AN INVESTIGATION INTO THE USE OF VIDEO TECHNOLOGY IN FACILITATING TEACHING AND LEARNING BIOLOGY AT INHLANHLAYABEBHUZE AND BANQOBILE HIGH SCHOOLS.

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A DESERTATION SUBMITTED TO THE FACULTY OF
HUMANITIES UNIVERSITY OF KWAZULU NATAL
(WESTVILLE CAMPUS) IN THE FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF: CO-ORDINATED
MASTERS IN EDUCATION AND TRAINING (COMET)

EDUCATIONAL TECHNOLOGY IN THE SCHOOL OF
EDUCATIONAL STUDIES.

MASTERS OF EDUCATION (EDUCATIONAL TECHNOLOGY) IN
THE SCHOOL OF EDUCATIONAL STUDIES.

ABSTRACT

The study is focusing on the use of Video Technology in teaching and learning process. This was conducted In rural schools because it has been discovered that most community / rural schools do not have adequate resources, especially the modern technologies that are used by certain schools in modern countries to enhance their teaching and learning process Shellington (1995).

The purpose of this study was to find out the general view of learners and educators towards the use of video technology in their schools. Generally it has been discovered that many participants of this study, both learners and educators were very positive towards the use of video technology. Though many participants voted for further usage of videos in future, but there were few discrepancies that were discovered during this study that needs immediate attention so that these schools will benefit a lot in the use of Video Technology in their classrooms.

In the conclusion and recommendations of this study it was then recommended that teachers should be empowered in different ways so that they could be able to use this equipment effectively and profitable. Learners showed keen interest in other methods of teaching other than the traditional way of teaching where the teacher stands in front of them and spoon-feed them with information. In this case the researcher of this study therefore recommends that community schools should try to work hand in hand with their communities so as to be able to buy what ever resources they need for their teaching, because some of these modern technology are quite affordable even rural schools can afford them.

Again it has been noted that few participants from this study have access to television at their home. In that case it is then recommended such learners should be encouraged to use them on their own at their spare times, because in that way independent learning will be inculcated.

ACKNOWLEDGEMENT

DEDICATION

I dedicate this research to:

My husband Touch Hlongwane for being a critical friend, his support, motivation, patience, sacrifices and encouragement through out the period of my study. He was always backing me up with his endless support in times where I felt, I was loosing hope and inspiration and to my family especially my sisters Manozi, May, Nduduzo, Mpume and Sphumelele, my step mother Grace and my five brothers for their endless support and encouragements.

I will never forget to mention my late mother Mrs G.K. Mdletshe for her unconditional love and support. She was always the pillar to lean at and my source of inspiration during the time I started this study, unfortunately she was not around to take me through this journey, but I will always cherish her teachings.

DECLARATION.

I   Nonhlanhla Mdletshe – Hlongwane, declare that this dissertation is my original piece of work and has not been previously submitted for any degree at any institution.

_____   _____

Nonhlanhla D. Hlongwane   **Date**

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Supervisor

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CHAPTER 1.

1. 1 INTRODUCTION.

As television and video Education grew in popularity and affordability it became apparent that they are now playing a major role in the learning process. Videotapes are media that have a great potential as an educational resource. Videotapes are commonly used to capture and bring reality into the classroom, usually in some form of documentary. Videotapes are an excellent substitute for classroom activity and present a well-made product of high quality and coherence.

In South Africa there are various methods, techniques and strategies that are used to enhance the teaching and learning processes that take place in and out of classroom situations. Some of these methods are mainly media learning programmes, such as television, internet and many others. Learners respond differently in these learning programmes. Sometimes some of these programmes do not achieve the goals and mission they were intended to achieve, because of the way in which learners respond to them. The researcher used the William Smith learning channel Grade 12 Biology programme to investigate this issue. The William Smith Learning Channel is a Television and video tape programme that was introduced by William Smith himself with the aim of assisting learners from Grade 10 – 12 in English, Mathematics, Science and Commercial subjects throughout South Africa. The intention of this study is to shed some light on how learners perceive the actual message in the given

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text. The researcher believes that the outcomes of this study will clearly indicate how they perform or display their experiences later on.

1. 2   STATEMENT OF PURPOSE

An investigation into the use of video technology in facilitating teaching and learning Biology at Banqobobile and Inhlanhlayabebhuze High Schools. (KwaZulu Natal – South Africa)

The apartheid government of pre 1994 allocated educational budgets and resources unequally to the different racial groups of South Africa. The educational budget was allocated and distributed unequally reflecting the racially based values and preferential treatment of the previous Apartheid State. Today even though the present regime is trying by all means to create balances and eradicate the inequalities of the past, but the legacies of the past are still there between the former model C schools (white) and previously disadvantaged Black community schools.   When one looks at the basic resources that these schools have one finds that they are operating at two different angles: The white schools are fully equipped with almost every basic educational resources whereas most black schools have absolutely nothing.

Kriekner (1992) in Doelker (1999) undertook a survey where he pointed out the imbalances in the educational budget under apartheid. (See table 1).

Table 1.

Educational expenditure on different racial groups in S.A 1988/89

Category allocation	Blacks in the designated White Areas	Indians	Coloureds	Whites	KwaZulu Homeland
Pre School	R1171000	R1309000	R9444 000	Not Individually allocated	
Primary Education	R74908.000	R166639.000	R478471.000	Same as above	
Secondary	R428993.000	R78808.000	R309017.000	Same as above	
Total	R1179245.000	R246756.000	R566723.000	R1969229.000	R599383.000
Overall Total	**R1640728.000**	**R483240.000**	**R1103369.000**	**R3727539.000**	**R599383.000**

The budget indicated above (Table 1) was only allocated for the registered population of grade 12 of South Africa in 1988 / 89.

Table 2.

The actual statistics of Grade 12 in 1988 / 89

Racial Group	*Total Numbers*
Whites	1 273 204
Indians	296 961
Coloureds	894 666
Blacks	5 429 102
Total	*7 895 014*

Kriekner (1992) in Doelker (1999) further mentioned that even the budget for each child per racial group was not the same. Some were allocated higher per capita amounts, which was a way of elevating and creating some imbalances among different education systems. This is clearly illustrated in the following table. (Table 3)

Table 3.
Per capita expenditure of the state in 1988 / 89 per child for different racial groups

Racial group	Expenditure
African (in White designated areas)	R 547.39
Coloureds	R 1507. 55
Indians	R 2014. 88
Whites	R 2722.00

Table 4.

Per capita expenditure by the homelands 1988 / 89

Homelands	Expenditure
Gazankulu	R 547 .63
KaNgwane	R 453.13
KwaNdebele	R 536 .25
KwaZulu	R 411. 58

Doelker (1999) highlighted that the way the budget was allocated impacted on the quality of education offered on different administrative departments. Due to this practice, schools in rural areas and poor communities in homelands were severely affected by this, because their communities could not afford to finance their schools. As a result most community schools are still far behind and are poorly resourced as compared to urban schools. In the light of these problems a research study was undertaken to determine the following:

❖ The different kind of teaching technology (media) the teachers in the historically disadvantaged schools have and

❖ To see the way they utilize those media to compensate the situation.

CRITICAL QUESTIONS.

A. How do the learners and educators perceive the use of video technology in teaching and learning?

B. How do the educators use video technology in teaching and learning Biology?

1.3 RATIONALE

I have been working with a number of schools in the ex- Durban South Region under the Curriculum Materials Development Unit (Zikhulise Project) – a project that was formed by both KwaZulu Natal Department of Education and Culture as well as Izimpande Consortium, a body that was constituted by a number of non - Governmental Organizations (NGO's) such as Media in Education Trust (MIET), Educational Learning English and Teaching Services

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(ELETS) and others. This Zikhulise project was funded by United States Agency for International Development (USAID) and its main purpose was to empower educators to develop their own teaching and learning materials. This project was to be implemented over a two year period from year 2001 up to the end of 2002 in 3500 pilot schools through out KwaZulu Natal. Therefore, through this involvement the researcher observed many problems that are prevailing in the most disadvantaged schools. She then became interested in conducting a study that would find out the other educational technologies that can be used by both educators and learners in their teaching and learning environment. The other important factor that triggered her interest more was the discovery that, throughout the Table Mountain Circuit there was no Resource Centre or Community Centre that could be used by learners and educators as the source of reference for their education. All these factors therefore prompted the researcher to go on and conduct a study into finding out the actual value of using other media especially Videos by both educators and learners in their teaching and learning processes.

Another major reason that prompted the researcher to conduct this study was seeing the problem that is usually experienced by schools in rural areas of shortages of qualified educators especially for the so-called "scarce subjects" namely science, mathematics and commercial subjects. This problem has led many schools in these areas not to offer these subjects. This has been an ongoing problem for years until the National Department of Education came up with a policy in the year 2000 of employing and deploying teachers to all schools especially to the previously disadvantaged schools to address this

problem hence those educators were known as curriculum transformation educators, because they were employed with the aim of transforming curriculum in schools so that the learners produced in such schools are able to meet the modern needs of this changing society .

The researcher therefore believes that this study has come up with different views from both learners and educators on how they perceive the use of other methods of teaching that can be used to compensate the situation in previously disadvantaged schools. Therefore, through this study the researcher was able to come up with some ideas that can be used to help the schools from disadvantaged communities to cope and implement new technologies in teaching and learning.

The following are factors that were identified during the period of this study:

- The attitude of some educators and learners from disadvantaged schools towards the use of video technology as a means of teaching and learning.

- Drastic measures to be taken in order to equip and empower some educators in disadvantaged schools about new teaching technology.

1.4 Theoretical Framework

1.4.1 Constructivism

Constructivism is a theory of knowledge, which is based on philosophy, psychology and cybernetics. In the constructivist perspective, knowledge is constructed by the individual through his interactions with his environment. Constructivists claim that knowledge is not discovered and that the ideas

teachers teach do not correspond to an objective reality. (Jonassen, 1991).

Piaget"s theory of cognitive development (1960's) proposes that humans cannot be "given" information which they immediately use and understand, instead humans must "construct" their own knowledge through experiences. Experiences enable them to create schemas, mental models in their heads. These schemas are changed, enlarged and made more sophisticated through two complementary processes that are assimilation and accommodation. Social constructivists further contended that culture gives the child the cognitive tools needed for development. Parents, teachers and language are conduits for the tools of culture. Constructivism is based on the premise that we all construct our own perspective of the world through individual experiences and schema. Merill, (1991) summarised the assumptions of constructivism as follows:

❖ An individual through his interactions with his environment constructs knowledge.

❖ Learning is a personal interpretation of the world.

❖ Conceptual growth comes from the negotiation of meaning, the sharing of multiple perspectives and the changing of our internal representations through collaborative learning.

Merill (1991) also pointed out that, another important concept for social constructivists is that of scaffolding, which is a process of guiding the learner from what is presently known to what is to be known. Scaffolding allows student to perform tasks that would be normally being slightly beyond their abilities without that assistance and guidance from the teacher.

This study is based on the above-mentioned theory because:

❖ Learners were provided with the opportunity for apprenticeship learning in which there is an increasing complexity of tasks, skills and knowledge acquisition. Many students were exposed for the first time to this type of teaching where they were expected to sit down and listen to the video and make their own summaries of presentations.

❖ Knowledge construction and not reproduction was emphasised.

❖ Teachers played the role of guides, monitors, coaches, tutors and facilitators,

❖ Learning construction takes place in individual contexts and through social negotiations, collaboration and experience.

1. 5   THE SCOPE OF STUDY.

This study was carried out between March 2002 up to March 2003 and covered only three Secondary Schools. The sample was randomly chosen using the Education Management Information Services (EMIS) status. The schools used are BANQOBILE HIGH, THOLULWAZI SECONDARY AND INHLANHLAYABEBHUZE HIGH

These schools are in the Table Mountain Circuit under Camperdown District and ex-Durban South Region except Tholulwazi Secondary, which is in the Pinetown District – Molweni Circuit. Tholulwazi Secondary School was not used as part of the study but was used voluntarily to pilot test the tools that were used in gathering information. This school was chosen because it was nearer and convenient to the researcher to reach when piloting the

instruments. This school was chosen because it is located in a disadvantaged community, which shares almost the same sentimentals (characteristics) as Umkhambathi Reserve where the two schools are situated. Their common characteristics are that, they are all poorly resourced, from rural and poor communities and most of their learners were never exposed to video technology before.

1.6 SAMPLE.

Sampling refers to the means of selecting a given number of subjects from a defined population as a representative of that target population. Ackroyd and Hughes (1992) in James etal (1993) define target population as a hypothetical set of people, events or subjects to which we wish to generalize the result of the study. Therefore the target population in this study is all those schools that were previously disadvantaged and found in under-privileged communities. The sample of this study was randomly selected on the basis that this strategy would yield research data that could be generalized to a larger population within margins of error that may be determined statistically. Again, it also permits the researcher to apply inferential statistics to the population values based on the obtained sample values.

1.6.1 SAMPLE SIZE.

Borg (1983) says the general rule of sampling is to use the largest sample simply because the main purpose is to learn about the population from which they are drawn. According to Borg (1983) the larger the sample, the more likely is its mean and standard deviation to be representative of the population mean

and standard deviation, but in many educational research studies small samples are more appropriate than larger samples. This is because small samples often provide more knowledge than the study that attacks the same problem by collecting only shallow information on a large sample.

In this study the researcher chose to employ the small sample size, because out of eight High Schools in Table Mountain only two were used. The second reason was that of financial and time restrictions since this study was personally funded and was conducted during school hours in one school.

1.7. SAMPLE POPULATION.

Grade twelve (12) pupils of Inhlanhlayabebhuze High and Banqobile High School were chosen for this study on the basis that the researcher was not used and familiar to them since she was not working at the same schools, and on the fact that they were not used to media learning programmes. This group was also chosen on the understanding that since the researcher was a stranger to them they would not feel restricted and thus were able to say what they wanted to say without any restrictions of a teacher-pupil or parent-child relationship and thus submit or give bias free information.

The total population of the sample comprised 60 learners of whom 27 were boys and 33 were girls, their ages ranging between 18 - 24 years. They come from different religious and socio – economic groups but they are all blacks and Zulu speakers. Though KwaZulu Natal Province is constituted by a

number of racial groups such as, Whites, Indians, Coloreds and a few Xhosas, and Sothos, black Zulu speakers are a dominant group in this province.

The researcher chose to work with these groups at least once a month. In the first session the participants watched one-hour video programme on the PHOTOSYNTHESIS PROCESS. During this time the groups were captured videotape for the analysis, which was to follow. A thorough observation of participants by the researcher was also done during each session. At the end of each session a questionnaire was administered to the group with a number of open / closed questions by the researcher. The purpose of this was to ascertain the actual outcomes of the episode watched. This was given immediately at the end of the episode [topic: Photosynthesis] so that each learner could answer it alone without being influenced by others during recess. The second and third sessions were used to evaluate and determine what the participants had achieved or benefited from the videos. A significant part of these sessions was devoted to interviews and questionnaires. Interviews were chosen, because they were mainly conducted in isiZulu and hence participants were free to say whatever they wanted to say without any restriction of an English language, which seemed to be a problem to some of them. Questionnaires were used for the individual participation, because not all participants were interviewed. Types of questions asked were mainly open ended and closed. [Appendix A & B.]

1. 8 NATURE AND SIGNIFICANCE OF THE STUDY.

This study is a purely naturalistic phenomenological inquiry, because it used the non-interfering data collection strategies to discover the natural flow of events and processes. Its goal was to understand the natural phenomenon from the participants' perspective. Understanding was acquired by analyzing many contexts of the participants and by narrating participant's meanings for these situations and events. Participants' meanings included their feelings, beliefs, thoughts and actions

Through this study the researcher influenced and promoted the love, importance, usefulness, knowledge and skills of the use of video technology at schools since most of our educators are still adamant in using other means of teaching devices. Besides influencing educators this served as an icebreaker to the learners themselves who were not previously exposed to other means of learning, other than being lectured or taught through the word of mouth.

This study served as an eye opener to many educators there who then became interested in exploring more of this world of video technology, because during and after this research many educators came forward with the intention of seeking more help in terms of learning or acquiring more information and skills of using Video technology in their teaching and learning process so that they could extend this method of teaching to other subjects that were not treated in this study.

This also created some positive opportunities to both learners and educators when they realized the need and place of video technology within their

education and the need of educators to strive to know more about techniques and methods of implementing technological devices within their classrooms.

1.9 LIMITATIONS OF THE STUDY.

1.9.1 PARTICIPANT'S BACKGROUND.

Most learners in this study are from families without television, and therefore not exposed to long viewing of videos or films. This resulted in others becoming easily bored and others become fascinated and carried away by pictures, motions and actions that were taking place in the videos and therefore forgot about the main aim of watching those videos.

1.9.2 LANGUAGE ISSUE.

All the participants were Second Language English speakers and first language speakers were presenters in these presentations. As a result of this participants level of understanding of language used was very poor. The researcher noticed this during and after watching the videos. When the participants were interviewed in the medium of English after the shows most of them were very reluctant to talk. At first the researcher thought that the participants did not want to talk, because they were not interested in what had happened, but later on learnt that they were afraid to express themselves because they were not confident enough in their language command and instead preferred to be interviewed in the isiZulu language. Hartshorne (1992) pointed out that among many other things language is the serious problem in

Black schools that needs to be given a serious attention so as help our learners to cope with the outside world.

1. 9. 3   Duration (Length) of videos.

Since presentations were done more than once some videos used were too long. Topics like – **INTERNAL STRUCTURE OF THE EAR** took between one and half hours to be finished, which was too long for learners, especially those who were left behind in terms of understanding the subject content.

1. 9. 4   Floor space

In one school where these presentations were done during school hours the biggest problem was noise by other learners who were not participants. They became interested in seeing what was happening with those who were involved. They came closer to the venues and peeped through the windows where the study was conducted. By so doing they were making a lot of noise and disturbing the participants or even shouting or making a nasty comments. For the presentations conducted on Saturdays, attendance was poor, out of 30 pupils in the class only 24 attended and 6 were absent which constitutes 20% of the class. The major reason for absenteeism   was that   parents could not afford extra cost for bus fare.

1. 9. 5   Educator's skills of using video technology.

One educator from these schools was using this kind of technology for the first time, so he had no clue as to what to do and lacked the proper skills of

handling video presentations. He used to stop the presentations and clarify some issues to the participants that he thought they did not understand. By so doing participants ended up coming with so many questions and thus led to the presentation being extended. As a result of that some participants who were not following lost interest on the way and fell asleep. By so doing this educator was not wrong to create some pauses during presentation but the only problem with this was that he failed to control the questioning time. Baggalley (1989) agrees with what this educator was doing because he said in order to assess the level of understanding to viewers one need to stop at any time and ask any questions or comments to the participants. On the other hand, the educator from the other school didn't do anything until the presentation was over. In this way no one was sure whether the participants understood the content.

10. CONCLUSION.

As video technology becomes popular and accessible to those who can afford it. The researcher believe that it should be made popular to those schools that are in deep rural communities, because it has been seen that video technology is also useful in terms of teaching and learning processes and both educators as well as learners are keen to use and implement these new technologies in a learning process, but there are certain constraints like shortages and lack of exposure in terms of teachers and learners.

CHAPTER 2

LITERATURE REVIEW

2.1   Introduction.

The value of media came to the fore during the middle ages when educationists realised the importance of sensory perception and personal experience. They realised that when limitations prevented learners from direct contact with reality substitutes could be presented in the form of a picture, image or model (Curtis & Boultwood, 1977) Research done by Job (1993) revealed that there are several positive characteristics of audio- visual media in the classroom.

As Television and Video Education grew in popularity and affordability it is now playing a major role in learning process. Video is a medium that has great potential as an educational resource. Videos are commonly used to capture and bring reality into the classroom, usually in some form of documentary; they are an excellent substitute for classroom activity. They present a well-made product of high quality and coherence Tomaselli (1977).

It is true again that Audio-visual Educational Programmes have more weight and impact than written and still pictures to learners because through them learners can see and listen to what is said in that programme, and sometimes imitate what they have seen. The combination and wide range of audio- visual materials used such as pictures, objects, specimens, sound, colour, drama, movements and lighting bring more value to listeners and viewers than a still pictures. In other words if the combination of movement and pictures is correctly done, it can give meaning to the viewers without the uttering of a word. Cennamo (1993)

Though the value of still pictures is said to be immeasurable in a didactic situation since they bring reality and encourage interaction in learners, I still maintain that audio-visual programmes are more meaningful and advantageous than still pictures. Audio-visual programmes bring models of excellence to the viewers. Pupils can see and hear the able scientists, creative teachers, great poets and significant dramatists. The warmth, zeal, wisdom of Audio–Visual Educational Programmes can be transmitted through seeing, imitating and copying every move Cennamo (1993).

Cennamo (1993) said that, it is true that printed educational programmes / materials are more convenient to both educators and

learners in the sense that they can be taken and used anywhere, anytime, because of their cost effectiveness, availability, and reusability. We must not ignore the fact that there is a fear that in the near future computers will replace books and papers. Audio – Visual technology will remain to entertain and amuse people in their spare time.

The World Organisation (1992) of the Scout Movement and Utrech University in Netherlands, administered a study to pupils between 12–19 years from 23 countries from all over the world. Its result was presented to the general conference of United Nation Education and Science Commission (UNESCO), Paris in 1997. It argued that youth spend more time watching video programmes than doing other activities like reading, playing, etc. This briefly shows that televised programmes dominate the life of children in urban and electrified rural areas around the globe.

Lodziak (1986) said, when using the audio–visual educational programmes in classrooms teachers need to be aware that there is a strong relationship between media violence and real violence, in that way when selecting educational programmes they need to be more cautious to the type and content of that programme they have chosen. Many Audio – Visual Educational programmes contribute a lot to an aggressive culture in young ones because they fail to read and understand media messages and intentions. They fail to distinguish

between reality and fiction. In most cases pupils tend to copy and imitate everything that they see on media, for example people who are aggressive, they use media as further confirmation of their beliefs and attitudes.

2.2 WHAT IS AUDIO – VISUAL EDUCATIONAL PROGRAMMES.

Many scholars have come up with different theories as far as the definition and importance of media is concerned in the teaching and learning situation. They view this from different perspectives such as technological and psychological points of view. Heinich (1984) put forward that audio-visual media are the best tools that can be used in a teaching and learning situations, because they help to improve communication and instruction without any further participation by the participants (pupils), however this theory is completely contrary to the theories that was stated earlier on by B.F Skinner and others in the 1950's when they argued that programmed instructions are not good for learners because they encourage human learning that is passive, because in this learning situation, learners simply sit and watch all the proceedings without any actual involvement or commitment on their part . Looking at this argument one comes up with two sides of the story – "effective learning " The question that one may ask oneself is that, When do learners learn effectively? Is it when they

are actively engaged or not? It is these challenges that motivated the researcher of this study to become more and more interested in knowing and investigating on: **Do learners benefit from passive audio-visual programmes?** In other words after viewing the presentations given to them what perception do they develop about video technology? Do they see it as something that is useful that could be continued or never to be used in their future learning process?

Masterman (1985) insists that Media education is not always good and innocent, as they seem to be in first glance; sometimes they are impregnated with certain values and actively shape the messages they communicate. He further argued that it is important to encourage the development of media literacy skills in the teaching of all subjects because this will help educators and learners in different ways. In as much as we like and need media in our teaching we need to be very sceptical about it because it brings all kinds of prejudices, misconceptions and stereotypes

In the above-mentioned point Masterman (1985) was informing learners and educators by the first hand experience of what television and media is capable of and how these programmes are produced. When they understand this they will be able to develop critical powers and exercise greater choice over their usage. In short

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this is a warning that, media presentation should not be underrated and taken as they come to us because they are not always innocent and they are a human construct. The job they do is a result of human choice, cultural decision and social pressures.

Audio–visual media is an efficient way of bringing a carefully planned multimedia learning experience to a wide group of learners scattered all over the country. Many educational programmes are not confided to a class room situation but can be seen both at school and at home. Educational Television can be distributed through open broadcast, closed – circuit cables and cassette videotapes. Bates (1998) indicated that pupils benefit enormously from audio-visual media, teachers and parents should not forget that audio-visual programmes fail to accomplish the mission they intended because its viewers are not media literate. This means that teachers and parent have a big role ahead of them to teach their young ones how to read and interpret media correctly.

Haas and Pecker (1965: 258) state that, television is without doubt one of the most versatile audio – visual aids ever developed. Its ability to convey life and events in action will have a profound influence upon what teachers and learners think and do in the future. It is natural, therefore that all progressive educators use and test

television as an educational tool. They further stated that television offers vitality and newness, which attracts attention, creates interests and stimulates the desire to learn in young ones. However, this statement was counter acted by Lodziak (1984) in his study when he pointed out that television is a cause of a vast range of positive and negative effects in the lives of young people. Vygotsky's constructivist learning theory, which is often called social constructivism that says culture gives the child the cognitive tools needed for growing and development, supported this statement. The tools the culture provides may include adults as well as electronic forms of information access. Therefore, when children spent a lot of their time in electronic media we need to be aware that they learn all sorts of things that they see, because at their age most of them if not all of them are totally media illiterate. They have not developed the skill of screening the propaganda and the truth. Lodziak (1985) further said, in many cases televised violence programmes promote real life violence and aggressive behaviour in children and adolescents. Sproull (1973) says learners have the tendencies of imitating televised characters without actually assessing the reality or value of those actions. This is an indisputable truth, because such things have been witnessed many times in our youth philosophy of life.

Audio – Visual programmes make some programmes more understandable and appealing to a variety of ages and educational levels. From the illiterate five-year-old child to the sophisticated adult, television can provide common experiences to persons of different ages, education, or maturity. For example if you take Yizo Yizo drama you find that youth and adults interpret this drama differently. Youth find it more appealing and real whereas adults look at it as something that is used to teach their children bad behaviour and ways of life. Yizo Yizo is a multi language drama that was broadcasted by SOUTH AFRICAN BROADCASTING COPERATION (SABC 1) in the late 1990's with an aim of reflecting and revealing to the country the situation that was taking place in township schools in 1990's. The sole aim was to show and reveal the bad and good things that were taking place within our schools, which the outside world was not aware of. Of course different age groups interpreted this drama differently. It was very appealing to youth and very disgusting to adults since they took it as something that was out to corrupt their children.

According to Heinich (1999) Television programmes bring the world of reality to the home or classroom through the immediacy of a " live" broadcast or through videotapes. When one is seeing the real life

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event or a telecast of a real event he or she becomes challenged and absorbed depending on how he / she perceives it.

Heinich (1999) said, that audio–visual materials cannot provide a cure–all, but they can make rich contributions to the experience of both fast and slow learners.

Leornard (1991:379) defines audio–visual media as that which includes all sorts of pictorial, graphics and auditory media such as pictures, movies, audio and visual tapes, slides, charts, graphs chalkboards, bulletin boards and so on. These can be teamed up with almost any other instructional technique or strategy. Although no longer fashionable, the term audio-visual aids give an apt description of these tools. These are just the aids to teaching and learning. Their role is to supplement and support by means of visual and auditory augmentation of other instructional strategies and techniques, although in some lessons audio-visual approaches maybe the principal instructional delivery system. If you think of a television as a teaching tool you will not be misdirected. It has many uses by which to make learning more effective. This is true, because according to Giannetti (1996) movies in both simple visual, audio-visual or most sophisticated and complex computer driven instructional technology they are very productive because they teach people in more than one way at a time.

Audio-visual media (Television programmes) can help make ideas and concepts clear. They help raise l earning from verbalism to true understanding, because they hear and see some actions sometimes. They can make a lesson more interesting and vivid A Chinese proverb tells us that one picture is worth a thousand words. Cennamo (1993) this is true, because good audio-visual material have eye and ear appeal. By sharing our attention, they make learning more effective, because they promote motivation and retention.

The researcher fully agree with this idea that is stated here and it relates to my study in the sense that this study helped by exposing its participants to a variety of teaching and learning methods that were never used to before. To see things done and hear how it happened and why it took that shape made such learning more interesting and appealing to them. In that case they were able to relate what they saw in that presentation to what they already knew or had seen before and were able to come up or construct new knowledge using the pre and new experiences. This coincides with what was said by Roblyer (2000: 257) when he also mentioned that, one of the most important purposes of educational programmes is to provide students with a variety of self- enriching ideas and

experiences, which lead to intellectual curiosity and achievement, and the establishment of life long patterns of learning.

Davies K. (1981: 10) says: " When developing an educational programme one needs to consider the following questions and characteristics: "

2. 2 .1 Identify the objectives of the program.

- What is the desired terminal behaviour?
- What, knowledge skills and attitudes are essentials?
- What are the objectives of the programmes?

2. 2. 2 Design the programme that meets the objectives.

- What content should the programme contain?
- What student's experiences and activities are essential?

2. 2. 3 organise the programme to meet the objectives.

- State what resources are necessary for the design.
- State when and where the programme be held, and how frequently? How long should the programme be?
- How can the knowledge, skills and attitudes acquired in the course be reinforced once the training is completed?

2. 2. 4 Evaluation of the programme in terms of the objectives.

- Have the objectives of the programme been realised to the standard required?
- How can the programme be improved?

Davies (1981) further contested that unless the programme does its job, it is not worth having it.

Dale (1999: 409) says that it is true that the chief purpose of films and dramas are to instruct and convey messages and ideas to spectators because dramas and films are either educational or documentary. In these processes learning is a by- product. These are made chiefly to entertain, educate or sometimes influences behaviour of spectators. Entertainment films and television dramas have important educational effects as an essential part of a student's world. They can change attitudes, increase the store of information and modify behaviour.

Dale (1999) further argued that, the use of films as educational devices might sometimes end up with distorted impressions or conclusions, because people do not interpret what they see. Sometimes general information is presented incorrectly by pictures and is frequently accepted as valid unless the incongruity is quite apparent or unless the teacher or other informed person takes the necessary steps to correct possible misconceptions. In most cases learners take films and dramas

literally without due awareness of its symbolic representations and edited effects.

Sherrington (1993) says that films and television dramas have their own language that they use and which is much easier to learn and understand, through their speech and writing. This does not necessarily mean that television and films communicate better than the written or spoken word, but this simply means that what we see on screen is life-like images, which sometimes differs from reality because the crew has constructed it. People need to know and remember that film constructs reality, it does not reflect reality. Therefore, when watching television dramas and plays they need to be very cautious and not simply take and practice everything that they observe from the screen.

Giannetti (1996: 5) said when reading and understanding videos one needs to be:

- More aware of environmental influences.

- Concentrate not only on visual images but also on dialogue and music i.e. when the films ends try to recall the various elements you have seen and look for relationship between the diverse parts.

I fully support Giannetti's point of view because what he said is closer to the heart of this study, which is focusing on the way in which and

how its participants take and value the presentations done. Whether they took them as a source of entertainment where they were looking at pictures and actions that were taking place there or they were making meanings from what they saw together with their previous experience.

Fiske (1985), said according to the Frankfurt School, media, including television, is so powerful that it sucks up everything, and may be responsible for the creation of the passive, mindless generation. Therefore, it is important to bear this in mind in order to appreciate that whatever ideological effects the Frankfurt School attributed to television and the mass media. They should not only be understood as having a basis in the manipulation of needs and in indoctrinating power, but that people themselves would feel and satisfy the needs which are imposed upon them.

Educators should not ignore the undoubted power of television. Educational institutions sooner or later will have to recognise the importance of developing in their students the ability to examine visual images critically. Omitting to deal with media literacy in education leaves educators unable to cope with one of the most influential forces in the lives of their students.

Tomaselli (1977) says " The illiterate of the future will not be those who can not read, but those who cannot see" Van Zyl, (1977: 2) says without reading television critically denies the ordinary viewer the power, even the responsibility, of recognising for himself, his own situations in all its complexities and contradictions. The greater one's television literacy, the less the power of television. Literacy challenges power

Educators need to be critically aware of the ways in which video programmes may influence perception. This emotional awareness in reading the language of video may be referred to as media literacy. Tomaselli (1977). This is seen when young learners view video programmes they tend to select what they think is suitable for their generation or time without actually looking at the actual meaning and bearing of that exercise.

Moss (1984) in Cennamo (1993) suggested that much more should be done to inform children and educators by first – hand experience about what television is and how it is produced, so that they may begin to develop critical powers and exercise greater choices over their use of its product.

For educators to be able to help and educate learners effectively they themselves need to understand media texts as constructions. Tomasellil

(1977) said one of the cornerstones of media literacy lies in the ability to relate media content to the interest of the sources, that is, who produced it, and for what purpose? Educators need to avoid the technicist trap by having an insight into the two basic principles of media. Firstly they must know that communication forms are not innocent, and are transparent carriers of meaning and secondly, media is impregnated with values and actively shape the messages they communicate. Fiske and Hartley (1985: 17) support this when they say, " Television is a human construct, and the job it does is simple what the man wants to achieve at the end of the day, the cultural decisions and social pressures he wants to emphasise.

Educators when choosing Audio- Visual educational programmes for their learners, should know and understand the dynamics of camera usage in controlling and manipulating the minds of its users. Videos are able to produce subtle effects on which the viewer is not consciously aware that these effects are caused by the ways in which sound, colour, lighting, camera movement, body language, speech, framing and gestures are used. (Fiske and Hartley, 1985).

Once educators and learners understand the bias of video language they will then realise that media is not always neutral in reporting messages.

According to Fiske and Hartley (1985), when educators decide to use video materials in their teaching they should try and become conscious of the basic devices of camera positions, movement and lighting. Fiske and Harley (1985) emphasised that behind the neutral image there is a choice that has been made and selected. Camera angles have a very powerful emotive impact, for example a low angle gives a sense of tension and power whereas high angles suggest that the subject is inferior and hopeless. All these effects can easily trap the minds of viewers if they are not media literate.

Fiske and Hartley (1985: 32) who believes that educators need to be extra vigilant when using videos in their classrooms because, another important aspect that scriptwriters use to manipulate people's emotions are to make use of music to imitate and reinforce what is being shown on the screen. One good example is the use of melodramatic music to reinforce tension or drama, or soft and sentimental music used to accompany a love scene. In such cases a totally media illiterate person is easily caught up by what he sees on the screen as a true story and sometimes even adopts it and practices it.

2.3 THE SIGNIFICANCE OF UTILIZING MEDIA IN TEACHING AND LEARNING.

Media is currently being used with different aims in mind not only in formal education, but also in the whole spectrum of education and training in the non-formal sector. Cennamo (1993: 28) said the common reasons for utilising media in classroom is to accomplish the following:

- To structure (organise and systematise) reality in such a way that it activates student's ability to think and comprehend. The student must be offered the opportunity to perceive and experience, also on a deeper cognitive level.

- To enable students to think independently (after they have experience freely it is important for the student to experience the inner feelings from which the thinking power and thinking material can be drawn)

- To bring reality in the classroom when owing to limitations such as time and space, students are separated from the "real thing", therefore media such as models, films, filmstrips, slides and illustrations can play an invaluable role in this regard.

- To communicate to students the maximum amount of knowledge in the minimum period of time. A film maybe capable of supplying pupils with more information in minutes than oral instruction can in one hour.

- To arouse interest, attract and hold the attention as well as to present the learning material in an interesting way.

The above mentioned points are valuable and entirely links with the purposes of conducting this study which was to expose its participants to new approaches of teaching and learning, to let them think independently, bring reality to the classroom and to arouse interest and curiosity. As the participants were listening and watching to the presentations, the researcher noticed different behaviours from them like, curiosity and attentiveness they paid as well as boredom to others. These presentations brought realities to the classroom since both schools do not have enough science equipment or laboratories, which can make their teaching and learning processes easier and clearer. Since this study is based on a constructivist learning theory its other basic purpose was to let each participant to think independently so as to be able to come up with his or her knowledge that is different from one another, which will be a way of answering critical question number 1 which is, *How do learners and educators perceive the use of*

videos? . The fact that they did different things during presentations like taking some notes, others compared what was said to the presentations to their books while others were starring attentively to the videos shows that they perceived the usage of videos differently.

Another important aspect was to expose these participants on other approaches of teaching where they were flooded with a lot of information within a short space of time without having a chance of given an opportunity to stop the teacher and raise their concerns.

Therefore this study was not to help learners only but also educators, in the sense that some of them were never involved in such teaching before where they would become the facilitators and participants of the whole process. In that way they were to sit down and watch other strategies of teaching from other people from other countries. Over and above that educators learnt that they can use video technology to imagine the new approaches, rethink what they might take for granted, to consider the pros and cons of different approaches and in general to reflect on their practice in new ways. In the study conducted in the United Kingdom (UK) by The Board on International Comparative Studies in Education (BICSE) (2000) on the benefits and complexities of using video technology where the participants were scholars with expertise in contemporary ethnography, teacher education, cognitive science and videography in educational research and teacher

professional development. Lampert (2000) pointed out that watching international videos would help guide educators in identifying the best uses of video technology in the classroom.

Lampert (2000:124) further argued that, though cross–national videos are encouraging and challenging, educators in practise can easily dismiss the context of teaching if it is different from their own. Therefore through this study critical question number 2 will be answered which is, *How do educators use video technology in teaching?* This will give answers whether educators in disadvantaged schools have some skills of using video technology in their classrooms. When they use it, do they use it meaningfully or in a destructive way?

2.4 THE SIGNIFICANCE OF UTILIZING MEDIA IN TEACHING.

Cennamo (1993) mentioned that the value of media came to the fore during the middle ages when the educationists realised the importance of sensory perception. They realised that when limitation presented learners from direct contact with reality an effective substitute could be prevented in the form of a picture, an image or model.

An awareness of the value of teaching media increased over the years. Research done by Job (1993: 40) has revealed several

positive characteristics of video technology in the classroom. The study stated that video technology could:

- Provide background knowledge and common experience on which future learning activities and concepts can be based.

- Stimulate interest and

- Add depth and meaning to learning

These above-mentioned points are very relevant to this study because the use of video technology was mainly to investigate what the users would say after that exercise. Surely it was seen that they were all impressed as it stimulated interest in both educators and learners that is why learners on responses no.3, 5 &10 of appendix A all gave the positive answers. Then other major problem with the participants of this study was that most of them came from families where there are no televisions those few that has only thinks that it is for entertainment purposes only where they view pictures and actions only. Therefore, this study was to expose them to this new method of teaching where they learn that audio -visual media is for multi - purposes that is, through it they can also learn. Over and above this was to teach them that learning process could take place at anywhere and anytime, since most of them believed that education starts and ends in the classroom when there is a teacher in front of them. Most of the participants of this study came from the families where the parents have inadequate education or totally illiterate in that case they play very little role in terms of supporting their children with their homework (school assignments). Due to this problem even their children takes teaching and learning as process that start and end in the classroom.

Another purposes of exposing the participants of this study to video technology were to:

- Provide meaningful experiences, which contribute to the vocabulary development.

- Help to develop the ability to communicate effectively.

- To encourage independent working.

- Increase the permanence of learning.

- Stimulate voluntary reading and research.

- Save time in learning.

- Aid in teaching children with learning difficulties and stimulate the gifted children.

The English first language speakers did everything in pure English did presentations. Further clarifications and other simplifications were done through pictures and diagrams. The participants of this study were second language speakers and taught by educators who are also second language speakers who normally do a code switching from one language to another (English to isiZulu) if they want to reach those learners whom they feel are left behind. In this study things were not the same to what they were used to this brought a new experience of setting to them where they were to struggle on their own to understand and follow the discussion. This study therefore provided them with a wonderful new experience of learning, vocabulary and effective communication strategies.

2.5 CONCLUSION.

In as much as we are all convinced by the fact that media plays a vital role in a classroom situation or educating the nation we also need to consider and evaluate the influences it exerts to its viewers. We may not neglect the fact that video programmes can encourage behaviour that is not encouraged or desired by our schools and communities. This is supported by Gidddens (1994) when he argued that the symbols involved in advertising, learning programmes might have more profound influence on a social behaviour than the stated messages the script writers wish to get across Giddens (1994: 452)

Chapter two of this study gave an overview of what other scholars say in relation to the researched topic. In the next chapter we are going learn more about how data was collected using different research tools.

CHAPTER 3.

Research Methodology

3.1 Introduction.

This research study integrated both qualitative and quantitative approaches in data collection. Qualitative data was gathered through the administration of interviews and worksheets; this method of gathering information was therefore chosen for its naturalistic inquiry. Another data collection method was through interacting with selected persons in their settings who were concerned with understanding the social phenomenon from the participant's perspective. Understanding was acquired by narrating participant's meanings on different situations and events. Participant's meanings included their beliefs, feelings, ideas, thoughts and actions. Quantitative information was gathered through the questionnaire. Quantitative method was used for its positivism, for it is based on the assumption that any phenomenon should be studied objectively with an aim of obtaining a single true reality.

The reason of combining the two methods of data collection is that of triangulating information so as to enhance the validity of this study. Denzin, Cohen and Marion (1994) highly recommend triangulation approach in any study, because they define it as the use of complex approach in the study of some aspect of human behaviour so that the multiplicity of perceptions present in a social situation can be discerned.

PLANNING TAKEN BEFORE, DURING AND AFTER PRESENTATION

There is no magic formula or prescribed pattern for using video effectively in a group of learning situation Haas (1995). According to Haas video technology is such a versatile medium that can be used effectively in many different ways. Haas (1995) pointed out that if educators are to use video technology in their teaching they should take some precautional measures of using this method of teaching. Precautions should be taken before, during and after presentations. This will enable the smooth process and further the aims of using video teaching. So the researcher took into considerations the following aspects so as to make her presentations meaningful to its participants.

PLANNING STAGE

A thorough check of the following was carried out:

❖ Group size

❖ Was the monitor visible to everybody?

❖ Was every participant in a best viewing position and relaxed?

These above-mentioned points were given a serious consideration, groups from both schools were not too big. This was made to enable all participants to see clearly on the television screen. The monitor was placed on a slightly elevated area and enough spaces were given among participants so that they were free to do writing if they wished.

❖ Motivated the participants and explained the purpose of the whole exercise.

Aims and purposes of the presentations were made clear to the participants, so that they understood how it was going to help them at the end.

VIEWING STAGE.

During this stage the researcher noticed different things that were done and affected the participants, things such as:

❖ Enthusiasm and interest in the programme.

At the beginning all participants showed keen interests in everything that was taking place there.

❖ Tiredness and loss of interest by others.

As the presentations progress some participants showed some signs of tiredness and drowsiness in a way that they even stop taking some notes from the presentation. This was probably caused by the fact that they lost the understanding of the content or the videos were too long.

❖ External disturbances and destruction.

In one school presentations were done during school hours so it happened that pupils from lower grades became so curious and wanted to see what was happening in the rooms where the presentations were taking place. In that way they peeped through the windows and made a lot of noise. Some pupils from outside were even calling some participants by their name so as to make sure that they acknowledge what was happening. This caused a lot of disturbances, because sometimes we could not even hear the voice of the

presenter.

❖ Educator's role.

The roles that were played by educators from the schools involved were totally different. One educator stopped the video and explained some aspects (concepts) that were mentioned in the presentation that he felt were difficult for the participants while the other educator did not disturb the presentations.

He waited until everything was over and let the participants raise their concerns at the end.

AFTER VIEWING

The researcher mainly controlled this stage. Here there was nothing much that was to be done except for thanking the participants for their time, because much of this stage was to be reflected on either questionnaire or interview responses.

3.2   RESEARCH TOOLS.

3.2.1 INTERVIEWS

McMillan (1993:250) describe interview as a tool of gathering data that involves direct interaction between individuals and which is flexible and adaptable. He further said that the beauty of this tool is that it can be used with different problems and types of persons, such as those who are illiterate or too young to read and write. The interview is therefore, a form of data collection in which questions are asked orally and subject's responses are recorded. Interview was chosen because there is a direct verbal interaction between the interviewer and

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the respondent. The advantage of this tool is that, when this is administered professionally and successfully the interviewer can enhance motivation and obtain all the information that might not otherwise have been offered in other tools of gathering information. This was also chosen because it allows for greater depth and richness of information since the interviewer had chances to clarify questions that the subjects did not understand or follow. In that case the interviewer was able to do or identify the need of a follow up leads and probing. Interview in this research study was very useful and helpful because it was used in many participants in a short space of time and its results had much higher response rate than questionnaire. The presence of an interviewer with semi-structured questions also encouraged complete answers and reduced a number of "no answers" and neutral responses.

Semi - structured questions were used namely, questions that are open- ended yet specific in intent and allows individual responses. Questions were phrased in such a way that the subjects / participants were not led to a particular answer. Instead expected answers were individualistic where the participants were to give responses that were different from one another. These types of questions were chosen because they provide a desirable combination of objectivity and depth and often permit gathering valuable data that could not be successfully obtained by any other approach. Data collected through interview were recorded through the note taking method.

This research tool was also chosen, because it facilitates data analysis easily since the information is always accessible and readily classified into the appropriate response categories by the interviewer. Secondly respondent's answers are recorded besides the appropriate questions on the interview guide and make it easier for the interviewer to go through the guide processing all the data for each question separately in a relatively short period of time.

Though Berg, (1989: 455) argued that note taking method has however a disadvantage of disrupting the effectiveness of communication between interviewer and respondents. To avoid such things the researcher in this study used a number of techniques that made respondents feel relaxed and thus established rapport to the interviewer.

To increase the accuracy of the interview, respondents were given an opportunity to check the interviewer's perceptions of certain questions. In this way respondents were given chances to read questions and answers and made some addition and corrections where necessary. The biggest advantage of using this approach was to help build a positive relationship between the interviewer and interviewee. This was only used when the researcher noticed some digressions made by the participants. This instrument was administered to learners only.

3.2.3 Questionnaire

Denzin (1994) defines a questionnaire as the most widely used type of measure in educational research that is extensively used because it provides the best way

of obtaining information for a wider range of research problems. It is for this reason that this tool was used in this study to get the factual information from the participants. During the process of administering this tool the researcher had the opportunity of establishing a good rapport, when explaining the purpose of study and explaining the meaning of items that were not clear to the participants.

This instrument was first pilot tested to a group of Grade 12- Biology learners chosen voluntarily at Tholulwazi High School. The pilot study was done in order to reveal defects that can be corrected before the final form was printed and administered.

3.2.3.1 The format of the Questionnaires.

The design of the first questionnaire was very general, in other words it was only looking for the general information from the participants. The responses were not based on the understanding of the content of the video. For privacy purposes and for participants to give more and honest information, personal details were not requested. This was done deliberately because the researcher foresaw that since the participants were students they might be afraid that results of the study would be given to their teachers and thus give the wrong opinions which will nullifies the purpose of the whole exercise.

3.2.3.2 Control of the Questionnaire.

In all schools that participated in this study the researcher collected the questionnaires immediately after completion. The reason for doing it was to

ensure the high rate of return, which was very helpful to the researcher when doing data analysis.

3.2.3.3 Administration of the Questionnaire

A pretest of this instrument was conducted before the actual study commenced. This was exercised with the group of people that had the similar characteristics with the participants of the study. This was administered in exactly the same as in the study itself. The purpose of doing this exercise was to evaluate and identify some short falls that were there.

3.3   Observation.

As a technique of gathering information, the observation method relies on a researcher's seeing and hearing things and recording those observations rather than relying on subject's self report responses to questions or statements. In this study the researcher used a low inference observation strategy because this is usually reliable and requires the observer to record specific behaviours without making judgements in a more global sense.

McMillan (2000) argues that the primary advantage of using observation methods are that researchers do not need to worry about the limitations of self- report bias, social desirability, or response set and the information is not limited to what can be recalled accurately by the subjects. Behaviours can thus be recorded as it occurs naturally.

Again in this study the researcher chose this instrument because of its unobtrusive nature. This produces results that are uninfluenced by the awareness of the subjects that they are the participants.

The researcher also employed a contrived observation method where she made a complete intervention with the participants in order to make specific observations. In this time the participants were unaware of being observed.

3.3 Site visits and Time Frames.

All these schools are located in Table Mountain Circuit (Emkhambathini Reserve) Each school is about 15 to 20 km apart from one another, as a result they were visited on different times depending on the given times by the school management. Some schools were visited during school days within their teaching periods while others were visited either in the afternoon or Saturdays.

Time frames for each school visit were not the same; some were visited more than the others. This was mainly caused by the availability of each school, but the minimum visits allocated for each school was three visits.

3.3.1. The first Visit.

The instrument used during this visit was formulated mainly to gather general information from the participants. The instruments used were questionnaire structured interviews (appendices A & B) and general observation by the researcher.

3.3.2 The Second and Third Visits.

The actual purposes of these visits were to gather intended information from the participants, which were: **Did they really learn anything from video education?** In other words can schools in deep rural communities use video education in any subject to replace human resources if the need arises?

3.4 CONCLUSION

Collection of data using video technology is not an easy task, because different people use video differently to achieve what the desired outcomes. Haas (1995) pointed out that there is no magic formula or prescribed pattern of using video technology in a group of people within the learning situation.

The researcher in this study discovered that the results given in interviews were more informative and detailed as compared to the results of the questionnaire that were very scanty. The use of observation method in this study also yielded a very good results because participants were not aware that they were observed during presentations as a results they were very free in what ever they were doing which makes the process worthwhile because the researcher was able to record different behaviours which made this study to be worth doing.

In the following chapter the information gathered in this research will be analysed and interpreted critically with an aim of getting and putting down exactly and explicitly the findings so that it maybe useful to others.

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Chapter 4.

Data Analysis and Interpretation.

4.1   Introduction

In chapter 3 of this study three types of research tools of gathering data were used that is, interviews, observations and questionnaires. The information gathered through this process is accompanied by a detailed interpretation. The goal of this chapter is to provide an in-depth analysis based on what the participants gained during video education sessions. When interpreting and analyzing data the researcher used both qualitative and quantitative methods Qualitative data was gathered through interviews and observation that were carried out for both educators and learners. Quantitative information was collected through data analysis of a questionnaire the reason for combining the two methods was that of triangulating the information gathered in different tools so as to enhance the validity of this study.

Denzin and Marion (1994) highly recommended triangulation approach in any study, because they define it as the use of complex approach that yields good results.

4.2 Participants profile.

It was noted that most participants from these schools are the inhabitants from Emkhambathini Reserve in which these schools are situated and where there are no physical resource centres, which they can use for more consultation for their studies. The other biggest problems of the participants of this study are that their schools do not have advance technological facilities that can be used to enhance their daily formal learning. The most common teaching and learning resources available are chalkboards, piece of chalks and some few learner support materials (charts and real objects) that are found in some classrooms. Their learning relies solely on the prescribed books for their grades of which some learners do not have prescribed books due to their poor family backgrounds.

Another major problem of the participants of this study was that, most of them come from family backgrounds where the parents are totally illiterate and poor and therefore could not assist or contribute anything formally towards the education of their children.

4.3 The use of Questionnaire.

For critical question one both questionnaire and interview were used. The questionnaire used for this occasion was therefore based on three themes namely:

❖ Previous exposure of each participant to a learning process where video technology is used.

❖ Personal reaction or feeling towards the use of video technology in teaching and learning process.

❖ Future recommendations by both learners and educators towards the use of video technology.

4.3.1 Findings / results of a Questionnaire.

Data collected through the questionnaire was manually coded. This was done because it involves the identification of recurring patterns or trends in responses and fitting them under certain headings or categories. During this phase the researcher sifted data gathered to determine patterns for convergence and divergence.

4.3.1.1   First Round of data collection.

As stated in chapter 3 this was meant to gather general information on video education from the participants. The questions asked on the questionnaire (Appendix A) were not subject oriented or geared to test any understanding of any subject, but to get the general feeling of the participants after viewing Video Education for the first time.

 Findings of this stage were then summarized as follows:

4.3.1.2   Previous exposure of individual participant.

This was covered by question one of the questionnaire, and the results were as follows

Out of 60 respondents who attended this session, where a Biology video on Photosynthesis was shown. In this session it was observed that only two (2) participants were previously exposed / taught through video. As a result of that the researcher has noticed and observed a number of things that took place among participants during the presentation of this video. Some participants if not all sat, quietly looked at the presentation with keen interests while others were some how distracted or a bit drowsy sometimes. Therefore those who responded positively (Yes) to the first question formed only 3 % of the entire group. Those whose response was "no" formed 97 % of the group. Refer to figure 1.

Previous exposure of individual Participants to Video Technology.
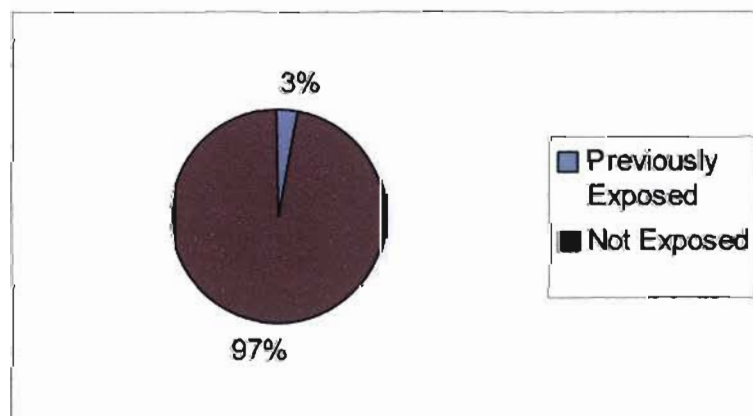
Figure 1.

.

4.3.1.3   Personal reactions towards video technology.

The answers to this theme was mainly based on the responses given by the participants on questions 2, 3, 4, 7, 8, 9 & 10 (Appendix A) as well as responses from educators for questions 3 – 5 (Appendix B)

From question 2 – 10 of Appendix A one will notice that these questions are seeking the personal reactions of individuals after viewing the video presented to them. The responses of most respondents were very positive towards the use of video technology.

Question 2: Did you enjoy this session? The analysis of this question was interpreted as follows

Very much = 57 responses out of 60 participants, which is 95 % of the entire group.

Not much = 03 responses out of 60 participants, which is 5 % of the group.

Not sure = 0 % nil responses

Personal reactions towards video technology
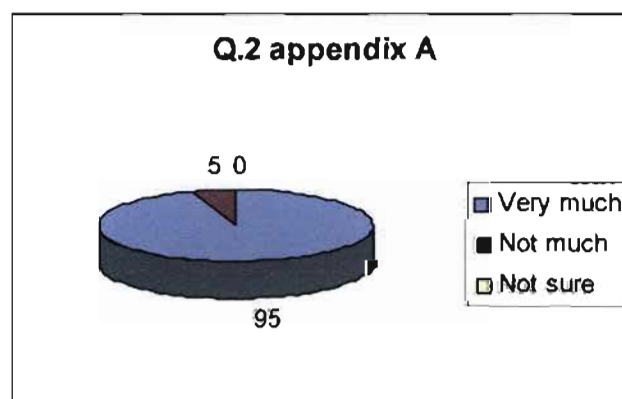
Figure 2.

This analysis clearly shows that even though most participants were coming across video technology for the first time in their formal teaching and learning they liked it so much.

For question 3 (Appendix A): The responses were all positive, that is they all liked to be exposed again to such learning.

For question 4 (Appendix A): For this question participants gave different views as far as choosing the use of video technology in their classrooms.

❖ Of the 60 participants, 55 (95%) like video technology very much because it helped them to understand what is taught more easily, because during presentations they could see what is said and done by the educators / presenters that is, theory goes along with practice.

❖ Generally all participants liked this method because most video presentations are well planned and therefore presented well. In most cases video presentations are a national issue that needs to be taken seriously because they are open to any criticisms. In other words all the equipments that were needed were prepared in good times in order to avoid any discrepancies that may occur in a poorly prepared classroom based session.

Question 7: *What is it that you like the most from this video?* The responses for this question were distributed among five different views, which are:

Presentation method, which had 32 responses, which is 53% of the total sample. Diagrams had 4 responses which is 7 %

Clarification of terms had 23 responses which is 38 % of the group

Subject content had no response, which is 0 %

Questioning techniques had one response, which is 2 %

Participant's choices
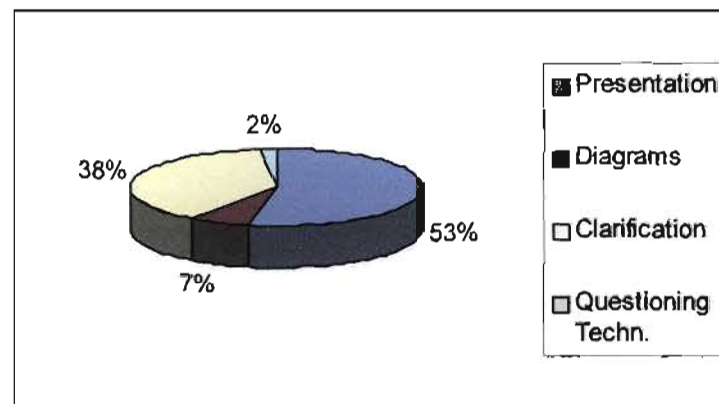
Figure 3.

From the above given information in figure 3 one could see that the majority of participants liked and enjoyed the way in which this Biology presentation was done, followed by those who enjoyed the way the concepts were clarified. The least chosen aspects were diagram presentation and questioning techniques used.

Question 8. Is there anything that you did not like in this video? For this question there was a big difference in terms of participants responses.

Those who said "yes" had 17 responses and those with "no" had 43 responses, which clearly shows that though the participants were generally happy about the whole idea of video technology, but there are those selected matters that could not be overlooked in video presentations, things such as, who does presentation to whom? Or is the context used relevant to the viewers? For instance in this

case the context was more relevant to its viewers, because this was a Biology lesson, which was part of their syllabus the work in which their assessment was to be based on. The problem with this video presentation mainly based on the fact that the presenter was a first language speaker and the viewers were second language speakers. The language used was not an issue here, but the pace of talking was problematic as some participants highlighted that they could no grasp and understand everything, because the pace of talking was too fast. The reason was that the presenters in all presentations were English first language speakers.

For Question 4 (Appendix B) All educators interviewed agreed that video Technology is good and is going to help their learners in the sense that they would grasp the matter easily since everything that was said was also demonstrated, in that way even if they were lost in the explanations but they could pick up from the demonstrations that are done to clarify and accompany the theory.

In Question 5 (Appendix B) educators responded differently, out of 5 educators that participated in these presentations 3 of them (60%) believed that if presentations were still on they should not disturb, by stopping (pause) the video and make some further clarifications where they felt it was necessary. Instead they said one need to wait until the whole session is over then make any necessary comments. They said, if you keep disturbing the viewers you will disturb their concentration and the whole exercise will become futile. On the

other hand 2 of 5 educators (40%) said there is nothing wrong in creating some pauses during presentations and clarify where there is a need, because it is useless to continue with the long exercise while other participants are left behind. For them pausing is good because it will give participants the opportunity to ask whatever they don't understand and be able to build the base of the new knowledge.

4.3.1.4 Future Recommendations

All respondents liked and enjoyed video technology in their classrooms, when asked about their future wishes concerning the use of video technology in their classrooms they all recommended that they liked and longed that their educators use it more frequently in their daily teaching. The answers to this were acquired through the responses that were given in question 5 and 6 of appendix A. In Question 5 the response of all participants (100%) was "yes" which shows that they believed that the use of video technology in classrooms is beneficiary to most learners. This is because theory goes hand in hand with practice even though one did not understand the concepts but one can do a catch up by following the pictures or demonstrations shown.

All educators that were involved in this study agreed that should they be given an opportunity of making a choice of using or not using video technology in their teaching, they would all opt for it and even recommend it to their colleagues who never used it before. According to responses from questions 7 & 8 (Appendix B)

all educators agreed that such method of teaching is needed by all educators for different learning areas, because besides the fact that it makes things easier for them it helps the learners more and more because in this kind of learning everything is clear that clarifications sometimes come with some further demonstrations that helps learners to understand even more.

4.4 Observation.

During presentation a number of things were observed by the researcher from the participants such as:

* ❖ 40 participants (66.6%) were taking notes during video presentation whilst others were not. I think this was caused by the fact that other learners were following and understanding all that was taking place at that presentation.

* ❖ 5 participants (8.3%) lost focus and fell asleep during presentation, when asked later on why they slept while the process was still on, their answer was that they were tired of starring at one long video, which took more than one hour.

* ❖ 8 participants (13%) opened their books comparing what was said on video to what is in their books. In this case they were comparing the similarities and differences of facts. By so doing I think they were wasting a lot of time in doing that comparison and disturbing their span of concentration.

* ❖ 7 participants (11.%) were carried away with what they saw (pictures and motions) and forgot to concentrate. As this was mentioned earlier on that others were watching video for the very first time so they were very impressed

and taken by what they were seeing and hearing. They then ended up concentrating on looking at the movements and pictures (activities) that were taking place rather than concentrating on the subject matter, which was the main purpose.

4.5 Interviews.

Semi - structured questions were used. This was simply chosen for its objectivity, open-endedness yet specific intent. The researcher also chose this tool because she felt that semi – structured questions also allows different individual responses, probing, follow – ups and clarifications. During interview session the interviewer recorded very brief responses from the respondents and expanded them after the interview was over. For critical Question two: "**How do educators use video technology in their classrooms**" both interviews and questionnaire were used. Interviews (Appendix C) were used for participants (learners) and questionnaires (Appendix D) for educators. Both these instruments were designed in a way that it is able to critic positively the performance of educators during presentations. Responses from the two schools involved were different, because in one school there was less that has been said by the participants in terms of question number 2 & 4 (appendix C) because the educator of this school used to stop the video and allow some discussions where he felt participants needed to know / understand more on those particular issues. As a result of that in this particular school a hot debate was created in some instance where the participants were arguing on a certain issue that they were not seeing

eye to eye on it. In this group the last two visits were quite interesting and very challenging and fortunately the educator of this group was very good and able to handle those challenges very well.

At the other school participants complained that they did not understand everything because the presenter was too fast when speaking therefore could not grasp everything, instead their educator would comment at the end asking them to ask whatever they need to know. At that time they could not, because even if they had some problems they forgot them during the process of sitting down listening quietly. According to these participants their educator was suppose to do some interventions as in the case of the other school, because this was to help them coping with all new developments

In Question one (Appendix D) there was a mixed responses as one educator was very happy and fulfilled after the presentation, because the whole exercise was challenging to him and his learners and he was sure that his learners benefited a lot from those sessions. On the other hand, the other educator was not sure of the whole exercise, because his learners could ask anything when they were given the opportunity to do so. `

Question four (Appendix D) Educators came up with different versions. 60% of them believed that presentations should not be interrupted, educators should sit down and become participants as well and gather all necessary questions or areas of concerns and attend them at the end of the session. Whereas 40% of

other educators did not see anything wrong in stopping now and again in order to highlight those areas of concern while they are still fresh in mind before one forget them.

In question 5 (Appendix D) both educators agreed on the fact that they both encountered problems during presentations, but their problems differ from one another. The other one said there was a lot of debate during presentation, which prolonged time for viewing and sometimes caused a little bit of chaos in class. The other one said some of the participants were sleeping during presentation, which cause them to fail asking questions at the end (Question 6 Appendix D)

4.6 The general view of interviews as compared to Questionnaire by participants.

The findings were as follows:

- ❖ The respondents were free and fluent in expressing their ideas as compared to the questionnaire, the reason being that the interviews were conducted in both English and IsiZulu while questionnaires were strictly in English.

- ❖ They were free to say anything because the interviewer was a stranger to them. However the findings varied greatly.

- ❖ 10 % of them chose video teaching over their educators, 5 % were not sure which is the best, 30 % say both educators and videos share the same status and 55 % of the whole population liked to have educators they contended that educators are the best, because they can easily identify and close the gaps that took place during learning and teaching

process, while videos can not identify those are following the discussion or not whereas educators can easily see that, some are bored or not. In that case they could then stop the video and do some clarifications.

Choices made by respondents
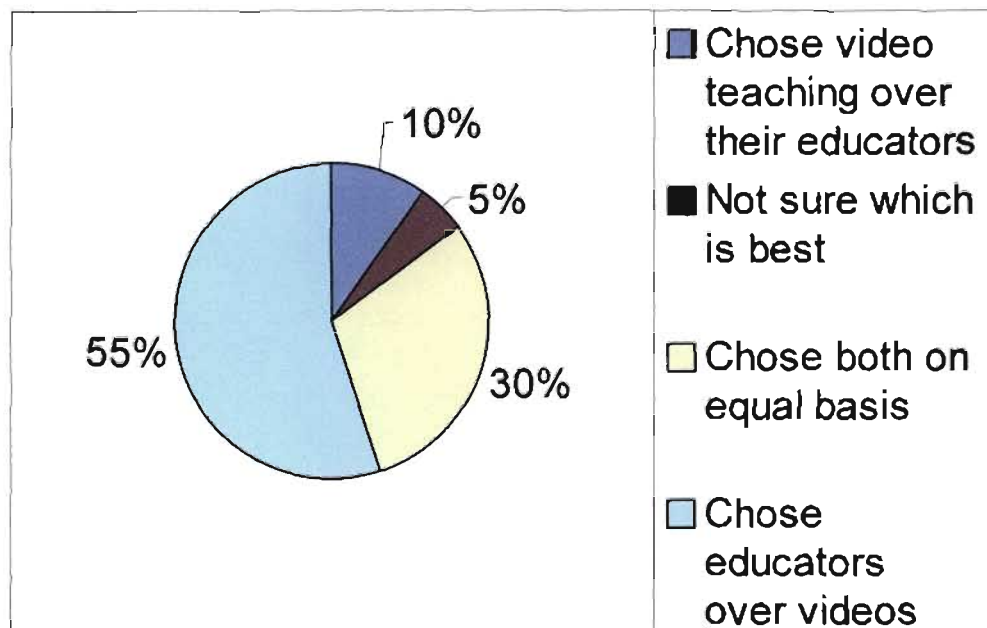
Figure 4.

The overall finding was that they all liked to be educated in video at certain times but not always or replace their educators with the videos because they still felt the need for the presence of the educators in front of them.

They argued that even though one can stop and replay a video as much as one would feel but that does not mean that one could guarantee a better understanding of that aspect. So in short in as much they did appreciate the

value of videos in their learning, but they insisted that it couldn't replace their educators.

4.6 Conclusion

The information gathered in this study is more interesting in the sense that unexpected issues came out and the use of triangulation approach in this study yielded very good results and from what has been discovered and founded it then became clear that there is a lot to be done in order to help our learners and educators in schools. Our schools need to engage themselves more in the usage of modern technology because it has been discovered in this study that some educators have never used video technology in their entire teaching, yet they agree that video technology is very useful and yields good results in most cases.

CHAPTER 5

RECOMMENDATIONS

5.1 INTRODUCTION

In the previous chapter of this research it has been noted that the use of video technology in most rural schools is something that is very uncommon and as a result of that the relevant stakeholders have identified a number of things as the area of concerns that need a special attention in order to address those challenges.

5.2 RECOMMENDATIONS

5.2.1 Frequent use of video technology in our teaching process.

Often use of video technology in teaching and learning process at schools should be encouraged, because both educators and learners showed keen interest in it. The learners see it as something that is very useful, because it makes things clearer and easier for them to understand. Presentations of subject matter are always accompanied by demonstrations and illustrations or sometimes with motions that easily catches the attention of the spectators. On the other hand, educators like it, because from the presentations of video technology they also learn different skills and techniques that are used by other educators from other continents, which might be helpful and relevant to their environment or context. They also mentioned that video technology is good because it give them time to learn and have ample time to come up with positive critique that will help their learners in future to be able to read videos with meaningful eyes.

It has been mentioned earlier that most participants of this study come from poor background, but there are very few that has television sets at their homes. Therefore, those learners with television set at their homes could be

encouraged to frequently use television education programmes for their learning, because there are programmes that are broadcasted on South African Broadcasting Corporation (SABC) 1 & 3 on certain days in a week. These school programmes are free of charge. They are broadcasted on Saturdays between eight and half past ten in the morning. SABC 3 broadcast William Smith Matric programmes on the following subject Mathematics, Accounting, Biology and English. If learners are encouraged to watch such programmes they will benefit a lot and also improve their listening and concentration skills, since this was noted as one other problem during this study that some of its participants were very poor in concentrating for the longer period hence they felt asleep during presentation. This will also encourage independent learning by learners because it means that each learner will sit down and compile notes of his / her own that he will understand better.

In case where a school has television and set of videos, use of video technology should be encouraged to all teachers. Once learners are familiar with this method of teaching and learning this could be used sometimes as a substitute of the educator when he or she is absent from school in order to keep the learners busy and occupied.

5. 2. 2 Empowerment of all educators on the use of video technology during teaching and learning process.

During this study it has been discovered that educators themselves had different views in terms of using video technology in their classrooms. Others believe that presentations should not be disturbed while it is in progress because it may distract the attention of learners, which will defeat the purpose of it. On the other hand other educators believe that there is nothing wrong in creating pauses during presentations, because pauses are addressing the misunderstandings or gaps that you as an educator feel should be address before causing more harm to the learners.

Raubenheimer 1992:147 describes enablement as a process where, one person is able to enrich or help one another. This must occur when teachers are treated as passive recipients of other people's innovations. He further defines the process of empowerment. He said, empowerment is based on the belief that each person has a meaningful contribution to make to the improvement of his or her situation and is capable of finding solutions to his or her problems. Therefore from what was discovered about educator's knowledge of using video technology in their teaching I therefore strongly recommend that, educators themselves should take self-empowerment, as their primary responsibility to empower themselves in using modern technologies as their teaching strategies. Educators must not wait for the Department of Education to come up with strategies of empowering educators on such things because that might take ages to happen or will never take place at all, whereas teaching and learning technology (Educational technology) is growing very fast on the other hand.

5. 2. 3 Adopt and use teaching strategies from other countries.

According to Fredericksen (1998:102) teaching has been such a secret local practice, that we always assume that we have figured out how to do it. He further contended that seeing something that is really very different from far away can open up the possibility that there are lots of different roads to Rome, that opens up, I think, readiness for inquiry to change that can be very powerful. In other words this simply means that looking at the practice of a teacher from the next classroom can lead to new insights about one's own practice.

This study showed that 53% of the whole group was more impressed by the way in which the Biology videos were presented which included both talking that was accompanied by more explanations as well as illustrations. Sometimes that made participants to understand subject matter more easily and clearer. According to most participants their educators when teaching

they do not go an extra mile of clarifying whatever they are saying through illustrations or bring other learner support materials that could be used to clarify the subject content of the day. In this case I therefore recommend that our educators in schools need to do a thorough research and see what other educators in other countries do in order to make their teaching and learning meaningful. In their search however they should be very careful in selecting or adopting styles. They should only consider the styles that are relevant to the context in which they find themselves.

Erickson (1986) in his study conducted in Australia on the use of video technology on different cultural groups emphasized that, video taped lessons have proven useful in different ways because it helps educators to imagine new approaches, to think what they might otherwise take for granted, to consider the pros and cons of different approaches and in general to reflect on their practice in new ways

The researcher believes that video technology, especially video from another country, with a mix of familiar and unfamiliar practices, heightens the possibilities of providing fresh insights, a glossary of teaching tools, strategies, skills, pitfalls and mistakes as well. Teachers again should also know that other challenges of cross national studied is encouraging teachers to see the relevance of classroom practice from other countries and try to compare to their own professional experience. When they do that they must always remember to dismiss practices that they feel its context is totally different from theirs

5.2.4 Involvement of school governing bodies (SGBs) and parents.

Some schools lack or run short of necessary teaching and learning support materials (TLSMs) that are needed to enhance and pursue teaching and learning process, not because the school and its community is failing to afford that needed equipments. Sometimes it is caused by the fact that there is no

effective and strong partnership between the two. In many cases it had been noted that where there is a weak parental involvement at school, spirit of ownership is also low, which results to a poor support of school by parents. If the community is taking a full support of its school it support it in different ways that will make that school to be a success.

It is true that the schools that were used as the sample in this study are from poor and rural communities, but it does not mean that schools from rural areas cannot afford to get what they need for the education of their children. In this case I think the school management team (SMT) together with the SGB should sit down and carefully come up with the strategic plan that they will use to explain the needs (teaching resources) of the school to the parents of their learners. The SGB can win the support of the parents if they successfully play their role to them. Once the parents buy the idea that is suggested by the school they will participate fully in whatever is taking place at school and develop the spirit of owning the school. Therefore if that spirit prevails among all stake holders of the school nothing will stand on the way of the education of their children as long as that thing could be collaboratively done.

For the schools that are used in this study I strongly suggest that while they are waiting departmental support in buying educational kit (resources) they should invite parental involvement because that might be a quick solution to their problem.

5.2.5 Encourage learners to speak English language during School hours.

It has been noted that 5 % of the participating group did not like the video presentation. The reason being that they did not understand most of the subject content since the presenters were all first language speakers and therefore, very fast in pace when speaking. They said, they could have

understood these videos well if they were presented in IsiZulu or by people who were going to code switch between IsiZulu and English.

This was picked up by the researcher in the general results of the interviews as compared to the results of a questionnaire, which showed that almost 90% of interview respondents were more free during the use of this tool as compared to a poor performance by many participants in answering questionnaire. The reason being that there was a lot of code switching between the two languages during interview sessions. This simply shows that some learners in rural Black schools cannot understand and communicate well in English. This point alone put such learners at a disadvantaged because it is this language that is used as their language of teaching (LOLT) and assessing almost all subjects. Therefore with regard to this problem I recommend that such schools should encourage their learners to use English more often during school hours. Using English all the time will help the learners to gain more vocabulary and confidence in using this language.

5.2.6 Erection of a resource centre at Table mountain (Emkhambathi Reserve)

During the researcher's visit to these schools it was noticed that there are no resource centres that are used by the people of this community. A resource centre that will be centrally used by all schools at Umkhambathini Reserve. The nearest fully-fledged resource centre to this area is Hillcrest Library which is about 35 - 40 kilometres away and Pietermaritzburg Library which is about 47 km away. If this community can get a well-resourced centre it will help them in different ways such as:

❖ Used by individuals for leisure sake.
❖ Used by schools for further references.
❖ Loan schools with different technological gadgets

Therefore, with regard to this matter I strongly recommend that this community should stand together and write an application form to their

municipality and apply for one resource centre in their area. The resource centre that will be beneficial to both adult and young ones. This community needs a professionally administered centre that has all necessary educational equipments. The centre should be located on the central venue to all 25 schools at Table Mountain (Emkhambathi) so that educators can take their learners to this centre in order to use and expose their learners to certain teaching and learning support materials that these centres have.

5.3 CONCLUSION

Video Technology is a powerful tool for learning and improving education, since it creates opportunities for learning from cross-national and cross-cultural comparisons. Video images of educational settings from around the world stimulate reflection and expand understanding of the potential range of instructional practices, but despite its novelty and its power to capture attention, however, this technology is a tool and not an end in itself. That means that even though teachers prefer to use this tool in their classroom they must be extra careful and be very sensitive to issues such as relevancy and suitability to the context in which it is used.

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Questionnaire
For Grade 12 learners in Secondary Schools
Please tick where it is necessary.

1. Have you ever been exposed to video education ?

Yes	No

2. Did you enjoy this video education ?

Very much	Not much	Not sure

3. Would you like to get this kind of education next time ?

Yes	No	Not sure

4. Why ?

----

5. Can you recommend this video to your friend who is doing Grade 12 in another school ?

Yes	No	Not sure

6. Why ?

----

7. What is it that you liked the most from this video ?

Presentation method	Diagrams	Clarification of terms	Subject content	Questioning techniques

8. Is there anything that you did not like from this video ?

Yes	No

9. What is it ?

Presentation method	Language used	Pace of talking	Diagrams	Length of videos

10 If your teacher organize this kind of learning next time would you like to attend ?

Yes	No	Not sure

11. Why ?

Appendix B.

Educators Interview Schedule.

1. Have you ever used video technology in your teaching before ?

    ----

2. If yes, when was it , and how do you find it ?

    ----

3. Do you think is it going to help this group of participants ?

    ----

4. Why do you say so?

    ----

5. What do you think is the best method of using video technology in class ?

    ----

6. If opportunities allow you will you further use video technology in your class ?

    ----

7. Can you recommend this kind of teaching to other educators in your school ?

    ----

8. Why ? ---

Thank you so much for your time !!

Participants Interview Schedule

1. Did you gain anything today ?

    ----

2. Do you think your educator was successful in conducting this session ?

    ----

3. Name two things ~~he / she did~~ you like the most .

    ----

4. What is it that you did not like in his / her presentation today ?

    ----

5. If you were the teacher of this class what would you do to help your
    learners to understand more ?

Thank you for your time !!!

Appendix D.

1. How do you feel after this kind of teaching ?

    ----

2. Do you think your learners benefit anything from this presentation ?

    ----

3. Why do you say so ?

    ----

4. During presentation do you sit down and become the participant like
   Your learners or do you take a leading role ?

    ----

5. Did you notice any problems in your teaching today ?

    ----

6. If yes , What was it ?

    ----

7. What were your weaknesses in today's lesson ?

    ----

8. What would you do to improve your next video presentation ?

Answer all these questions.

1.   Choose the correct answers on the following options.

1.1 An example of an organic molecule is

a. Oxygen

b. starch

c. carbon dioxide

d. water

1.2 A destarched plant is on which

A.   has had its starch removed by alcohol

B.   cannot form starch

C.   has been left in the dark for some hours

D.   can only form sugars , not starch

1.3 The main purpose of respiration is

a.   the release of carbon dioxide

b.   the release of carbon dioxide and water

c.   the release of energy from energy rich foods

d.   the exchange of oxygen and carbon dioxide

1.4 A pH value of 2 would most likely be found in

a. pancreatic juice

b. gastric juice

c saliva

e.   bile

1.5 "X" in a graph refers to

a.   a green plant

b.   the prey population

c.   a predator population

d.   an autotrophic organism   [1x5]

1.1 --------------------------------------

1.2 --------------------------------------

3.5 A result of calcium deficiency	e anemia
	f. rickets
	g. deamination
	h. constipation

3.1 ------------------

3.2 ------------------

3.3 ------------------

3.4 ------------------

3.5------------------   [5x2]

4.   study the diagram and answer the questions.
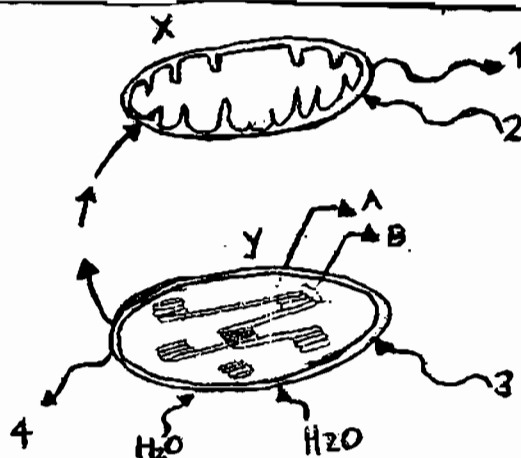
4.1 Identify the cell organelles X and Y (2) X ------------- and Y -------------------------------

4.2 Which metabolic process is associated by

(a) X   (1) -------------------------------------

(b) Y   (1) -------------------------------------

4.3 Identify the parts numbered A and B (2) A ------------------ and B ----------------------------

4.4 Study the diagram below which represent an outgrowth of a human organ and answer the questions
     that follow

Thank you for your time Good luck in your coming Exams !!!!

Thank you for your time May God bless you in your coming Examination !!!!

Appendix F.

96 Circle Park

Wyebank

3610

10 February 2002

The subject Teacher

Inhlanhlayabebhuze High School

P.O. Catoridge

Dear Mr Ncanana

Re: Request to conduct a Research Study on your subject – Biology Grade12.

1. I am requesting for your permission to conduct a study at your school using your subject Biology at Grade 12 class.
2. My research topic is: The use of Video Technology in teaching Biology.
3. Presently Aim doing a Masters degree at Durban Westville University. I am intending to conduct this study in the afternoons or Saturdays if it is possible or alright with you, because I don't want to disturb your school schedule. I also think that I will need / visit your group three or four times.
4. Another letter requesting the permission will be sent to your school principal shortly.
5. I will appreciate your co-operation.

Yours Faithfully

Mrs N.D. Hlongwane

(083 234 6694)

.

Appendix G.

96 Circle Park

Wyebank

3610

10 February 2002

The subject Teacher

Banqobile High School

P.O. Catoridge

Dear Mrs Dubazane

Re: Request to conduct a Research Study on your subject – Biology Grade12.

1. I am requesting for your permission to conduct a study at your school using your subject Biology at Grade 12 class.
2. My research topic is: The use of Video Technology in teaching Biology.
3. Presently Aim doing a Masters degree at Durban Westville University.
   I am intending to conduct this study in the afternoons or Saturdays if it is possible or all right with you, because I don't want to disturb your school schedule. I also think that I will need / visit your group three or four times.
4. Another letter requesting the permission will be sent to your school principal shortly.
5. I will appreciate your co-operation.

Yours Faithfully

Mrs N.D. Hlongwane

(083 234 6694)

Appendix H

96 Circle Park
Wyebank
Kloof
3610
12 March 2002

The Circuit Manager

Table Mountain Circuit

C/O. Hammardale District

Hammarsdale

Dear Mr Makhanya

Re: Request to conduct a Research at Table Mountain Circuit.

1. I am applying for a permission to conduct a research / study at two schools in circuit, Table mountain. These schools are Inhlanhlayabebhuze High and Banqobile High School. I randomly chose these schools.

2. Presently I am a Masters Student at University of Durban Westville (UDW) and my research topic is: The use of Video Technology in teaching Biology.

3. I am intending to conduct my study after school hours or Saturdays if possible.

4. Negotiations have been made with the principals and subject teachers of the schools concerned, who in turn referred me to you.

5. I will appreciate your co-operation in this matter.

Yours Faithfully

N.D. Hlongwane (Mrs)

Appendix I.

96 Circle Park
Wyebank
Kloof
3610
19 February 2002

The Principal
Inhlanhlayabebhuze High School
P.O.
Cato Ridge

Dear Sir.

Re: Request to conduct a Research at your school

1. I am applying for a permission to conduct a study in your school, presently I am a Masters student at University of Durban Westville, and my research topic is: The use of Video Technology in teaching Biology. My target group is Grade 12 Biology Class.
2. I promise I wont cause any disturbances at school, since my aim is to conduct this study in the afternoons or Saturdays if possible.
3. Attached please find the copy of registration card, which serves as the proof of registration.
4. You co-operation will be highly appreciated.

Yours Faithfully
N.D. Hlongwane

Appendix J

<div align="right">
96 Circle Park

Wyebank

Kloof

3610

19 February 2002
</div>

The Principal

Banqobile High School

P.O.

Cato Ridge

Dear Sir.

Re: Request to conduct a Research at your school

5. I am applying for a permission to conduct a study in your school, presently I am a Masters student at University of Durban Westville, and my research topic is: The use of Video Technology in teaching Biology. My target group is Grade 12 Biology Class.

6. I promise I wont cause any disturbances at school, since my aim is to conduct this study in the afternoons or Saturdays if possible.

7. Attached please find the copy of registration card, which serves as the proof of registration.

8. You co-operation will be highly appreciated.

Yours Faithfully

N.D. Hlongwane (Mrs)

Inhlanhlayabebhuze High School

P.O. Box 1067   *Phone (031) 7828348*
Cato Ridge
3676

Dear Mrs Hlongwane

Re: Permission to conduct Research at our school

1.   Your letter dated 19 February 2002 refers;

2.   You are hereby granted permission to conduct your study along the lines you have stated in your letter of application on the following conditions:

2.1   Learners should not be forced to participate if they don't want to, Since you indicated that your study would be conducted beyond the school hours.

2.2   Confidentiality of the participants is respected.

2.3   A copy of this study will be given to the school after completion as the school incentive.

2.4   May I take this opportunity to wish you all the luck in your study.

Yours Faithfully

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Mr P.S. Hlongwane (Principal)   School Stamp: