

FOUNDATION PHASE PUPILS' VIEWS ON SANITATION

by

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## DEDICATION

I dedicate this work to my parents, Monoane and Malefsane Zebediela.

Also to my two younger brothers, Tihabanelo and Tshenolelo who are not yet at school.  
Hoping this will be an inspiration to them.



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A special thanks to the staff of the two schools Batsogile and Tshebedisano in Pimville for letting me do the research in their schools.

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Above all, I thank the ALL MIGHTY who showed me that nothing is impossible with THEE.



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## ABSTRACT

The research essay was an attempt to attend to the problems faced by foundation phase pupils on sanitation. This was to explore through in-depth interviews the pupils' sanitation experiences and facilities at home and those available at the schools, and to find whether they impact on the pupils' effective usage of these facilities at school.

A conclusion was reached that it was found necessary to involve parents and the general communities in the education of pupils in order to improve their sanitation usage. This could be achieved through community education that addresses the needs of communities. This community education will keep communities abreast with the changing world.

This will mean involving everyone in planning and designing the programmes relevant to the community needs. Everyone should see himself/herself having a role to play in bringing about changes that could lead to a better and healthier lifestyle.

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# SECTION 1

## OVERVIEW

### INTRODUCTION

Foundation Phase<sup>1</sup> schools experience lots of problems with sanitation due to misuse and abuse of its facilities. Most of the problems relating to sanitation concern the shortage of facilities, abuse of existing facilities and lack of maintenance of existing facilities. Due to limited facilities, they are not enough to cater to the whole school. The existing facilities often become blocked because the users omit to flush or flush unwanted materials down the toilets.

Bad sanitation practices are costly and have resulted in many deaths. South Africa has a record of human suffering and death caused by the unhygienic disposal of human excreta. Diseases such as bilharzia, typhoid, cholera, viral hepatitis and dysentery have been reported to have been caused by poor sanitation practices (Pietersen, 1996).

People who are high risk candidates are those staying in rural areas and informal settlements. These areas still use pit latrines which lack proper maintenance. The unavailability of water makes it very difficult to improve the situation, which is further aggravated by the low education levels of rural dwellers concerning health matters.

This is an exploratory study of the practical experience that foundation phase pupils have of sanitation facilities. The study will investigate the facilities available to them and will also seek their views on problems they experience in utilising these facilities. The study aims to contribute to the debate on how to improve the health status of children in schools and communities. For the purpose of this study two schools in Pimville were selected.

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<sup>1</sup> Foundation Phase is a new terminology that refers to primary school.

## BACKGROUND OF THE STUDY

Pimville is an African<sup>ii</sup> urban area in Gauteng province and forms part of the South Western Townships better known as Soweto. Pimville is situated 12 miles from Johannesburg. Pimville was established in 1904 as an informal settlement. The inhabitants were originally from a suburb now known as Braamfontein, but were forced to move from the area due to bubonic plague. Previously Pimville was known as Klipspruit but on the 22 October 1934, it was renamed Pimville after a pioneer of African Welfare, Howard Pim (Mohlamme, 1990).

In 1954 the Bantu Resettlement Board undertook as one of its projects the rebuilding of Pimville, as well as an informal settlement, which has adopted the name of Klipspruit. The two foundation phase schools included in this study are Tshebedisano and Batsogile schools, which serve the communities of Pimville, Klipspruit and Kliptown.

Township schools are constantly used by communities as church and community centres for cultural activities, a situation that leads to over utilization of the schools' facilities. During these events the school facilities are misused and not properly cared for by the users. The worsening situation in schools are reflected in the apathy of school administrators and teachers to do something to improve the conditions, or to address this situation.

The government has shown concern over the problem and has launched a number of pilot studies. For an example, the consortium comprising the Human Science Research Council, Education Foundation and the Research Institute For Educational Planning conducted a survey which covered 32 000 educational institutions. The survey showed a ratio of 20 learners per one toilet and reflected a shortage of 270 000 toilets in schools countrywide. (The Teacher, 1997:3). The Department of Water Affairs and Forestry has contracted with the MVULA TRUST to act as the implementers of the government's water and sanitation project (Maru a Pula, 1997). The initiatives will inform policy-makers and health educators, not users of the facilities.

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<sup>ii</sup> African refers to the Black racial group in South Africa.



The research conducted thus far on sanitation in South Africa have been quantitative in nature, providing the government with the statistics for reconstruction and development purposes. Nothing has been done thus far to get the views of the users and to try find out how they cope with the situation. This study is an effort to redress the situation by conducting research that is qualitative and is concerned with the users of these facilities in the foundation phase schools.

### **PURPOSE OF THE STUDY**

The purpose of the study is to find out what type of facilities pupils have access to at home, and whether that access affects their usage of the school's facilities. This study also wants to ascertain what the Foundation Phase pupils' views are on sanitation issues in their schools and what they perceive as constraints to using these facilities effectively. The findings will be used to make recommendations to the education authorities on effective sanitation education at foundation phase level.

### **IMPORTANCE OF THE STUDY**

I consider it important to give voice to the users of these facilities; thus I considered qualitative methodology to be the most effective research approach. The findings of this study would be useful in informing the revised curriculum on proper utilisation of sanitation facilities at schools. Most importantly, the study's findings will seek to contribute to the health of the community it is situated in. It will seek answers to the question on how the school in particular, and the communities in general can solve social and health problems in the schools.

## RESEARCH STRATEGY AND METHODS

Data collection strategies are informed by theory. This implies that the techniques chosen must match the construct in the theory so that the data collected answer the questions posed in the study (Le Compte & Preissle, 1993).

The research plan will combine both group and individual interviews. Four to five group interviews will be conducted with a random sample of pupils who will be representative of all age, sex and class levels. Both sexes will be represented in these group interviews since there are no sensitive differences emanating at this stage, such as menstruation. Group interviews are preliminary to informant interviewing and they offer the researcher a chance to develop an interview schedule that is grounded in participant understanding of the topic (Ferreira & Puth, 1988).

Follow up individual interviews will also be conducted with some of the group interview participants, to clarify and verify some of the information gathered during these interviews. Other individual interviews will be conducted with the teaching staff and cleaning personnel responsible for supervision or cleaning of toilets. They will only be informants to the study.

According to Patton (1987), the inclusion of key informants can be a useful way of finding out what is happening in subgroups to which the observer does not or cannot have direct access. The issue is not to compare the foundation phase pupils' views with the views of the school managers on sanitation issues. The critical focus is thus on the views of interviewees since the views are based on their experiences and perceptions of how to utilise sanitation facilities.

In addition, an inspection of the physical structures at each school will be undertaken so as to get a clear picture of the quality of these facilities available for the pupils' usage. Tape recordings will be used as data gathering tools. Data analysis will start immediately after the first interviews have been conducted. Through the process of open coding

(Strauss & Corbin, 1990) themes will be identified that I will be able to explore as the research progresses.

Prior to the first visit, I will seek entry to the setting through telephonic means and will set dates for the first meetings and interviews. The principals of these schools have been informed of the study to be undertaken, and have granted permission to me to visit these sites.

## **EXTENT OF THE STUDY**

The main focus of the study will be the investigation of the experiences and views of foundation phase pupils about the sanitation facilities at their schools. The research will be guided by broad questions about the pupils' background and available facilities at home and school. This will include :-

- i) accessibility and availability
- ii) the pupils' knowledge of healthy sanitation practices.

The findings of the study would be used to educate the community about good sanitation practices. It will also inform curriculum development that could lead to relevant health education for informal as well as formal settlement communities.

## **LIMITATIONS AND DELIMITATIONS**

The study depend mostly on interview data which reflects the experience and perception of the pupils.

One limitation that is anticipated is that some interviewees might not feel free to talk about this issue in public, taking it to be too personal thus their comments might be very limited on the subject. Others might be intimidated by the presence of peers during the group interviews.

The fact that appointments need to be made so as to gain access to the site pose another limitation in that the inspection of the physical structures might bring a distorted

information to the one given by the interviewees. For an example the interviewees will say that their toilets are not cleaned while the researcher might find that during the visit the facilities are properly cared for.

The study is delimited to two schools in Pimville; which cannot be considered fully representative of foundation phase schools in the area. The study is delimited to one race group, and as such the findings would not be generalizable to communities other than that being served by these two schools.

## **RESEARCH QUESTIONS**

This study explores the views of foundation phase pupils on sanitation issues based on their home background and prior knowledge of sanitation practices. It will investigate the facilities available at home and school of each individual and whether the pupils are aware of the results emanating from poor sanitation practices.

- i) What type of facilities are available at school?
- ii) What type of facilities are available at home?
- iii) How do home practices impact on the school usage of sanitation facilities?
- iv) What role do the pupils perceive to be in improving the sanitation conditions of their lives both at school and at home?

## **STRUCTURE OF THE ESSAY**

The rest of this research essay is divided into four sections.

Section II deals with the conceptual and theoretical framework of the research.

Section III describes the methodology which was used for data collection. It is the how and what approach of the study. The study participants are also introduced in this section.

Section IV is a discussion of the findings. This involves the processes of interpretation, validation and conclusion drawing. The section concludes with recommendations.

## **SECTION II**

### **LITERATURE REVIEW**

#### **INTRODUCTION**

In health education individuals are provided with information and skills which are needed to make appropriate health related decisions that are consistent with both personal capabilities and environmental circumstances that exist. To achieve this, pupils should become aware of sanitation issues and thus acquire an understanding of the nature of the environment, which includes sanitation habits, provided facilities and their uses (Bedworth and Bedworth, 1978).

Within health education curriculum at schools, there need to be sanitation education to address the sanitation issues of humans. Health education should be a continuous process throughout the learner's life. This is what is referred to as life long learning in curriculum 2005 (Mona, 1997). Before I continue, I will define the concept sanitation, as it is the core concept in this research essay.

#### **MEANING OF SANITATION**

Sanitation is the maintenance of sanitary conditions (Pietersen, 1996). It refers to the system that provides sufficient hygienic toilets to allow for the safe disposal of human excreta. One component of this essay is to explore the hygienic practices of the available school facilities in conduction with the user experiences. It also focuses on the pupil's role to maintain these facilities so that they become disease and germ free.

Most health related problems encountered at school are related to poor sanitation practices for example a child with running stomach will be asked whether he did washed his hands after visiting the toilet, that is before eating. I believe that attending to sanitation issues in schools could lead to the improvement of the quality of life of these foundation phase pupils.

Maslow's hierarchy of needs describes humans as having basic needs that must be met before more complex needs can be fulfilled. The needs are arranged starting from the most basic to the more complex: - physiological, security, self-esteem, self-actualisation and lastly knowing and understanding, (Behr, 1983). Sanitation is part of the basic level of physiological needs. The satisfaction of this need is important for one to function effectively. For example, a child who needs to go to the toilet during classes will not give her/him a full concentration much as the sick child with diarrhoea due to poor sanitation practices will be missing his/her classes. One can see that if sanitation is left unattended at, this level can lead to many problems such as diseases. Sanitation being the physiological need can bring an imbalance in the life of an individual if not satisfied. This can cause bladder infection to a pressed child in class who will not develop cognitively, being the next level of needs.

A child from an informal settlement finds the different sanitation facilities at school as to what he is exposed to at home. Such a child might experience problems in using the school facilities. For example he will forget to flush the toilet after using it. There need to be some form of an orientation to equip the child with skills that will make him to use the system effectively.

## **HEALTH EDUCATION IN SCHOOLS**

Health education is a process of individual growth in which individual attitude and behaviour change as a result of new experiences. Health education is not being offered in grades 1-5 of foundation phase schools, a stage which according to Piaget's developmental stages is referred to as the concrete operational stage (Behr, 1983). This stage marks the appearance of proper logical thinking and concept formation. It is during this stage when children are able to consider alternative forms of behaviour at points early enough in their lives to be of value in the choices and decisions they are faced with.

Though health education is offered in grade 6, the pupils are not examined on the subject. This causes the pupils and even the teachers not to take the subject seriously.

Furthermore there is no set curriculum, leaving the teachers with the decision on what content should be relevant (Pietersen, 1996). Health education involves the development of the affective area such as people's feelings, emotions, attitudes and values. It is about translating the facts into a meaningful context which allows the pupils to make decisions as to the appropriate course of action with regard to their health behaviour (Lee, in Cowley et al., 1981). Through this, pupils are able to have a choice as a result of greater awareness and knowledge.

## **THE SCHOOL AS A SOCIALISING AGENT**

The school is an agent of socialising. Children bring to school already formed beliefs and attitudes from home and the communities they come from. These influences are much more powerful than any attempts the school may transmit (Tones, in Cowley et al., 1981). The school is the secondary and primary socialisation agent to parents and the community. Primary and secondary socialisation produce knowledge and beliefs relating to health-related values and they help to buttress these values against attacks from any outside agencies intent upon producing some change in the life style of an individual.

Prior knowledge and cultural background of the learner plays a major role in the child learning. Knowledge is transmitted informally through primary socialisation. Informal education is incidental transmission of attitudes, knowledge and skills with most emphasis on the attitudes and values (Douvan, 1985). According to Piaget (Wardsworth, 1979), prior knowledge is embedded in the child in the form of schemata<sup>111</sup>. One must however remember that not all of the pupils who enter formal schooling at the age of seven are equally ready. For example, due to lack of facilities and exposure, many do not possess the skills to address problems they are faced with concerning sanitation (Behr et al., 1986).

According to Vygotsky (Rogoff, 1990) culture and education play a major role in transforming the individual. The child who comes from the background where health

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<sup>111</sup> Schemata are according to Piaget mental structures that control the individual's perception of the world around him.

education is lacking will be at a disadvantage. Children learn better when presented with better artefacts. Children from low economic families are often not exposed to modern sanitation practices due to economic constraints. For example, households from informal settlements cannot afford toilet paper and as a result newspapers and magazines are used. The unavailability of water contributes to the spread of diseases.

The child during social interaction with the family and community adopts culture. Knowledge that the child gets culturally may be incomplete or misleading. Sanitation practices that the child adopts culturally are influenced by the financial backgrounds of the parents, such as the use of toilet paper which can be expensive and scarce to the users.

## **METHODS RELATED TO THE TRANSMISSION OF HEALTH EDUCATION**

Health education in the foundation phase case should be child - centred. This allows the teacher to be the facilitator of learning process, not as the only fact giver. The teacher should move away from the traditional way of teaching referred to as the banking system by Paulo Freire (Shor, 1994). According to Freire, pupils develop ways of critical thinking through dialogue. If they are to discuss their feelings, attitudes and behaviour there need to be interaction and communication between them and the teacher.

There are certain theories that provide guidance to the teaching of health education such as Piaget's theory of prior knowledge contributing to learning and Vygotsky's theory of the child learning through mediation. Carl Roger's child-centred teaching puts emphasis on the teacher as the facilitator who assists the child in selecting and learning things that he perceive as relevant, (Engs & Wantz, 1978). The health belief model of Rosenstock, Hochbaum & Leventhal (Engs & Wantz, 1978), postulates that in order for an individual to take action to avoid diseases they must believe in the following:-

- personal susceptibility to the disease,
- contraction of the disease will affect their lives moderately or severely and
- taking particular action to reduce susceptibility to the disease



Giving the pupils facts is not sufficient to bring about the changes in their behaviour. The aims of health education are to get people to internalise and personalise the knowledge available about health issues. Education is always the key to change, with education the child is able to develop personally to his full potential. Learning whether informal or formal should be recognised as prior learning. Prior learning helps to connect learning to as the pupils move from one learning situation to another.

## **COMMUNITY AND PARENT INVOLVEMENT**

Community members as volunteers in the school can affect the school's instructional programme in many ways. Bedworth (1978) discussed community involvement as public relations in which the general public get involved in planning, organising, and the implementation of health education. Communities are resourceful to schools regarding their involvement in the sense that the needs differ individually and others could help the needy. This helps in addressing the community needs. My experience is that the governing bodies used to visit the schools twice a month to inspect the school facilities. A report used to be sent to the parents and they would have a meeting to make contributions, inspect and repair the damages.

Within these communities volunteers would fix the damages. In the case of the sanitation facilities, they would be cleaned and the children would be given informal lessons on how to care for these facilities. Most communities would like to be engaged physically and not financially because of their economic status. Adults working together learn from each other and as a result they are able to improve on their practices at home. Parents would want to preserve the physical structures already in existence rather than to close them down due to misuse as a result they are willing to get involve in their children's learning by helping them to engage in good sanitation practices.

School toilets are vandalised by communities since they use the school facilities during weekends and holiday as community centres. Schools should thus encourage community involvement with the schools. Schools should establish mutual relationships with communities to achieve common goals. Community involvement in schools increases

public confidence and social problems are identified quickly. The solution to these becomes accurate and timely.

## **THE CORE-PLUS FRAMEWORK FOR SCHOOLS**

The core-plus framework is described by Townsend (1994) as a way for schools to be effective. The core is the state mandated obligations of the school such as to promote literacy, numeracy and awareness. The plus is determined by the school community itself. This is what we refer to as the empowerment of people at the school site. The development of this core-plus framework provides the opportunity for schools to be the architects and supporters of community development and change. New skills, knowledge and attitudes are taught so as to cope with the rapidly changing world.

The core part of the core-plus curriculum incorporates the local community needs and uses the available resources of the community to address those needs. Sanitation education can thus become part of community education in which the local community is informed about the good sanitation practices including the maintenance of these facilities.

In the core-plus curriculum, the need to do the identification of the core is very important. This is done through the need assessment of the particular community. In the case of communities of informal settlements a need for water for the purpose of sanitation and the improvement of sanitation practices to avoid diseases exist. Community health programmes can be introduced as the “core” of the core-plus curriculum and could be offered in the time suitable to the availability of adults. The adoption of the core-plus curriculum could address the sanitation issues in these schools.

Reintroducing health education in schools could address the needs of learners. Health education is an important subject because it relates to the life situations of learners and comparison between the home and the school. The school curriculum to a certain extent encourage participation of learners and it is important for children at this level of schooling to learn by doing. The fact that school toilets were build far from the

classrooms contributed to the facilities not being cared for and even the teachers were lazy to inspect them.

The fact that children bring in their experiences during learning can help the teacher to address situations that need immediate attention.

## **CONCLUSION**

When children from informal settlements are clients of the school, the school has a role to play, which is different from the present one. They need a relevant programme that can educate them about good sanitation practices. These children need to be exposed to better health conditions due to their lack of exposure to modern sanitation facilities.

One of the major constraining influences upon the success of health education is the failure to develop and use methods appropriate to its needs, (Cowley ET al, 1981). Health education needs to go beyond fact giving as a way of helping young people to make choices and decisions relevant to their lives.

Effective health education may produce changes in understanding or ways of thinking, bringing about a shift in belief or attitude. It may influence or clarify values, may facilitate the acquisition of skills and may even effect changes in behaviour.

## **SECTION 111**

### **RESEARCH METHODOLOGY**

#### **INTRODUCTION**

This section describes the methodology which was used for data collection which is the "how and what approach" to the study. The section is organised in the following sub-headings I) Qualitative Inquiry as a research method; ii) Research Design; iii) Selection of participants; iv) Data collection procedures and v) Data Processing and Analysis.

#### **QUALITATIVE ANALYSIS AS A RESEARCH METHOD.**

Qualitative data provides depth and detail through direct quotation and careful description of the situations, people, interactions and observed behaviours. People's experiences are not fitted in to predetermined standardised categories such as the response choices that constitute typical questionnaires or tests (Patton, 1987). The study is qualitative because data is collected in the form of words rather than numbers.

Qualitative data are the source of well grounded, rich descriptions and explanations of processes in identifiable local contexts (Miles & Huberman, 1994).

Qualitative research methods offer several traditions within the human and social sciences. My study has chosen the case studies tradition in which the researcher explores a single entity or phenomenon bounded by time and activity and collects detailed information using a variety of data collection procedures during a sustained period of time (Creswell, 1994).

The study tries to understand how people respond to the system, what their experiences are and how they cope to the situation at hand. Qualitative research strives to gain a holistic view of the particular context in study (Miles & Huberman, 1994). It aims to form an integrated and comprehensive understanding ("Verstehen") of a particular situation and the participants in it.

When conducting research, the researcher attempts to capture data on the perception of local actors according to the views they present concerning the theme/topic under discussion. This then explains how people act and manage their day-to-day situations of life. The researcher is thus the main measurement device in the study (Miles & Huberman, 1994).

## **RESEARCH DESIGN**

The study is a qualitative design . This followed an explanatory case study because the questions asked included “how and why”. These questions dealt with the operations such as how do the pupils cope with the situation whereby the toilet facilities are different from those available at home. I had little control over the events meaning that no observations were to be made in this regard since this was totally a private situation.

Research fall within the parameters that describe the setting in which the research takes place, the actors who are observed or interviewed, the events which will unfold what the actors will be observed doing or interviewed about and lastly the process which explains the evolving nature of events undertaken by the actors within the setting (Miles & Huberman, 1994).

The research design is flexible and evolves as the process unfolds without losing the originality of the topic. This was always kept in mind and had the research questions as a guide. The data collection steps involves setting the boundaries for the study, collecting information through observations, interviews and visual materials and establishing the protocol for recording information (Creswell, 1994).

The focus of the study deals with the views of foundation phase pupils on the sanitation facilities they have in their schools. This was done through interviews, and inspection of the facilities at the setting.

## **SELECTION OF PARTICIPANTS**

The idea of qualitative research is to purposefully select participants who will best answer the research question (Creswell, 1994). In this case it was the foundation phase pupils in two schools. The two schools are Tshebedisano and Batsogile in Pimville.

Tshebedisano opened in 1973 and has an enrolment of 732 pupils of which 422 are girls and 310 boys. From 1990 it housed a pre-school on its premises in two class rooms. The pre-school shares the same sanitation facilities with the rest of the school. There are two blocks of toilets, the first one is nearer to the administration block with 8 toilets, 4 for boys and 4 for girls. The second set of 17 toilets are next to the pre-school classrooms, 10 for girls and 7 for boys. The structures such as the buckets are different from the ones in the other block. They are smaller in size because they were initially meant for pre-school pupils and yet the flushing strings are high up and cannot be used by the small kids. There are 29 pupils per each toilet at the school.

Batsogile Foundation school opened in 1975 and has a population of 293, 142 girls and 151 boys. This school is different from the above mentioned one because it has no pre-school and thus starts from grade 1 to grade 7. There is only one block with 17 toilets, 10 for girls and 7 for boys. There is one toilet for 17 pupils to use.

The participants for the study were selected randomly, two from each grade representing both genders. This means that each session had 14 participants, 7 girls and 7 boys from grade 1 to 7 with the exception in Tshebedisano where a pre-school pair was included.

## **RESEARCH INSTRUMENTS**

Instrumentation refers to the specific methods used for collecting data. In this study a tape recorder was used. This had the advantage of ensuring that everything said during the interviews was preserved for later use in analysis. At the same time field notes were recorded noting observations of participants' behaviours. According to Patton (1987) data

also include the silence during the interview session by participants, and what was said during the breaks and after the sessions.

The interviews were unstructured interviews using semi-structured schedule. The questions were not asked in a particular sequence, but did serve as a kind of control for ensuring that all relevant sub-topics are covered during the interview (Schurink, 1988). In this case an umbrella question was asked and when it leads to two responses, each response was followed-up by questions to get the required answer. Key informants were asked about the contents of the school policy regarding the proper maintenance of the toilet facilities such as, how often are the facilities cleaned.

## **DATA COLECTION PROCEDURES**

Access to the two schools was gained telephonically, and an appointment to visit the schools was made. During the first appointment I introduced myself as a student from the Rand Afrikaans University (RAU) doing research in the field of community education. My research proposal was presented in writing to the Principals of the two schools. They then each assigned teachers whom I had to directly contact for further arrangements.

Statistical data as to how many pupils were attending in each schools was also collected during this visit. This visit also included the inspection of the toilet facilities. A further appointment with the assigned teachers was made, on when I could visit the school to collect data. An agreement was reached with the teachers that I could visit the schools on Thursdays. Being a student at RAU gave me credit since the majority of the staff for both the schools furthered their studies at the same institution.

The data collection process started during the last quarter of the academic year in September. This was not quite a busy period since the teachers had finished the school syllabi and were busy with the preparations for examinations. Even so, some teachers at some stage did not co-operate and thus refused to send out the pupils for interviews.

Two kinds of interviews were conducted. These were group interviews, as well as individual interviews with particular group members and with key informants. The interviews were conducted in a secluded room that served as a storage room. The chairs were arranged in a circular form with the tape recorder placed in the centre of the group. As an interviewer, I formed part of the circle situated in the middle.

As participants entered the venue of the interviews, each was given a number tag and background information of each participant was recorded on the check list (See appendix 1). The information was helpful during the interviews in that pupils from informal settlements had a minimal response because of the differences they had with the kind of sanitation facilities they had at home such as pit toilets which they did not want to talk about in public. This made me to conduct individual interviews with these pupils.

Before I started the interviews, I introduced myself and briefed them on what was expected. To explain this I engaged them in a training session. During the training the participants were given a question "what they want to be in life." They had to wait for a minute to digest the question and respond by saying out their numbers as their names. This exercise was helpful in getting the voice levels of participants and to avoid a situation in which they will give a response simultaneously in a group. The tape recorder was played back to them and they could notice and rectify their mistakes. This was fun and as a result it made them relax.

The language during the interviews was Sesotho, with a little bit of Zulu here and there. This allowed the interviewees to express themselves clearly. The interviews produced typical direct quotations which according to Patton (1987) were a basic of raw data in qualitative evaluation. They revealed the respondents' level of emotions and perceptions of the world.

In-depth interviews with other participants revealed information that the participants regarded as too confidential to talk about in public. The respondents used their own words and terminology in expressing and giving their opinions about the situation.



Interview questions were divided into three sub-classes such as,

- i) School toilet usage by participants.
- ii) Health related practices of toilets.
- iii) The effective use of toilet facilities.

After the treatment of each sub-class the participants were allowed to take a break. Each child was given a sweet to relax his/her jaws and they looked forward for the next session.

Individual interviews with the teacher who supervised the cleaning of toilets in Batsogile foundation school and the factotum at Tshebedisano provided information as to when the cleaning was done and how the pupils maintained the facilities. The key informants were not part of the study and data obtained was from their present perceptions and not what was actually happening (Patton, 1987).

## **DATA PROCESSING AND ANALYSIS**

The interviewers were transcribed verbatim after each session. Data analysis depends on theorising which include cognitive strategies such as comparing, contrasting, aggregating, ordering establishing linkages and relationships and speculating (Le Compte & Preissle, 1993).

Coding as a process of analysis was done after all the transcription. The main ideas were identified and were determined by the research question. Open coding which is a process of giving names; categorising and comparing the transcribed data followed the process. (Strauss & Corbin, 1990). Pattern coding was also incorporated to identify patterns that were similar and classified them according to patterns. (Miles & Huberman, 1994). Connections were identified with the different categories made during open coding. This is the process that is referred to as axial coding. The coding paradigm involves conditions, context, action strategies and consequences (Strauss & Corbin, 1990).

## **SECTION IV**

### **DISCUSSION OF FINDINGS**

#### **INTRODUCTION**

The section focuses on the research findings which are an explanation of consolidated data. Consolidated data refers to categories which were formed and were helpful in conclusion drawings. Further research and recommendations will be suggested in this section of the essay.

#### **CONSOLIDATIONS OF DATA**

During analysis units of information were deducted from the transcriptions of data which were later developed into clusters according to themes identified. Clustering is a tactile that can be applied at many levels of qualitative data. The levels may be of acts, individuals, processes or cases as wholes (Miles & Huberman, 1994).

The following categories were established following the interviews:-

- i) The difference between the pupils' homes and school sanitation facilities.
- ii) Looking after these facilities.
- iii) Consequences of poor sanitation practices.
- iv) Changing and taking responsibility to the situation.

Most pupils use flushing toilets that are available at home except for a few who come from the squatter camps and use pit toilets. These children explained the ordeal of using such systems during their first month in the school as follows:- pupil A said,

I remember my first day at school during lunch break, I went to the toilets but could not use the flushing string because I did not know what it was for. As the results I left the toilet dirty.

The pre-schoolers and grade 1s explained that at home they still use “Skiki”<sup>iv</sup> and the elder sisters will then transfer the contents to the toilets. This happens especially when the toilets are pit systems.

Most pupils admit exploring the toilet facilities during classes when very few pupils are present in the toilets. Peter, one of the interviewees, said:

I used to stand on the toilet bucket and pull down the string and I would be fascinated by water coming out. This process would be repeated twice before I could go back to my class.

The pupils who used pit toilets at home are assigned the job to wash the toilets at home on a daily basis. They do this on weekends and everyday after school. This was different at school because the toilets were either cleaned by the factotum or the grade 3-6 and excluding the grade 1 and 2. In the school where the responsibility of cleaning the toilet is given to the factotum, the pupils found it unusual for an elderly man to do that. Sam told me: “This is not normal for a man to do the cleaning. It is a woman’s job”.

At Batsogile foundation school the children did their own cleaning which was assigned by the teachers according to grades. This according to the school policy was to be done twice a week of which the policy was not followed. Some of the pupils interviewed complained that “we (grade 4A) only washed the toilets once this year and this was a punishment for making noise. The toilets may take a week before they are cleaned again.” They further stipulated that there were some women from the feeding scheme who sometimes volunteered to clean the toilets. This only happened thrice this year.

Pupils who had the factotum to do the cleaning were very comfortable with the idea because they thought it was time consuming. Ellen said:

This is done during our free periods during which we are supposed to do our homework and study for the next coming classes. Once again the cleaning equipment are not

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<sup>iv</sup> Skiki is a Zulu name for chamber pot

enough for us to clean in one period. There is only one toilet brush and one floor brush for each block.

They said they cannot do the cleaning after school because some pupils have to catch buses home and besides, no teacher is prepared to stay behind for supervision. In this case it means that they were willing to sacrifice their after school activities provided some teachers were present with them and enough equipment was available.

Most pupils were not aware of the diseases that can be contracted due to poor sanitation conditions. Snacks are being taken into toilets as was evident from the following response:

sometimes during break time when the bell rings, I rush to the toilet with my packet of simba. Just as I enter I empty the packet into my mouth, this means that I enter chewing and throw the empty packet on the floor.

Those who used the school toilets could not remember whether they washed their hands or not during their visits to the toilets. Diseases that were normally reported included running stomach which was connected to food bought from the mothers who sell fatcakes and sweets. These women occupied a corner next to the toilets nearer to the entrance gate. Pupils could not however connect the contracted diarrhoea with the site these women occupied.

The improvement of the conditions prevailing at the schools' toilets was one category which was identified. The pupils have mentioned a number of issues that needed attention in order to improve the school toilet facilities. A complain as to the availability of the facilities was launched. They complained that the facilities were not enough and this posed a problem in winter when the facilities are mostly needed. All in all this led to a major toilet blockages occurring in winter.

Pupils also wanted privacy to be maintained in their toilets. Windows and toilets were not fitted as a result dust and rubbish occupied them. School yards are not respected by the

public, This is used as a double-up way through to the next sections of the townships. There need to be a way to regulate this because the general public use the school's toilets on their way through.

## **PUPILS' ROLE**

One of the questions asked of them was what they perceive their role to be. The pupils are well prepared to take a role in improving the conditions at schools. They think that it will benefit them in the future. They see their role as follows:-

- i) Electing class prefects who will monitor the use of toilet paper and soap allocated to each class.
- ii) Everyone seen misbehaving such as writing graffiti on the toilet walls and doors should be reported and the culprits be punished. One said: "It would be wise if after all the renovations a monitoring- camera could be installed and a parrot be placed so as to identify the culprits". Pupils feel that those who are staying nearby should report the presence of strangers after school, instead the school premises should be locked when the school day ends.
- iii) Doing their own cleaning since they are the ones using the facilities.

## **GENERALISED BELIEF**

From the interviews conducted with the pupils, it became apparent that a generalised belief exists and had been propagated that the grade1 and 2 pupils of foundation phase schools and the local communities were the major causes of all problems related to sanitation. These people leave the toilet taps running, unflushed toilets, rubbish on the floors and toilet blockages. One grade 4 said "we are able to care for the facilities but the grade 1 and 2 spoil the toilets when they use them. Sometimes they do not bring toilet paper with them as a result they wipe themselves on the toilet seats.

## RECOMMENDATIONS

The introduction of health education in all foundation phase grades is very important as the lower grades experience more problems with the use of sanitation facilities at schools than at home. Health Education will be very helpful to pupils who lack health education in their families and who come from low economic families where modern facilities are not available. Health Education should involve communities in the sense that the problems are related to the home situation.

Teachers who offer health education should receive training in this field. There is a need to have in-service programmes for such teachers as more new skills are acquired regularly as problems arise. Presently there are no written prescribed documents for classroom use. These can be made available when communities work hand in hand with schools in designing the curriculum according to the community needs. Community involvement will identify the local resources such as health professionals who can make inspections to the schools facilities and the pupils themselves.

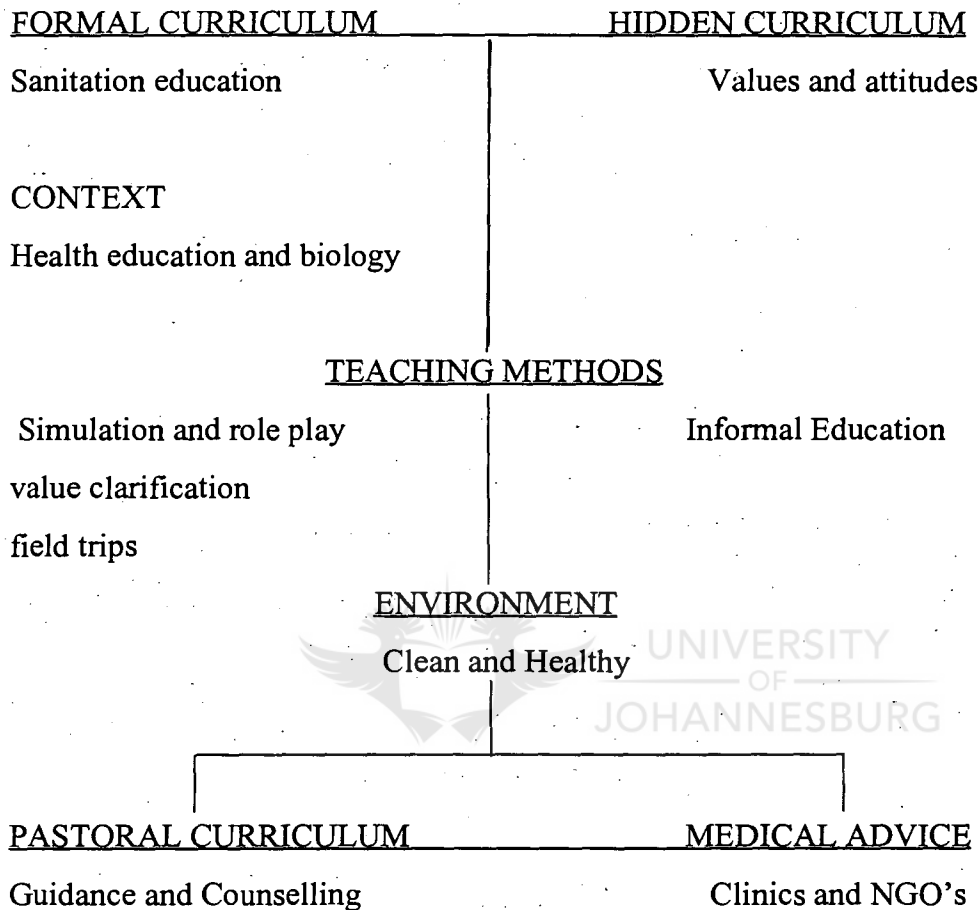
Teaching the subject should involve the pupils in the sense that they give their experiences. They should develop critical thinking, reasoning, reflection and action. Pupils learn by doing thus learning should be connected to real life situations as it involves their experiences. Learning should emphasise on the outcomes, that is what the learner becomes, understand and behaviour change.

The schools should adopt the core-plus framework in which community needs are met. Communities with low health education can be empowered with knowledge and new skills so as to improve their sanitation lives.

Figure 1 below, represents how sanitation education curriculum can be structured. The curriculum needs to incorporate formal and hidden curricula. This cannot just be a subject on its own but to be incorporated in health education. The formal transmission of sanitation education needs to be in the context of biology since it involves the human body. The teaching methods thus should include simulation and role play in which the

pupils can explore in depth the issues, value clarification in which the pupils' views are considered during group discussions and lastly field trips to hospitals, that can give the pupils experience especially of patients.

FIGURE 1



Hidden curriculum is also provided at schools but mostly it is the pupil's contribution from his own experiences. These experiences have their own origins at home and within the communities through informal learning. These form the parallel curriculum. Teachers contribute to the hidden curriculum as they communicate their values and attitudes of the same communities.

Questions may arise which are related to health matters and pupils may bring to school pieces of information that the teacher can use to introduce new health topics or they may come from the toilets without washing their hands, thereby providing practical examples of everyday activities that are important to health life. Teachers may make more use of

the hidden curriculum teaching in sanitation education provided they are aware of the important contribution it makes.

The environment should also promote sanitation education by being healthy and safe. Pastoral curriculum is provided in schools through guidance and counselling and medical advice can be obtained from medical centres and non-governmental organisations concerned with sanitation in schools.

## **FURTHER RESEARCH**

Sanitation in South Africa has thus far received little attention in terms of research. The essay has only concentrated on one racial group as a result one cannot make a generalisation. An exploration of other racial groups will be interesting in the sense that some ideas that can be a solution to other people can be identified.

There are communities that have implemented the community projects related to sanitation such as in Carltonville. The parents after realising the conditions their children were exposed to in school decided on this kind of a project which is Danish based and is involved in cleaning the toilet in townships and villages. An investigation on community involvement can be helpful for the future of the children as they portrayed dedication.

## **CONCLUSION**

Every development should consider the basic level that is the children. This should start at foundation phase level and should include communities. Children can learn when their parents are empowered through health education. Community education can lay a foundation for development as adults resist change because of their beliefs and customs.

In education everybody should have his/her role towards the contribution of curriculum design. Pupils need to see the relevance of their studies and this can be achieved when the educators can give them a hearing. Their views can contribute a lot to the designing of the curriculum content.



## REFERENCES

- Anon, 1997. Unhealthy Conditions. The Teacher, 2(9), September 1997: 15.
- Anon, 1997. Mvula wins two Bott Bids. Maru A Pula, News Letter Of The Mvula Trust, (6), July 1997: 4.
- Bedworth, D. A. & Bedworth, A. E. 1978. Health Education: A Process For Human Effectiveness. New York: Harper & Row.
- Behr, A. L. 1983. Psychology And The School. Durban: Butterworths.
- Behr, et al 1986. An Educational Psychology For Schools In Africa. Durban: Butterworths.
- Biehler, F. & Snowman, J. 1993. Psychology Applied To Teaching. Boston: Houghton Mifflin.
- Bryman, A. 1988. Quantity And Quality In Social Research. London: Unwin Hyman.
- Cowley, J.; David, K. & Williams, T. (eds.) 1981. Health Education in Schools. London:Harper & Row.
- Creswell, J. W. 1994. Research Design: Qualitative And Quantitative Approaches. London: Sage.
- Douvan, E. 1985: Psychoanalytic Theory Of Development in Husen, F & Postlethwaite, T. N. (eds.), International Encyclopaedia. New York: Pergamon, Vol. 7, pp. 4133-4134.

Engs, R. & Wantz, M. 1978. Health Education In The Elementary Schools.

Boston: Houghton Mifflin.

Ferreira, M. & Puth, G. 1988. Focus Group Interviewing. Ferreira et al (eds.),

Introduction To Qualitative Research Methods. Pretoria: HSRC, module 3, pp.162-186.

Johnson, R. C. & Medinnus, G. R. 1965. Child Psychology: Behaviour And

Development. New York: John Wiley & Sons.

Kvale, S. 1983. Research Interview: A Phenomenological And A Hermeneutic Mode

Of Understanding. Journal Of Phenomenological Psychology. 14(2). pp. 17-196.

Lecompte, D. M. & Preissle, J. 1993. Ethnography And Qualitative Design In

Educational Research. London: Academic Press.

Miles, M. B. & Huberman, A. M. 1994. Qualitative Data Analysis. London: Sage.

Mohlamme, J. S. 1990. The Early Development of Education In Soweto As Seen

the Story Of Pimville School. Johannesburg: Skotaville.

Mona, V. 1997. South African School In Shocking Conditions. The Teacher,

2(9), Sept. 1997:17.

Nimpuno, K. 1986. Children As Agents Of Change: Water And Sanitation. UNESCO

Education For Child Survival And Development In Africa. Paris: UNESCO-UNICEF Co-operative Programme, Digest 20, pp. 71-80).

Patton, M. Q. 1980. Qualitative Evaluation Methods. London: Sage.

Patton, M. Q. 1987. How To Use Qualitative Methods In Evaluation. London: Sage.

Pietersen, A 1996: Water And Sanitation: Towards A Healthy Family. South Africa;  
South African Department of Water Affairs And Forestry.

Rogoff, B. 1990. Apprenticeship In Thinking Cognitive Development In Social Context.  
New York: Oxford University Press.

Shor, I. 1993. Education In Politics: Paulo Freire's Critical Pedagogy. MacLaren, P. &  
Leonard, P. ( eds.), A Critical Encounter. London: Routledge.

Silverman, D. 1993. Interpreting Qualitative Data: Methods For Analysis Talk,Text  
And Interaction. London: Sage.

Strauss, A. & Corbin, J. 1990. Basics Of Qualitative Research: Grounded Theory  
Procedures And Techniques. London: Sage.

Tones, K., Tilford, S. & Robinson, Y. 1990. Health Education: Effectiveness And  
Efficiency. London: Sage.

Townsend, T. 1994. Effective Schooling For The Community: Core-Plus  
Education. London: Routledge.

Wardsworth, B. J. 1979. Piaget's Theory Of Cognitive Development. New  
York: Longman.

## Appendix 1

Name of school \_\_\_\_\_

Date \_\_\_\_\_

Pupil	Type of toilet	Home	No. in house	Age & grade	Gender
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

1. Type of toilet      A= flush  
                                    B= pit  
                                    C= chemical
2. Home                    A= township  
                                    B= squattercamp

## **Appendix 2**

### **INTERVIEW GUIDE FOR FOUNDATION PHASE PUPILS ON SANITATION**

#### **TOILET USAGE**

1. Who does not use the school's toilets?
2. Those of you who do not use the school toilets what, do you use instead?
3. Those who use the toilets who flushes and why?

#### **TOILET CLEANLINESS**

4. Why do you think that the toilets should be cleaned?
5. Who cleans the toilets at school?
6. Who do you think should clean the toilets?
7. What should be done when cleaning the toilets?

#### **EFFECTIVE USAGE OF TOILETS**

8. How can we make sure that the toilets stay clean?
9. How can we keep our toilets germ free?
10. What will your role as pupils be in this process? i.e How will you help?