	46	26,0
USAGE OF AN INSTRUMENT	57	32,2	120	67,8
OTHER	16	9,0	161	91,0

Table 3.13 reflects the practical ways in which respondents had the chance to handle teaching media. Many respondents handled teaching media when they did micro-teaching (78,5%) and through the preparation of teaching media (74%). Those who handled other teaching media through other means cited the following ways: through biology practicals, science laboratory and climatological instruments.

QUESTION 18 (see Appendix D):

One hundred and fifty-eight (89,3%) of the respondents claim that they have prepared teaching media at the College whereas only nineteen (10,7%) said they did not prepare teaching media at the College.

QUESTION 19 (see Appendix D):

Response:

Table 3.14 Type of teaching media prepared at the College/University

	YES		NO	
	TOTAL	%	TOTAL	%
MAPS	56	31,6	121	68,4
CHARTS	147	83,0	30	17,0
FLANNEL BOARD	25	14,1	152	85,9
BULLETIN BOARD	38	21,5	139	78,5
OTHER	37	20,9	140	79,1

Table 3.14 shows the type of teaching media prepared at Colleges/University. It is very apparent that most of the respondents (83,0%) prepared charts at the College/University. This suggests that they can only prepare wall charts. The thirty-seven (20,9%) respondents who could prepare other teaching media cited: models, preparing cassettes, preparing transparencies, flash cards and flip cards.

QUESTION 20 (see Appendix D):

One hundred and sixty-four (92,7%) of the respondents said they had teaching skills practice in media. For those who had a chance, forty-two (23,7%) of the respondents had a chance of 0-1, ninety-four (53,1%) had a chance of 2-5, and twenty-eight (15,9%) had a chance of five to ten times in micro-teaching. Although the position in this regard is not excellent it is, however, satisfactory.

QUESTION 21:

Table 3.15 Practice in media selection, integration, preparation and evaluation

	YES		NO	
	TOTAL	%	TOTAL	%
MEDIA SELECTION	106	59,9	71	40,1
MEDIA INTEGRATION	77	43,5	100	56,5
MEDIA PREPARATION	123	69,5	54	30,5
MEDIA EVALUATION	85	48,0	92	52,0

Table 3.15 shows the extent to which media selection, integration, preparation and evaluation have been practised in micro-teaching. It appears media selection and media preparation have been practised during micro-teaching.

QUESTION 22 (see Appendix D)

Eighty-two (46,3%) of the respondents had problems in the use of

teaching media in micro-teaching whereas ninety-five (53,7%) do not have problems in the use of teaching media in micro-teaching. Those who had problems mentioned the following reasons:

- they are not used to teaching media from secondary level;
- they have no time to do it practically;
- they cannot operate some of the teaching media;
- they do not know the right procedure to follow;
- the limited time in micro-teaching;
- some topics do not have teaching media;
- do not know which teaching media will arouse the pupils; and
- the unavailability of relevant materials.

It would appear that student-teachers are only trained to use the chalkboard, maps, wall charts and to some extent overhead projectors in a practical way at the College/University. Most of these are taught at the College or University. The handling of teaching media is done in micro-teaching and through the preparation of media. Charts are media that are mostly prepared at College (83,0%). Although micro-teaching is done about 46,3% of the respondents still have problems in the use of teaching media in micro-teaching. The reason could be lack of training in the use of media in the didactic situation.

QUESTION 23 (see Appendix D)

Table 3.16 shows the teaching media that the student-teachers used at the schools. It would appear that the teaching media that are used by student-teachers are the chalkboard (98,9%), maps (44,6%), wall charts (88,1%) and the models (40,1%). Maps show a tendency of being lower than wall charts and this may be attributed to the fact that not all student-teachers do Geography and History as major subjects.

Table 3.16 Teaching media used by respondents at schools

	YES		NO	
	TOTAL	%	TOTAL	%
CHALKBOARD	175	98,9	2	1,1
MAPS	79	44,6	98	55,4
WALL CHARTS	156	88,1	21	11,9
OVERHEAD PROJECTOR	15	8,5	162	91,5
TELEVISION & VIDEO	9	5,1	168	94,9
COMPUTER	2	1,1	175	98,9
RECORD PLAYERS	23	13,0	154	87,0
16mm SOUND PROJECTOR	4	2,3	173	97,7
BULLETIN BOARD	17	9,6	160	90,4
FLANNEL BOARD	18	10,2	159	89,8
MODELS	71	40,1	106	59,9
OTHER	11	6,2	166	93,8

The few who used other teaching media (6,2%), used pictures, realia, radio, textbooks, cartoons, typewriter and the calculator.

QUESTION 24 (see Appendix D):

Response:

Table 3.17 Media used by teachers at schools

	YES		NO	
	TOTAL	%	TOTAL	%
CHALKBOARD	171	96,6	6	3,4
MAPS	141	79,7	36	20,3
WALL CHARTS	127	71,8	50	28,2
OVERHEAD PROJECTOR	23	13,0	154	87,0
TELEVISION & VIDEO	20	11,3	157	88,7
COMPUTER	6	3,4	171	96,6
RECORD PLAYERS	29	16,4	148	83,6
16mm SOUND PROJECTOR	5	2,8	172	97,2
BULLETIN BOARD	30	16,9	147	83,1
FLANNEL BOARD	22	12,4	155	87,6
MODELS	56	31,6	121	68,4
OTHER	13	7,3	164	92,7

According to table 3.17, media mostly used by teachers at

schools are the chalkboard (96,6%), maps (79,7%) and wall charts (71,8%). It is apparent that media, such as the overhead projector, television and video, computer, record player, 16mm sound projector, bulletin board, flannel board and models are not used apparently because they are not available.

QUESTION 25 (see Appendix D):

One hundred and four (58,8%) of the respondents believe the period of teaching practice is enough for practising the use of teaching media in a lesson at schools, whereas about seventy-three (41,2%) respondents believe the period of teaching practice is not enough to practise the use of teaching media in a lesson.

QUESTION 26 (see Appendix D):

One hundred and fifty-eight (89,3%) of the respondents said the biggest problem in using teaching media at schools was the lack of materials at schools, five (2,8%) respondents believe it is lack of knowledge, eight (4,5%) said they lack time to prepare teaching media while six (3,4%) cited lack of guidance as their biggest problem.

3.11 CONCLUSION

In this chapter the responses of the four groups, that is, three groups of interviews and one group of the respondents to the questionnaire, namely Rectors of Colleges/Dean of the faculty of education, heads of departments, lecturers and student-teachers were given. In chapter four, findings and conclusions of this investigation will be stated and recommendations regarding the improvement of student-teachers at colleges will be made.

INTERVIEW SCHEDULE A

INTERVIEWS WITH RECTORS/DEAN OF THE FACULTY OF EDUCATION

1. Is it true that materials and equipment such as Overhead Projectors, Television and Video, Charts, Maps, Video-Cameras, Mini-Computers, .16 mm Sound Projectors, Tape Recorders, Language Laboratories, Libraries and others are available at your College?

2. Do you think student-teachers are capable of using at least most of them in the teaching-learning situation?

3. Why are they not capable of using them? (If they cannot.)

4. What do you recommend should be done?

INTERVIEW SCHEDULE B
INTERVIEWS WITH HEADS OF DEPARTMENTS AT COLLEGES
OF EDUCATION AND THE UNIVERSITY OF VENDA
(FACULTY OF EDUCATION)

1. In which subjects are you head of the Department?

2. Do you think it is necessary to use teaching media in the subjects you are heading?

3. Do you think your student-teachers can use the Chalkboard, Maps, Charts, Overhead Projectors, Television and Video, Mini-Computer, Record Player, 16 mm Sound Projector, Bulletin Board, Flannel Board and Models in the teaching-learning situation?

4. Why are they not capable of using them? (If they cannot use them.)

5. What do you recommend?

8. Do schools where your student-teachers do school practicum have materials and teaching media for student-teachers to use?

Chalkboard
 Maps
 Charts
 Overhead Projectors
 Television and Video
 Computer
 Record Player
 16 mm Sound Projector
 Bulletin Board
 Flannel Board
 Model

YES	NO

9. Do you think the period for teaching practice is enough for student-teachers to practise the usage of teaching media in the real classroom situation?

YES	NO

10. Do you think student-teachers have guidance in the use of teaching media at schools?

YES	NO

11. What are your recommendations?

QUESTIONNAIRE SCHEDULE

A QUESTIONNAIRE FOR STUDENT-TEACHERS

A questionnaire of teaching media usage by student-teachers in colleges of education in Venda/University of Venda.

The aim of this questionnaire is to find out in which way student-teachers are trained in the use of teaching media. Information found by this investigation will be used in an evaluation of the above-mentioned area to conclude how student-teachers can be trained in media usage.

All secondary teachers diploma student-teachers and B.A.Ed. student-teachers are requested to answer this questionnaire.

Please answer all the questions. Your name is not required, so be free, be honest and give your true response to all the questions.

Questions are answered by ticking the appropriate block:

Y - stands for Yes

N - stands for No

e.g. chalkboard

Y	N
---	---

In some questions you will be required to supply information and reason/s. Please do so.

A. GENERAL INFORMATION

State whether you are at the College or University.

COLLEGE
UNIVERSITY

Sex: Male
 Female

1
2

1. Which of the following are your major subjects?

- Accounting
- Agriculture
- Arts
- Afrikaans
- Biblical Studies
- Biology
- Business Economics
- Economics
- Electronics
- English
- Geography
- History
- Home Economics
- Luvenda
- Mathematics
- Mechanics
- Music
- Physical Science
- Religious Instruction
- Technical
- Others (Specify the subject)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21

2. Did you have media science training in these subjects?

Y
N

3. Did you have teaching science as a subject in your training?

Y
N

4. Did you have teaching media as a component in your teaching science training?

Y
N

5. Is there any other subject in which you had teaching media training?

Y
N

6. If the answer is Yes in 5, specify the subject/s.

7. Do you think it is necessary to use teaching media in your teaching subjects?

Y
N

Give a reason/s: _____

B. THEORETICAL COMPONENT

8. Do you have a theoretical knowledge of the following teaching media in a teaching-learning situation?

Chalkboard

Maps

Wall Charts

Overhead Projectors

Television and Video

Y	N
Y	N
Y	N
Y	N
Y	N

14. The following are some of the things one must consider when integrating teaching media (tick the appropriate boxes).

Structure of the lesson
 Situational analysis
 Aims and objectives
 Learning content
 Pupil's entry situation (pre-knowledge)
 Modes (method)
 Availability of media

Y	N
Y	N
Y	N
Y	N
Y	N
Y	N
Y	N

C. PRACTICAL COMPONENT

I. INSTITUTE PRACTICUM

15. Were you ever trained in a practical way to use the following teaching media in a lesson?

Chalkboard
 Maps
 Wall Charts
 Overhead Projectors
 Television and Video
 Computer
 Record Player
 16 mm Sound Projector
 Bulletin Board
 Flannel Board
 Models
 Other (List)

Y	N
Y	N
Y	N
Y	N
Y	N
Y	N
Y	N
Y	N
Y	N
Y	N
Y	N

16. If you have been trained in a practical way in the following teaching media, where were you trained?

	College	University	Home	Other	Not trained
Chalkboard	1	2	3	4	5
Maps	1	2	3	4	5
Wall charts	1	2	3	4	5
Overhead projector	1	2	3	4	5
Television and Video	1	2	3	4	5
Computer	1	2	3	4	5
Record player	1	2	3	4	5
16 mm Sound projector	1	2	3	4	5
Bulletin board	1	2	3	4	5
Flannel Board	1	2	3	4	5
Models	1	2	3	4	5

17. In which of the following practical ways did you get a chance to handle teaching media?

Micro-teaching	Y	N
Preparation of media	Y	N
Usage of an instrument, e.g. Video camera, Overhead Projector	Y	N
Other (specify)	Y	N

18. Have you ever prepared teaching media at the College/University?

Y
N

19. If the answer is yes, which of the following did you prepare?

- Maps
 - Wall charts
 - Flannel board
 - Bulletin board
 - Other (specify)
-
-

Y	N
Y	N
Y	N
Y	N
Y	N

20. Do you ever do teaching skills practice (micro-teaching) in media at your College/University?

Y
N

If you ever had a chance, how many times per annum (year)?

0-1
2-5
5-10

21. In your teaching skills practice (micro-teaching) did you EVER practise the following?

- media selection
- media integration
- media preparation
- media evaluation

Y	N
Y	N
Y	N
Y	N

22. Do you encounter problems in the use of teaching media when you do teaching skills practice (micro-teaching)?
 Comment for yes or no: _____

Y
N

25. Is the period of teaching practice enough to practise media usage at schools?

Y
N

26. Your biggest problem in using media in the schools where you did practicum (tick the one you think is the most correct) is that:

a) There are no material and teaching media at schools

b) You lack knowledge of using teaching media.

c) You have no time to prepare the teaching media.

d) You lack guidance.

THANK YOU FOR YOUR COOPERATION AND CONTRIBUTION

CHAPTER 4

OVERVIEW, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS FROM THE RESEARCH

4.1 OVERVIEW

In chapter one a brief reflection of the problem, purpose of the study, main concepts and method of study were done. Furthermore an indication was given of the methods that were followed.

To get more information on the problem a literature survey on pre-service education and media training was done in chapter two. This consisted of the components of pre-service teacher education, resistance to large-scale implementation of teaching media, tendency in media training and conclusion.

In chapter three the empirical research study was done and analysis of data accumulated from interviews with Rectors, heads of departments, lecturers and from the questionnaire given to student-teachers.

The main aim of the study was not only to determine whether student-teachers are trained in the use of teaching media at Venda Colleges of Education and the University of Venda, but also to come to possible conclusions about the ways to overcome these problems that might hinder effective teacher training in media usage.

From the results of the literature review and empirical study done, the findings of this investigation are summarized.

4.2 FINDINGS

4.2.1 General findings

- Student-teachers desire to use audio-visual material but are held back by a variety of good reasons, namely, lack of

time to prepare materials, lack of knowledge of how to use this material, lack of guidance and lack of material at schools.

- The lack of knowledge on how to use audio-visual material effectively in a didactic situation is a major deterrent. The result is a definite lack of use of educational technology in both in- and pre-service education.

4.2.2 Findings pertaining to Rectors of Colleges of Education

- Rectors believe that the available material and equipment at the training institutions are not being used by lecturers and if they are used they are not being fully utilised.
- The lecturer cannot use the available teaching media because he himself has not been trained in the use of it.
- The training programme of student-teachers is also congested which limits the time to train and practise the use of media in didactic situations.
- The Rectors believe the problem can be overcome by in-service training, curriculum development and specific subjects to account for the training.

4.2.3 Findings pertaining to heads of departments

- All the heads of departments who were interviewed believe it is necessary to use teaching media in lectures.
- Most of them reported that their student-teachers are not able to use teaching media. The reason therefore is that student-teachers are not being trained in the use of teaching media in the teaching-learning situation.

- Lecturers cannot use media in the teaching-learning situation because of lack of knowledge.
- The heads of departments recommended the training of human resources and the first group should be lecturers; the programme must be flexible enough to make allowance for tutorials for teaching media; materials should be bought since the funds for these materials are available and lecturers must read widely in their subjects.

4.2.4 Findings pertaining to lecturers

- Lecturers thought it is necessary to use teaching media in the didactic situation.
- Only three types of media can be used by student-teachers, namely, the chalkboard, maps and wall charts.
- Lecturers say they cannot train student-teachers because lecturers do not use media when teaching; student-teachers have not been trained at all and mass classes are also a problem; the staff do not have the experience in the training of teaching media.
- Lecturers were mainly trained in the use of the chalkboard (100%), maps (50%) and wall charts (97,5%).
- Schools do not have teaching media for student-teachers to use in the didactic situation.
- Lecturers think the period of teaching practice is not enough to practise the teaching media in the real teaching-learning situation where some of the teaching media are available.
- Student-teachers do not have guidance from experienced teachers in the use of teaching media during teaching

practice.

- Lecturers recommended that facilities should be made available to schools; more practical work should be done; there should be properly trained and well-qualified lecturing staff in educational media; there should be a media centre where student-teachers can learn and practise the use of media.

4.2.5 Findings pertaining to student-teachers

A. General information

- Student-teachers who had media science training are 58,4% of the respondents.
- About 80,2% of the respondents had teaching science as a subject.
- Those who had teaching media as a component are 68,4% of the respondents.
- About 37,3% of the respondents did not have training in teaching media in other subjects.
- 99,4% of the respondents have a positive attitude towards the use of teaching media in the didactic situation.

B. Theoretical component

- Generally speaking, student-teachers appear to have a good theoretical training in the use of teaching media in the didactic situation.
- It would appear that 89,8% of the respondents handled the different teaching media at College/University although it is only the chalkboard, maps, wall charts,

overhead projector and models during the theoretical training of media.

- It would appear that respondents have a sound knowledge on media selection and media preparation, however they lack theory on media integration and media evaluation.
- The theoretical ways of getting training is mainly through lectures and discussions in groups.

C. Practical component

I. Institute practicum

- Practical training in media integration is mainly done on the chalkboard and wall charts.
- Media are handled during micro-teaching sessions and during the preparation of teaching media period.
- Only wall charts are prepared at College.
- During teaching skills practice (micro-teaching) practical training takes place in media selection and preparation.

II. School practicum

- The main teaching media used by student-teachers are the chalkboard (98,9%) and wall charts (88,1%) during teaching practice.
- The teachers mostly use the chalkboard (96,6%), maps (79,7%) and wall charts (71,8%) in the didactic situation.
- The period of teaching practice is short.

4.3 CONCLUSIONS

From the findings from the research the following conclusions can be drawn:

- The lecturer of student-teachers in training cannot use the available teaching media at the College because he himself has not been trained in the use of teaching media in the didactic situation.
- The training programme of student-teachers is congested which limits the time to train and practise the use of media in didactic situations.
- The student-teacher completes his training without enough knowledge on how to use teaching media in a teaching-learning situation.
- All four groups (that is Rectors, heads of departments, lecturers and student-teachers) believe it is necessary to use teaching media when teaching.
- Those who might reject the use of teaching media do so as a result of lack of knowledge on how to use teaching media.
- There is no in-service training for lecturers to update them in the use of teaching media.
- X - Only three media can be used by student teachers and lecturers, that is, chalkboard, maps and wall charts.
- Schools where student-teachers do teaching practice have a lack of audiovisual materials and other equipment.
- The period of teaching practice is not enough to practise the teaching media in the real teaching-learning situation where some of the teaching media are available.

- Teachers at schools cannot offer guidance to student-teachers in the use of teaching media during teaching practice.

4.3.1 Student-teachers

A. General

- Many student-teachers do not have media science training.
- Subject methodologies do not offer training in teaching media (37,3% of the respondents).

B. Theoretical component

- Student-teachers have a good theoretical training in the use of teaching media in the didactic situation.

C. Practical component

I. Institute practicum

- Practical training in media integration is only found on the chalkboard and wall charts during micro-teaching sessions and during the preparation of teaching media.

4.4 RECOMMENDATIONS

4.4.1 Recommendations coming from the research

In as far as the improvement of teaching media usage by Venda student-teachers is concerned, there are many problems that need to be addressed. However, the following recommendations are made as a result of this investigation:

- Rectors of Colleges/Dean of Faculty of Education, University of Venda, heads of departments and lecturers emphasized the training of the lecturer and teachers in practice in the use of teaching media and this could be done by providing in-service training to lecturers and teachers in media.
- The programme should be adjusted in such a way that student-teachers can do tutorials in media practice even by reducing some of the subjects in the curriculum which are not relevant to what the student-teachers are studying for.
- Because the attitude of the lecturer and the student-teacher is positive it must be improved by the training of these two groups in the proper use of media.
- Student-teachers should be trained to prepare teaching media in preparation for the period of teaching practice at schools because schools do not have materials; on the other hand the government should also give priority to making teaching media available at schools.
- Schools must try to improve the usage and production of media to raise the level or variety of media for education.
- The researcher recommends a longer teaching practice period for the training of student-teachers.
- Teachers at schools must be aware of the important role they play in the training of teachers.
- Rectors and heads of departments must encourage lecturers to train student-teachers in media science. The exercise can succeed if all lecturers irrespective of the subject help in improving media science training.

- While theoretical knowledge in media is satisfactory an emphasis should be put on the practical use of teaching media in the didactic situation.
- Every College of Education and the University must have a well-planned media centre where student-teachers and lecturers can be trained.
- All Colleges should at least hold sessions to discuss the training of student-teachers and especially training in the utilization of media in didactic situations. This should include both the theoretical and practical training in teaching media.

4.4.2 Recommendations for further studies

- Further research should investigate how separate theoretical and practical examinations could be introduced in teaching media by the Department of Education and Training because student-teachers take what is examined seriously.
- The feasibility of using media in schools in Venda.
- The content of media training in pre-service teacher education.
- The in-service training of teachers in media in Venda.
- The link between pre-service and in-service education in media training.

4.5 SUMMARY

This investigation into the training of student-teachers in teaching media within the context of the set objective is a contribution to the training of student-teachers in teaching media in Venda.

In this study not only training of student-teachers in the usage of teaching media in Venda was evaluated, but the problems that deter student-teachers from using the teaching media were also identified. It is, however, important to note that the study is confined to Venda Colleges of Education and the University of Venda and that problems experienced here might be peculiar to other areas.

It is the wish of the researcher that the study will provide a base for further investigations into media training in Venda, whereby the level of education in schools might be raised to even higher levels.

Hereby the study on media training of student-teachers in Venda is done.

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11 OCTOBER 1991

THE DIRECTOR-GENERAL
DEPARTMENT OF EDUCATION
P/BAG X2250
SIBASA

Dear Sir,

THE COMPLETION OF QUESTIONNAIRES BY SECONDARY TEACHERS DIPLOMA STUDENTS (FINAL YEAR STUDENTS) IN COLLEGES OF EDUCATION.

I hereby apply for permission to conduct a research into the training of student-teachers in media usage in colleges of education in Venda.

The title of my dissertation is: MEDIA TRAINING OF STUDENT-TEACHERS IN VENDA. I am a student at the Randse Afrikaanse Universiteit for an M-ED degree and my study leader is Dr. Hollander.

The following information is provided:-

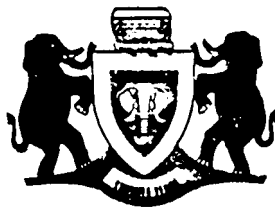
- only student teachers in their final year will be requested to fill in the questionnaire.
- only colleges with STD will be visited.
- the questionnaire will take 10-15 minutes to complete.
- the questionnaire will be forwarded to you before any research can be done as soon as it is approved by my study leader.
- the research will be conducted as from the 19th September to the 7th October 1991.

Furthermore I shall seek the necessary permission from Rectors of the Colleges.

Sincerely

R.J. Monobe

REPUBLIC OF VENDA



REPUBLIEK VAN VENDA

RIPHABULIKI YA VENDA

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DEPARTMENT OF EDUCATION AND CULTURE
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MR MONOBE R.J.
RANDSE AFRIKAANSE UNIVERSITY
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AUCLAND PARK

THE COMPLETION OF QUESTIONAIRES BY SECONDARY TEACHERS DIPLOMA STUDENTS IN COLLEGES OF EDUCATION.

1. *Your letter dated 11 September 1991 regarding the above matter refers.*
2. *Your application to conduct research for the M.Ed degree in Colleges of Education in Venda has been approved.*
3. *You are requested to contact rectors of Colleges to make arrangements for the completion of questionnaires well in advance.*

[Handwritten Signature]
DIRECTOR GENERAL FOR EDUCATION AND CULTURE

/stn/