

**CHILD-CENTRED COURSE FOR TEACHERS TO
PROMOTE BASIC HEALTH AND HYGIENE AWARENESS
IN RURAL COMMUNITIES**

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Water Research Commission



**CHILD-CENTRED COURSE FOR TEACHERS TO PROMOTE BASIC
HEALTH AND HYGIENE AWARENESS IN RURAL COMMUNITIES**

Report to the
Water Research Commission

by

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on behalf of Lenehan Consulting

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Executive Summary

Background and Motivation

Children have the capacity to actively promote health and hygiene campaigns within their communities. In most countries the education system is the broadest channel for health education. With this in view, it would seem that any programmes which target children as change-agents in rural communities must involve schools and the community at large.

Innovative approaches designed to target school children do exist and many are successful. The challenge for development/education professionals remains to promote programmes which successfully target school children as the most significant yet underutilised resource in the community. Although these programmes exist, they have been mainly designed for urban schools environments.

Aims and Objectives

This research project aims to facilitate the development and implementation of health and hygiene programmes on a local level in rural communities. This will include the development of child-centred course materials that can be re-used by educators and adapted for other rural schools. The creation of these resources is necessary as they are often scarce in rural areas and they may also lack local context. Many courses seem aimed at urban communities and more work needs to be done on developing resources in the rural context.

The objectives of this research project are:

- To develop a set of course materials for educators to promote basic health and hygiene awareness (e.g. cholera, diarrhoea etc..) in rural primary schools.
- To build capacity in previously disadvantaged individuals through direct training and participation in the research project.

Methodology

The initial step taken in developing the course material was undertaking a literature review of international and local initiatives and case studies relative to child-centred health and hygiene awareness promotion. Lessons learnt from previous studies were incorporated into the development of the material, including the need for an integrated approach. However, effective school health and hygiene programmes, particularly for younger children in rural environments, have been limited.

It was recognised that input from educators in rural schools was imperative and a Preliminary Baseline Survey was developed. This survey consisted of a questionnaire with questions directed to educators in order to ascertain issues that are significant to these role players.

Implementation of the Preliminary Baseline Survey was undertaken at three schools in Northern KwaZulu-Natal, located in the Mahlabathini District, approximately 45km north of Ulundi. These schools were chosen as they are rural schools with limited resources and a range of relevant circumstances.

From the literature review and results from the Preliminary Baseline Survey, a draft health and hygiene awareness programme was developed. Initial piloting of this draft programme was undertaken at the three schools. A questionnaire was included with the draft programme to encourage comments from educators on the draft programme and the piloting process.

Communication with rural schools, including distribution of educational materials and feedback from the schools, has been recognised as problematic. Communication for this research project was

undertaken through the postal service and facilitated by a contracted local resident to ensure efficient transfer of information within the logistical constraints of the rural environment.

Piloting of the draft programme was also to be undertaken in rural schools in the Mooi River and Currys Post areas 50km north west of Pietermaritzburg. Participation of these schools was requested from the Department of Education and relevant Principals but was not possible in the time frame of this research project.

Capacity Building

This research project utilised educators in rural primary schools in the development and piloting of the health and hygiene awareness programme. This has included training and mentoring during the piloting process. Participating educators also provided feedback on the research project. Facilitation of the piloting process was undertaken by a local resident in the Mahlabathini area in Northern KwaZulu-Natal.

Previously disadvantaged individuals employed by Lenehan Consulting were also trained and involved in:

- Development of the health and hygiene programme for piloting.
- Monitoring and evaluation of the piloting process.
- Development of the educational resource sheet “Germs”.
- Facilitation of the feedback process to the participating schools.

A significant objective of this research project was to facilitate the promotion of health and hygiene awareness in previously disadvantaged communities. This has been achieved in communities with participating schools. Dissemination of the research findings has also been undertaken to facilitate implementation of health and hygiene awareness promotion in a wider range of communities.

Description of Health and Hygiene Awareness Programme

The Health and Hygiene Awareness Programme developed in this research project is based on the lesson plan format and is ready for use by rural school educators. It consists of 10 lesson plans and is designed for learners aged 6-8 years. The aims of these lesson plans are:

- To provide an appropriate format for successful health and hygiene programme for lower primary school learners.
- Allow for a holistic, cross-curricula educational experience for learners and educators.
- To give educators and other community stakeholders an opportunity to comment on the education of their children.
- To further the education of learners regarding health and hygiene issues that may concern them.

This programme was developed in the lesson plan format to facilitate its replication for utilisation in a range of applications. The simple format was also necessary as the programme needed to be appropriate to educators with a varied level of education and also suitable for translation into more than two languages for national relevance.

Resources to support the lessons were chosen that are typically available in rural schools or relatively easy to substitute, acquire or replicate (e.g. paper, pencils, crayons, plastic bottles). The resource sheet “Germs” was designed to be easily photocopied and intentionally includes images acquired in the internet public domain to avoid copyright infringement.

The final programme was developed after feedback from the pilot process and comments from the project steering committee. Basic design principals incorporated into the design of the programme include:

- Appropriate for rural primary school learners.
- Replicable across curricula.
- Low-tech resources.
- Emphasis on child-centred activities.

Results and Analysis

Results from the questionnaire, attached with the Preliminary Baseline Survey, indicated a significant demand by educators for the type of material being developed as part of this research project. A Health and Hygiene Awareness Programme was developed and piloted at a number of schools. The piloting process included a questionnaire and request for comments from educators. Completed questionnaires and comments from educators indicated a significant demand for health and hygiene materials for primary school learners. There was also strong support for simple and appropriate lesson plans to ensure efficient communication of health and hygiene messages.

Due to the complex nature of the variables involved in health and hygiene promotion, measurement of the impacts of this Health and Hygiene Awareness Programme is hard to quantify. However, indicators of the Programme's effectiveness include:

- The Programme was managed effectively and cheaply from a location remote from the pilot schools.
- Educators and learners were enthusiastic to be involved.
- The research team was invited to the end-of-year graduation at Sawoti School.
- Some schools in the area, but not involved in the pilot, expressed a desire to be involved in future health and hygiene awareness programmes.
- Generally good health and hygiene practices (washing hands, clean toilets etc..) were observed amongst learners at the pilot schools after the Programme was completed.

Conclusions and Recommendations

The Health and Hygiene Awareness Programme developed as part of this research project is an effective medium for communication of relevant messages in rural primary schools. Aspects of this Programme which ensured its effectiveness include:

- Simple and appropriate for the rural primary school environment.
- Lesson plan format ensured ease of use by educators.
- Format was replicable and adaptable.
- Integrated approach to material development and implementation.

This research project has reaffirmed that demand for health and hygiene awareness material in rural primary schools is very high. It is recommended that strong emphasis is put on developing relevant programmes. Further research not included in this project which would improve effectiveness. are:

- Assessment of exposure of parents to health and hygiene programmes implemented in schools to ensure appropriateness.
- Monitoring and evaluation of programmes over the long-term as effectiveness can only be properly assessed in this time frame.

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1. Introduction

Children have the capacity to actively promote health and hygiene campaigns within their communities (Hawes, 1993). In most countries, the education system is the broadest channel for health education. With this in view, it would seem that any programmes which target children as change agents in rural communities must involve schools and the community at large.

Innovative approaches designed to target school children do exist and many are successful. Child-to-Child, for example, has had great success in many African countries, including South Africa. The challenge for development/education professionals remains to promote programmes which successfully target school children as the most significant, yet underutilized resource in the community. This research project aims to facilitate the development and implementation of these programmes on a local level in rural communities. This will include the development of child-centred course materials that can be re-used by educators and adapted for other rural schools. The creation of these resources is necessary as they are often scarce in rural areas and they may also lack local context. Many courses seem aimed at urban communities and more work needs to be done on developing resources in the rural context.

The objectives of this research project are:

- To develop a set of course materials for educators to promote basic health and hygiene awareness (e.g. cholera, diarrhoea etc..) in rural primary schools.
- To build capacity in previously disadvantaged individuals through direct training and participation in the research project.

2. Literature Review

The literature review investigated health and hygiene awareness promotion for rural primary school children, particularly with respect to water supply and sanitation. An integrated approach, including infrastructure development and health and hygiene awareness promotion, has been recognized as the most effective approach to maximize health benefits. Health education resulting in improved sanitation practices in primary schools is an effective method to promote community health. To date an integrated approach to the development of water supply projects and primary school health and hygiene awareness promotion has been limited.

2.1 Water-Related Health Challenges to Children

Health challenges to children related to water are numerous with complex relationships (Genthe & Seager, 1996). To understand these challenges a conceptual system has been developed and is now widely used (Bradley & Emurwon, 1968; Bradley, 1974; Feachem, 1978,1983). This system is based on epidemiological factors allowing for generalizations on the processes involved and variables which may influence these processes. Four types of water-related diseases can be classified according to transmission processes (Clacherty & Associates, 1997). These include:

- Water-borne diseases.
- Water-washed diseases.
- Water-based diseases.
- Water-vectored diseases.

Water-Borne Diseases

These diseases affect people through the ingestion of water acting as a passive carrier of the infectious or chemical agent. These include diarrhoeal diseases including cholera, typhoid, dysentery and hepatitis. Acute epidemics of these diseases can be dramatic. However, it is the continuing occurrence of endemic infection which is more significant in the long term due to the high mortality

rates experienced, particularly in young children (Genthe & Seager, 1996). These diseases are the leading cause of infant and child morbidity and mortality rates in developing countries (Huttly, 1990).

South Africa has experienced several epidemics of this category of diseases, including the recent cholera outbreak which infected more than 110 000 people with over 250 deaths since the summer of 2000/2001 (www.sandmc.pwv.gov.za/ndmc/cholera).

Water-Washed Diseases

These diseases include:

- those ingested and affecting the gastrointestinal tract leading commonly to diarrhoea;
- those that affect the skin and body surface (e.g. scabies, trachoma, conjunctivitis).

Prevention of these diseases can be significantly affected by improving domestic and personal hygiene. This is primarily facilitated by improving the quantity of water supply rather than the quality (Genthe & Seager, 1996).

Water-Based Diseases

These diseases are caused by pathogens which spend an essential phase in an aquatic host, and include bilharzia. Transmission is dependant on water quality and cultural/social behavior. Bilharzia is probably one of the most neglected and underestimated parasitic diseases in South Africa (www.puk.ac.za/nuus/eng/news21.html). Thousands of people in the rural endemic areas of the Northern Province, Mpumalanga and KwaZulu-Natal in particular, are infected with the bilharzia parasite (Gear *et al.*, 1980). Infections of approximately 75% of persons between the ages of 4 and 22 are common in these bilharzia-endemic areas.

Water-Vectored Diseases

Transmission of these diseases is caused by insects which breed in water (e.g. malaria mosquito) or which bite near water (e.g. tsetse fly). Malaria kills over one million people world-wide each year, with almost 90% of these deaths in sub-Saharan Africa of whom most are children under the age of 5 (www.malaria.org.za). Each year there are over 300 million clinical cases of malaria. That is five times as many as combined cases of TB, AIDS, measles and leprosy. Malaria is responsible for 25% of childhood deaths in Africa. Control of these diseases is through management of water resources to reduce the vector potential and insecticide application.

2.2 Assessing the Scope of Health and Hygiene Challenges faced by Children

Statistics on children's health and hygiene are unreliable and variable (Bility & Onya, 2000; Clacherty & Associates, 1997; Genthe & Seager, 1996). The literature confirms that children, particularly in rural areas, are the most susceptible to health and hygiene challenges. Children are the most vulnerable to diseases including water-related diseases, HIV, TB, etc. This is not just through direct infection, but also indirectly due to reduction of household capacity to care for children when adults are infected. The vulnerability of children is further increased by poverty and malnutrition (Hawes & Scotchmer, 1993).

Other factors which affect the health and hygiene of children include:

- Accidents – children under five years old are particularly at risk from accidents at home and on roads (Hawes & Scotchmer, 1993). Nearly all accidents can be prevented and children have a significant role in facilitating this. Adequate water supply can be significant in the hygienic treatment of injuries due to accidents.
- Personal security – abuse of children and insecure environments for children will significantly contribute to decrease in health and hygiene.

2.3 Promoting of Health and Hygiene Awareness in Children

Community health and hygiene can not be significantly improved by water supply and sanitation infrastructure only (Duncker, 2001a). Health and hygiene awareness education is also an essential component, which requires an integrated approach. Measurement of health impacts of water and sanitation projects is difficult and has historically been misrepresentative due to the complex nature of community health promotion (Caincross, 2002). Although great progress has been made in developing specific interventions to reduce the prevalence of water related diseases, less emphasis has been placed on combining water, sanitation and health and hygiene education into integrated strategies (Kirkwood, 1998).

The role of children in community health and hygiene promotion is both significant and under-exploited (Hawes & Scotchmer, 1993). Children are very good health messengers as they are still developing understanding and thoughts, and can be receptive and open to change. Targeting of schools for health promotion offers high potential for communicating health messages to children. The present increasing enrollment of children at schools in South Africa provides an easily accessible target group at a location which is generally central to the lives and activities of communities. However, effective school health and hygiene programmes, particularly for younger children, have been limited (Bility & Onya, 2000). This has been due to:

- Developmental age and grade inappropriateness of teaching and learning materials.
- Children's lack of interest in current teaching aids.
- Incompatibility between children's health concerns and health education activities.

Effective health and hygiene promotion to children requires development in the physical, psychological and cognitive domains. In development of these programmes it is important to involve and receive support from families, schools and communities. Integration of health education in school curricula has been more successful than 'separate subject' programmes. Factors to be considered in developing effective programmes include:

- Content and method of the curriculum.
- The role and training of the teachers.
- Support from the education authorities.
- Integration of school and community support and activities.
- The degree of cooperation between home and school.

According to Bility & Onya (2000) four main functions of an effective health and hygiene programme include:

- Creation of a general awareness of the links between water, sanitation and health development.
- Dissemination of information.
- Support and reinforcement of school based projects.
- Diffusion of innovative practices.

2.4 Overview of Current Programmes in Health and Hygiene for Children

2.4.1 International Initiatives

Child-to-Child Approach

Child-to-Child is an approach to health education and promotion involving the direct involvement of children (www.child-to-child.org). This approach was launched in 1978 in preparation of the forthcoming International Year of the Child. An independent charitable trust, the Child-to-Child Trust,

was set up in 1988 in order to promote the Child- to-Child approach. The Child-to-Child approach is based on the following principles:

- The concept of primary health care through developing the power of individuals and communities to share responsibility for improvement of their own health.
- The ability of children to spread health messages and practices to younger children, peers, families and communities.
- The promotion of health education based on identified priorities and which links health knowledge with health action.

The Child-to-Child Trust has been involved in many international health education activities since its inception. These activities are generally components integrated into broader health education programmes in order to involve children in decision making rather than communicators of adult messages.

A pilot Child-to-Child project was undertaken by The Mvula Trust and Glover Development Engineers during 1998 in two northern KwaZulu-Natal schools (Glover Development Engineers, 2001). This project encouraged children to learn about key water and sanitation-related health problems and to take responsibility for reduction of these problems. This included informing their respective communities about these issues. The aims of this project were:

- To explore creative ways in which children can play a leading role in the promotion of better health in rural communities.
- Help children to learn about health issues and to share with others.
- Assist children in developing skills that will help them throughout life.
- Begin a long-term process of health education in these schools and communities.
- Offer a model for future health education initiatives in other areas.
- Offer training in Child-to-Child to health and education professionals.
- The general impact of the project was very positive with many activities and projects being initiated. However, the project also demonstrated that impacts of Child-to-Child initiatives are long term.

Child-to-Child projects which are presently operational in South Africa include:

- Children's Resource Centre – this is a Cape Town based organization established in 1983 which supports community based children's groups in the implementation of the Child-to-Child approach.
- Gauteng Department of Education – Child-to-Child activities have been undertaken in a number of primary schools in the Gauteng Province since 1999 in order to foster inclusive education in schools and to enhance outcomes-based education.
- University of Natal/University of Ulster, Northern Ireland – this project is a joint programme between the two universities to utilize the Child-to-Child approach in rural KwaZulu-Natal schools in the promotion of academic achievement.
(www.ulst.ac.uk/faculty/shse/Psychology/Staffprofile/cliddell/myweb.htm)

The PHAST Initiative

Participatory Hygiene And Sanitation Transformation (PHAST) is an innovative approach to promoting hygiene, sanitation and community management of water and sanitation facilities developed by the United Nations Development Programme/World Bank Regional Water and Sanitation Group and the Rural Environmental Health Unit of the World Health Organization (WHO, 1997). The PHAST approach uses methods and materials designed to stimulate the participation of a community in its own development. These methods and materials include training of field workers and development of graphic materials which are adapted to reflect the relevant cultural and physical characteristics of recipient communities. The objective of PHAST is not only to teach hygiene and sanitation concepts, but also to enable communities to overcome constraints to change. The initiative was first developed in 1993 and piloted over three years before formulation in 1997.

PHAST has been utilized in a number of communities in South Africa. In Tweerivier (Northern Cape) meaningful local participation resulted in improved community water quality. Although PHAST is a meaningful tool for the integration of the community in the management of water supply and sanitation, it is more focussed on the involvement of adults as it is reliant on the training of extension workers and development of graphic materials.

Focusing Resources for Effective School Health (FRESH)

An approach called Focusing Resources for Effective School Health (FRESH) was launched by UNICEF, WHO, UNESCO, USAID, Education International, the World Bank and the private sector at the Education for All Conference in Senegal in April 2000 (www.irc.nl/sshe/fresh). This approach focuses on creating an environment in schools and in basic education programmes in which children are both able and enabled to learn. Such an environment must be friendly and welcoming to children, healthy for children, effective with children, and protective of children. The development of such child-friendly learning environments is an essential part of FRESH to increase access to and improve the quality of schools. FRESH includes a framework to develop an effective health component in a broader effort to achieve more child-friendly schools. The framework includes a simple set of core interventions:

- Health-related school policies.
- Provision of safe water and sanitation in all schools.
- Skills-based health and hygiene education.
- School-based health and nutrition services.

Supporting activities adopted to provide the context in which these interventions can be implemented are:

- Effective partnerships between teachers and health workers and between the education and health sectors.
- Effective community partnerships.
- Pupil awareness and participation.

School Sanitation and Hygiene (SSH)

In February 2000, UNICEF's Education and Water, Environment and Sanitation Programmes entered into a joint partnership with the International Water and Sanitation Centre for the implementation of a School Sanitation and Hygiene Education project (www.irc.nl/sshe/nn). The project focuses on the testing at a national level, guidelines established in the Manual on School Sanitation and Hygiene (www.unicef.org/wes/pubs/glines/schsan.htm) and on advocacy and awareness building activities at national, regional and global level. This guidance manual deals with both hardware and software aspects needed to bring about changes in hygiene behavior of students and, through these students, in the community at large. The hardware is the total package of sanitary conditions and facilities available in and around the school compound. The software are the activities aiming to promote conditions at school and practices of school staff and children that help to prevent water-and sanitation-related diseases.

A comprehensive and effective SSH programme would include:

- A participatory needs assessment involving students, teachers, parents and community members.
- Formulation of objectives, outputs/results and an action plan.
- Improved water and environmental sanitation facilities.
- Properly used and maintained facilities.
- Hygiene education for students.

- Teaching aids which build on the practical situation in and around schools, making students aware of the benefits of using improved facilities in a proper and hygienic way and the seriousness of diseases that result from poor SSH.
- Improved facilities and hygiene education going hand-in-hand.
- Involvement of students in planning, implementation and maintenance.
- Training for technical staff and teachers.
- Monitoring of the programme and its impact, with a focus on self assessment.

Specific activities include a global workshop and country workshops in the six participating countries: Nepal, Vietnam, Burkina Faso, Zambia, Nicaragua and Colombia. In the six countries, low-cost teaching aids and different low-cost technology options have been developed and tested in a participatory manner. Evaluation and documentation of country level experiences facilitated by enhanced access to information has been undertaken. The project period is from February 2000 until July 2002.

2.4.2 Government and Parastatal Initiatives in South Africa

National Sanitation Task Team

The National Sanitation Task Team (NSTT) is a collaborative effort of six government departments; Water Affairs and Forestry, Education, Environmental Affairs and Tourism, Health, Provincial Affairs and Local Government and Housing. It was initiated in 1995 to develop a national sanitation policy and a corresponding implementation strategy. The NSTT initially developed a National Sanitation White Paper (NSTT, 1996) which outlined policy principles and a national sanitation policy. This white paper has since been superseded by a new Sanitation White Paper (NSTT, 2001) to provide a clearly defined government policy and a way forward to deal with a backlog of 18 million South Africans without adequate sanitation.

The NSTT mandated an inter-ministerial body called Health Education Awareness Task Team (HEATT) in 1996 to develop a health and hygiene education programme (Still, & Holden, 1997). In its review of health and hygiene awareness status in South Africa, one of its key findings was that community health workers and educators are the most appropriate and under-utilised resource to deliver the health education message. This review led to the development of a Water and Sanitation Related Health and Hygiene Education Resource List (Clacherty & Associates, 1997).

The NSTT has also facilitated the implementation of policies at the provincial level by establishing organisations such as the KwaZulu-Natal Sanitation Task Group (SANTAG). SANTAG consists of sanitation role-players in KwaZulu-Natal and co-ordinates and facilitates sanitation work in the province (www.santag.org.za). These functions are defined in terms of five spheres of activity:

- Co-ordination and Networking
- Awareness
- Advocacy
- Training
- Technical Support

SANTAG also publishes a monthly newsletter called *Outlet* which disseminates relevant information to a wide range of role players.

The NSTT has recognised the role of education, particularly that of learners, in the support of the provision of sanitation and water. Guidelines for Developing and Evaluating Education Materials in Water and Sanitation Programmes (Clacherty & Associates, 1998) were developed in order to gain a better understanding of the nature and role of sound educational materials related to sanitation and water programmes. These guidelines outlined education materials as part of a broader programme of

infrastructure delivery, education materials as part of an education programme and the process of materials development.

School Health Services

School Health Services is an initiative undertaken by the Department of Health since 1914. It is designed to provide preventive and promotive health services to learners at schools. This is undertaken in the framework of Health Promoting Schools. This is an approach built on coordinated action informed by the participation of young people and focuses on the school setting for this action. It is undertaken by School Health Services teams which travel to schools and facilitate activities including:

- Providing information and support for the development of health policies at school level.
- Encouraging the development and implementation of youth health projects as part of Health Promoting Schools.
- Facilitate coordination and collaboration between role players and beneficiaries as part of School Health Services and Health Promoting Schools.
- Monitoring and evaluation of identified indicators.

Water Research Commission

The Water Research Commission (WRC) (www.wrc.org.za) is a research organization legislated by the South African government in 1971 to:

- Promote coordination, communication and cooperation in the field of water research;
- Establish water research needs and priorities;
- Fund water research on a priority basis; and,
- Promote effective transfer of information and technology.

Several research projects have been commissioned by the WRC which are relevant to health and hygiene awareness promotion. These include:

a) *Water Use, Sanitation Practices, Perceptions and Hygiene Education in Primary School Children in the Northern Province and Western Cape, South Africa* (Bility & Onya, 2000)

This study was undertaken to investigate the availability, adequacy and appropriateness of water and sanitation resources and hygiene education materials in two provinces in South Africa. The study explored current hygiene practices and perceptions in order to make recommendations concerning infrastructure development and hygiene education in primary school curricula.

Findings realised from this study were:

- Water and sanitation infrastructure at public schools was grossly inadequate, particularly in rural, farm and peri-urban areas.
- Health and hygiene awareness is reasonable at a superficial level, but practice does not accord well with knowledge.
- The context and practice of health and hygiene awareness in the school and home environments are similar which indicates the need for an integrated approach to solve infrastructure and learning deficits.

b) *Hygiene Awareness for Rural Water Supply and Sanitation Projects* (Duncker, 2001a)

The main objective of this study was to develop and pilot a tool to determine the knowledge, attitudes and practices regarding hygiene, water supply and sanitation in developing rural communities. The study found that the level of general hygiene knowledge is high in rural communities, but is not practiced. This is due to:

- Lack of household economic means to ensure a more hygienic lifestyle.

- Lack of adequate water and sanitation infrastructure in communities.
- Lack of specific knowledge in communities with respect to the cause, transmission and prevention of water-related diseases, despite a good knowledge of disease treatment.

These findings led to the initiation of two more studies to better address the needs of developing communities and implementing agents of water supply and sanitation studies. These two studies were:

- Hygiene Awareness Workshop (Duncker, 2001b) – this document outlines a hygiene awareness workshop for rural communities.
- *A Manual on: Knowledge, Attitude and Practices Study for Hygiene Awareness in the Rural Areas of South Africa* (Duncker, 2001c) – this document was developed to enable researchers from technical and social backgrounds to gather information on the hygiene status of rural communities.

Recommendations for a strategy for the implementation and improvement of basic health and hygiene in rural communities were:

- Development of an implementation strategy and plan for the Hygiene Awareness Package to address the needs of national, regional and local government.
- Development of an evaluation strategy to assess the impact of the Hygiene Awareness Workshop on the communities in which it is implemented.

c) *The Effect of Water Supply Handling and Usage on the Water Quality in Relation to Health Indices in Developing Communities* (Genthe & Seager, 1996)

This study aimed to investigate the quality of water supplied compared to the quality of water consumed in relation to health indices in developing communities. The stated objectives of the study were:

- Determination of water quality at the point of collection and after transport and storage.
- Examination of water use patterns, quantity of water used and identification of water treatment by the user prior to use.
- Correlation of water quality with community health indicators.

The study found that there was more significant contamination of water after handling and storage by users than at source. Reasons for this were:

- Poor knowledge regarding food handling and hygiene.
- Low level of knowledge regarding the causes and prevention of diarrhoea.
- Poor kitchen hygiene.

d) *Management of Water-related Microbial Diseases* (TT 175/03)

Volume 1 in this series entitled *What is the problem? - Disease Characteristics*, is a comprehensive introduction to water related health issues. This document is an awareness building guide in four parts:

- Part 1 Water Quality and Microbiological Issues - general information on water quality with respect to microbiological status and health issues.
- Part 2 The Role of Microbes in the Transmission of Disease - discovery and role of microbes in the transmission of diseases.
- Part 3 Summarized Fact-Sheets on Some Important Water-Related Diseases – detailed information on characteristics of water related diseases.
- Part 4 Water, the Environment & People's Health - summary of management issues to minimize incidence and transmission of water related diseases.

Curriculum 2005

Curriculum 2005 (Department of Education, 1997) is a developmental and child-centered approach to curriculum design. This new curriculum uses outcomes-based education as a central philosophy. Curriculum 2005 does not include detailed content, but states outcomes in each learning area to ensure learning can be contextualized. The practical implications of change in the education system will be in three main areas:

- Teaching and learning
- Assessment
- School management.

2.4.3 Mass Media Initiatives

Soul City Communication Strategy

Soul City is a communication strategy developed by the Institute of Urban Primary Care to promote health and development in Southern Africa through the use of multi-media (Skosana, 2001). This strategy involves the concept of “edutainment” which asserts that people learn when entertained. The project has undertaken practical health education through the use of radio, television and print media. In 1997 Soul City was approached by HEATT to include water and sanitation messages in the project. Although there has been a positive impact of mass media in the communication of these health and hygiene messages, the messages needed to be supported by local health and hygiene programmes.

Soul City has since developed a new manual called “Breaking the Rules – new approaches to promoting health through water and sanitation in South Africa” (Soul City, 2001). This manual is aimed at community health officers and health workers who deal with issues of health, water and sanitation.

This manual outlines five new rules for the promotion of better water and sanitation:

- To improve health, people need better sanitation rather than better or more water
- For better health, people need more water rather than better water quality.
- People can not achieve better health if they do not learn about hygiene.
- Better sanitation can start at people’s homes.
- There is a wide range of sanitation options available.

Project for Health and Sanitation (PHASE)

PHASE was a pilot health and sanitation education initiative developed by The English Language Education Trust (ELET, 1998). This project provided Grade 7 and 8 learners and educators with classroom material focusing on health and sanitation issues. Material included comics, an action book and lessons to develop learner interaction with health and sanitation issues and implement problem solving strategies within the school and community. The material was integrated into the outcomes-based curriculum framework and provided orientation for teachers in Curriculum 2005.

“Sanitation Works”

A set of learning support materials on sanitation for use in schools called “Sanitation Works” has been developed by the Wildlife and Environmental Society of South Africa (Ringdahl, 2002). This educational programme is a DWAF partnership project in support of the WASH campaign. These materials are intended for use to promote resource-based learning relevant to health and sanitation in rural schools and follow closely the application of the National Environmental Education Programme (NEEP). The resources are based on the ‘Active Learning Framework’ and covers all aspects of active learning. These include information seeking, enquiry, reporting and action. Learning areas

covered by activities in the resource pack include natural sciences, human and social sciences, life orientation, technology and language.

The programme was piloted in five schools in the Ladysmith area in KwaZulu-Natal in March 2002 which included introducing the educators to the materials, implementation to the learners and report back with follow-up to the schools. Piloting will also take place in more schools in the Inanda area outside Durban. The final product will be a compilation of all activities into a manual or pack to be introduced to educators nationally through the NEEP.

3. Methodology

The initial step taken in developing the course materials was undertaking a literature review of international and local initiatives and case studies relative to child-centred health and hygiene awareness promotion (see Section 2.0). Lessons learnt from previous studies were incorporated into the development of the materials including the need for an integrated approach. However, effective school health and hygiene programmes, particularly for younger children in rural environments, have been limited.

It was recognized that input from educators in rural schools was imperative and a Preliminary Baseline Survey was developed. This survey consisted of a questionnaire with questions directed to educators in order to ascertain issues that are significant to these role players. The questions used in this survey and summarized results are shown in **Appendix A**.

Implementation of the Preliminary Baseline Survey was undertaken at three schools in Northern KwaZulu-Natal (Mashiyane, Sawoti and Hlanganakahle Combined Primary Schools) located in the Mahlabathini District approximately 45km north of Ulundi. These schools were chosen as they are rural schools with limited resources and a range of relevant circumstances. More specifically these are:

- Mashiyane School – this school has water and sanitation infrastructure and is in a community with recently developed household sanitation but substandard water supply. The school was a pilot for a Child-to-Child project undertaken in 1998 (Glover Development Engineers, 2001).
- Sawoti School – this school has water and sanitation infrastructure and is in a community with recently developed water supply to all households. However, no formal household sanitation programme has been undertaken in the community and the school has had no previous health and hygiene awareness promotion.
- Hlanganakahle School – this school has substandard sanitation infrastructure and no water supply. The community has had no water supply or household sanitation development and the school has had no previous health and hygiene awareness promotion.

From the literature review and results from the Preliminary Baseline Survey, a draft health and hygiene awareness programme was developed (see Section 4.0). Initial piloting of this draft programme was undertaken at Mashiyane, Sawoti and Hlanganakahle Schools. This involved visits to each school to introduce the draft programme to educators and give instructions on the desired piloting process. A questionnaire was included with the draft programme to encourage comments from educators on the draft programme and the piloting process. A letter to each school was also included, giving feedback to educators on this research project and their role in its development. Ongoing supervision, monitoring and evaluation of the piloting process was undertaken by a local resident contracted within this research project.

Communication with rural schools, including distribution of educational materials and feedback from the schools, has been recognized as problematic. Previous research has shown that only 50% of distributed material reaches the target schools in KwaZulu-Natal and only 20% is utilized in the

classrooms (The Media in Education Trust, 2003). Communication for this research project was undertaken through the postal service and facilitated by the contracted local resident to ensure efficient transfer of information within the logistical constraints of the rural environment.

Piloting of the draft programme was also to be undertaken in rural schools in the Mooi River and Currys Post areas, 50km north west of Pietermaritzburg. Participation of these schools was requested from the Department of Education and relevant Principals but was not possible in the time frame of this research project.

4. Description of Health and Hygiene Awareness Programme

The Health and Hygiene Awareness Programme developed in this research project is based on the lesson-plan format and is ready for use for by rural school educators. It consists of 10 lesson plans and is designed for learners aged 6-8 years. The aims of these lesson plans are:

- To provide an appropriate format for successful health and hygiene programme for lower primary school learners.
- Allow for a holistic, cross curricula educational experience for learners and educators.
- To give educators and other community stakeholders an opportunity to comment on the education of their children.
- To further the education of learners regarding health and hygiene issues that may concern them.

The lesson plans are shown in **Appendix B** (in English and isiZulu) and summarized below:

Lesson 1: What is healthy?

Objectives:

- To find out what learners know about health.
- To encourage learners to contribute to class discussion.

Lesson 2: I can be healthy too!

Objectives:

- To show children ways they can be healthy.
- To encourage learners self awareness.
- To encourage fine motor coordination via artistic expression.

Lesson 3 and 4: What are germs?

Objectives:

- To introduce learners to the causes of ill-health.
- Use craft as a method of reinforcing the message.

Lesson 5 and 6: What can germs do?

Objectives:

- Assist learners to make the link between germs and where germs can be found in their environment.
- Help learners to understand the link between germs and ill-health.
- To give learners an opportunity to practice listening and fine motor skills.

Lesson 7: Getting ready for school!

Objectives:

- Reinforce simple health and hygiene messages related to school preparation.
- Encourage self expression in learners via simple drama/singing lesson.

Lesson 8: How to make our water healthy? (i)

Objectives:

- To teach learners simple ways they can ensure the water they drink is healthy.
- Identify places where learners can get safe water, so that they help prevent stomach upsets of diarrhoea.

Lesson 9: How to make our water healthy? (ii)

Objectives:

- Further learners' understanding of how to make water safe by drawing on some hygiene practices.

Lesson 10: How to make our water healthy? (iii)

Objectives:

- To teach learners simple ways to make water healthy for themselves and their families.

This programme was developed in the lesson plan format to facilitate its replication for utilization in a range of applications. The simple format was also necessary as the programme needed to be appropriate to educators with a varied level of education and also suitable for translation into more than two languages for national relevance.

Resources were required to undertake some of the lessons and were indicated accordingly. Some of these resources were supplied as part of the pilot process. These resources included:

- One Croxley blank exercise booklet.
- A resource sheet entitled "Germs" for Lessons 1-6 (see **Appendix C**).
- One packet of sample play dough for Lesson 3 and 4.
- Three sample clear resealable plastic bottles for Lesson 8.
- Health and hygiene education material from Umgeni Water including colouring book, poster and puzzle.

Resources were chosen that are typically available in rural schools or relatively easy to substitute, acquire or replicate (e.g. paper, pencils, crayons, plastic bottles). The resource sheet "Germs" was designed to be easily photocopied and intentionally included images acquired in the internet public domain to avoid copyright infringement.

The final programme shown in the relevant appendices was developed after feedback from the pilot process and comments from the project steering committee. Basic design principals incorporated into the design of the programme include:

- Appropriate for rural primary school learners.
- Replicable across curricula.
- Low tech resources.
- Emphasis on child-centred activities.

5. Results and Analysis

Results from the questionnaire attached with the Preliminary Baseline Survey are summarized in **Appendix A**. These results indicated a significant demand by educators for the type of material being developed as part of this research project. This also included requests for more funding and resources to undertake health and hygiene awareness promotion. More specifically, this feedback included:

- Educators at the school which had previously received health and hygiene awareness promotion (Mashiyane School) recognized it as a long-term process and perceived this piloting as part of that process.
- Educators communicated a demand for increasing infrastructure for water supply and sanitation at schools but were unsure of the process for applying for funding.
- Educators confirmed that there is a lack of relevant health and hygiene awareness promotion educational material for primary school learners.

A Health and Hygiene Awareness Programme was developed and piloted at schools as outlined in Section 4.0. The piloting process included a questionnaire and request for comments from educators. Responses to this questionnaire and comments are summarized in **Appendix D**. Completed questionnaires and comments from educators indicated a significant demand for health and hygiene materials for primary school learners. There was also strong support for simple and appropriate lesson plans to ensure efficient communication of health and hygiene messages. Other issues that became apparent included:

- Translation into isiZulu would be useful. This has since been done and included in the relevant Appendices.
- The play dough was not really utilized by the educators in the lessons. This may be due to cultural reasons but could be easily substituted with clay.

Due to the complex nature of the variables involved in health and hygiene promotion (see Section 2.4), measurement of the impacts of this Health and Hygiene Awareness Programme is hard to quantify. However, indicators of the Programme's effectiveness include:

- The Programme was managed effectively and cheaply from a location remote from the pilot schools.
- Educators and learners were enthusiastic to be involved.
- The research team was invited to the end-of-year graduation at Sawoti School.
- Some schools in the area, not involved in the pilot, expressed a desire to be involved in any future health and hygiene awareness programmes.
- Generally good health and hygiene practices (washing hands, clean toilets etc.) were observed amongst learners at the pilot schools after the Programme was complete.

6. Conclusions and Recommendations

The Health and Hygiene Awareness Programme developed as part of this research project is an effective medium for communication of relevant messages in rural primary schools. Aspects of this Programme which ensured its effectiveness include:

- Simple and appropriate for the rural primary school environment.
- Lesson plan format ensured ease of use by educators.
- Format was replicable and adaptable.
- Integrated approach to material development and implementation.

This research project has reaffirmed that demand for health and hygiene awareness material in rural primary schools is very high. It is recommended that strong emphasis is put on developing relevant programmes. Further research, not included in this project, which would improve effectiveness, is:

- Assessment of exposure of parents to health and hygiene programmes implemented in schools to ensure appropriateness.
- Monitoring and evaluation of programmes over the long-term, as effectiveness can only be properly assessed in this time frame.

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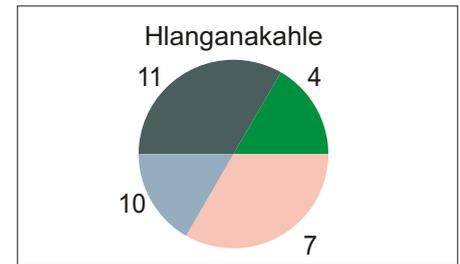
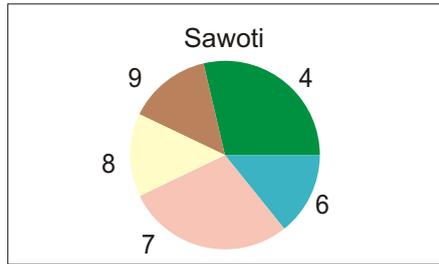
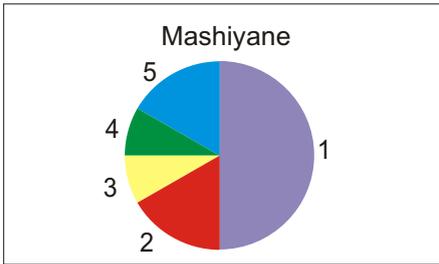
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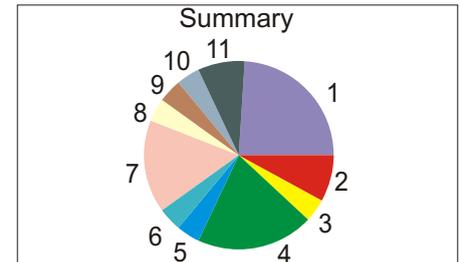
Appendix A

Results from Preliminary Baseline Survey

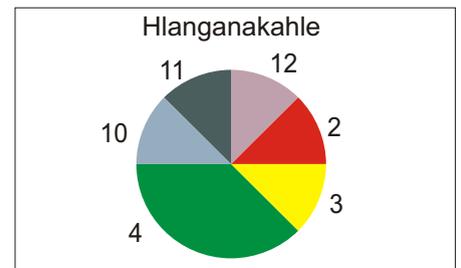
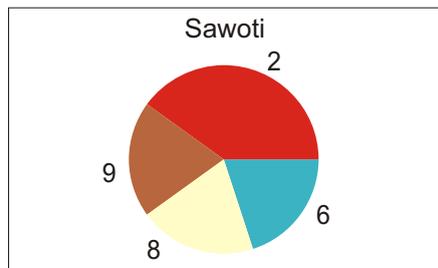
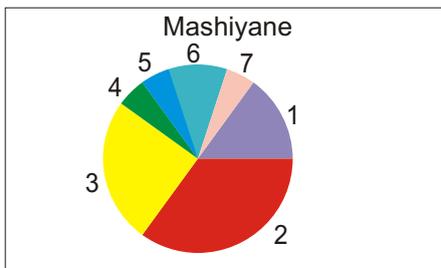
Question 1: What teaching methods work best in promotion health and hygiene messages in Schools



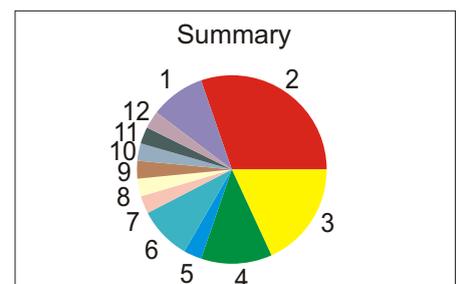
Response	Fill
1. Action project (eg. Child-to-child)	Light Purple
2. Participation of learners in health promo.	Red
3. Group work	Yellow
4. Dramatisation	Green
5. Teaching health practices (eg. Hand washing)	Blue
6. Teaching to wash clothes	Light Blue
7. Lectures	Light Orange
8. School cleaning rules	Light Yellow
9. Involve learners in cleaning	Brown
10. Narrative	Grey
11. Demonstrations	Dark Grey



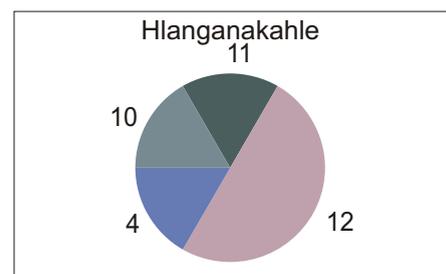
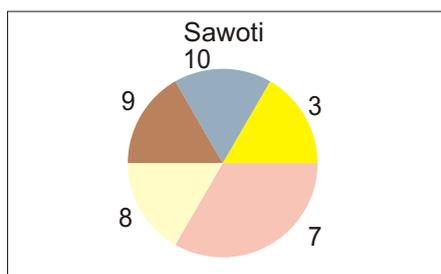
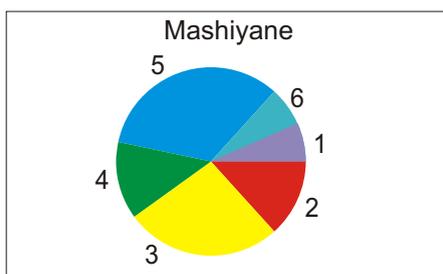
Question 2: What positive health and hygiene practices do you witness amongst learners.



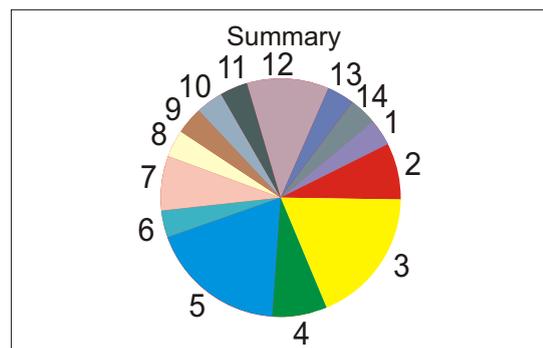
Response	Fill
1. Keeping classrooms clean	Light Purple
2. Hand washing after using toilets	Red
3. Keeping school premises clean	Yellow
4. Cutting hair and nails	Green
5. Drinking clean water	Blue
6. Cleaning toilets	Light Blue
7. Wash hands before eating	Light Orange
8. Picking up papers every morning	Light Yellow
9. Some children clean for school	Brown
10. Washing fruit before eating	Grey
11. Washing bodies and clothes	Dark Grey
12. Washing clothes	Light Purple



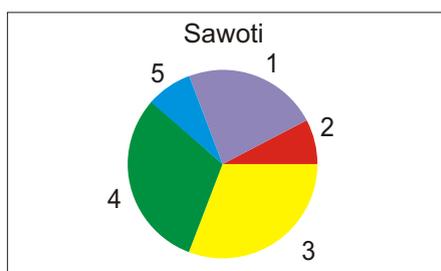
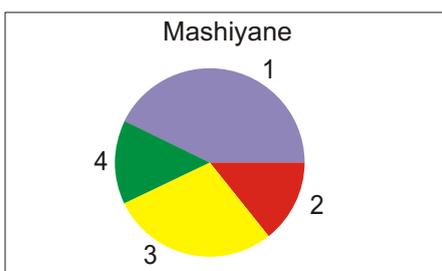
Question 3: What health and hygiene practices do you witness amongst your learners that needs improving



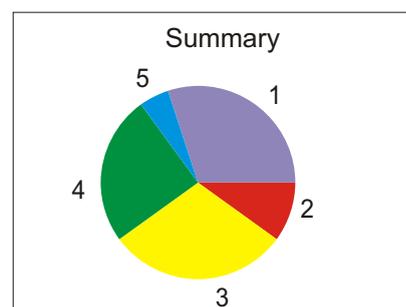
Response	Fill
1. Washing fruit before eating	1
2. Renovation of toilets	2
3. Basic hygiene (eg. Clean hair, clothes, teeth etc.)	3
4. Nutrition	4
5. Correct use of toilets by lower grades	5
6. Keep toilets clean	6
7. Picking up papers and correct disposal	7
8. Growing fruit	8
9. Use soap for handwashing	9
10. Uniforms to be washed and mended	10
11. Water buckets outside classrooms	11
12. Cleaning of school premises	12
13. Cleaning of classrooms	13
14. Keeping environment clean	14



Question 4: How many of your learners have access to clean water and toilet facilities at school and home

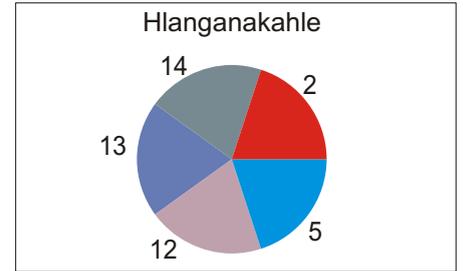
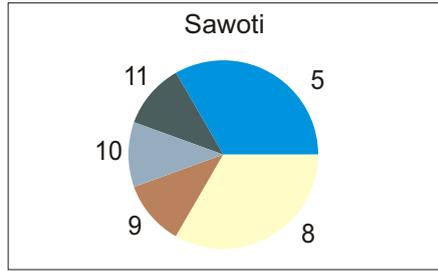
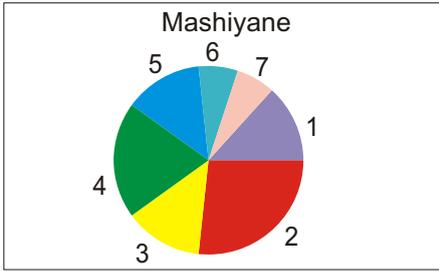


Hlanganakahle: No data available

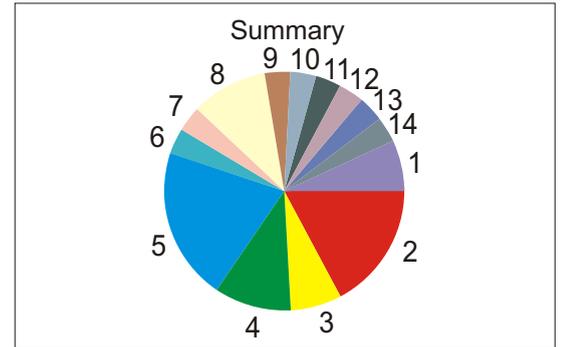


Response	Fill
1. All learners at school	1
2. At home only from rivers and dams	2
3. Some don't have toilets at home	3
4. Some don't have clean water at home	4
5. Government is offering subsidies for home toilets	5

Question 5: What health issues should be included in a health programme for lower and mid primary school learners

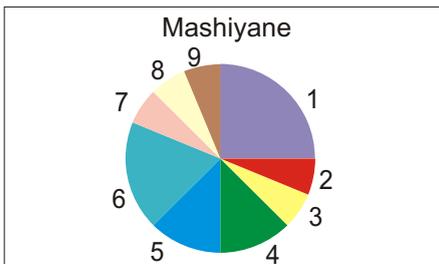


Response	Fill
1. Smoking and alcohol use	Light Purple
2. Purification of water	Red
3. Proper toilet use	Yellow
4. Environmental water pollution	Green
5. Diseases (Cholera, HIV, scabies, etc.)	Blue
6. Littering	Light Blue
7. Excretion in open spaces	Light Orange
8. Inviting of health and community workers	Light Yellow
9. Immunisation and check ups	Brown
10. Child abuse	Light Blue
11. ELET Programmes	Dark Grey
12. Handwashing before handling food	Pink
13. Use of hankies/tissues when sneezing	Dark Blue
14. Covering mouths when coughing	Dark Grey



Question 6: What resistance by learners and community to new health messages have been witnessed.

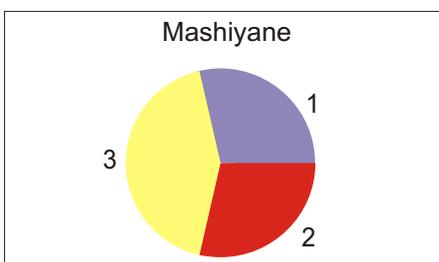
Sowati and Hlanganakahle respondents noted no significant resistance to new health and hygiene messages.



Response	Fill
1. Lack of involvement of learners and community	Light Purple
2. More workshops and seminars required	Red
3. Media used not clearly understood	Yellow
4. Toilet use message ignored	Green
5. Water pollution messages ignored	Blue
6. Lack of involvement of community structures	Light Blue
7. Lack on encouragement for toilet building and cleaning	Light Orange
8. More health and hygiene signs required	Light Yellow
9. Quarterly newsletters required	Brown

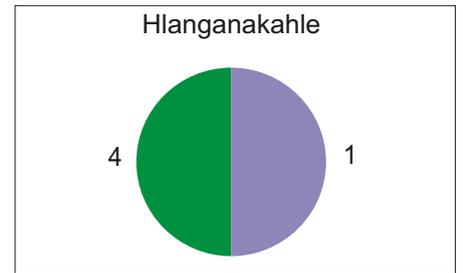
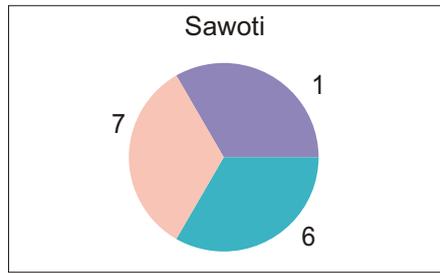
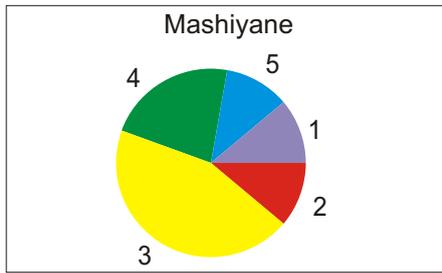
Question 7: What resources in terms of pencils, crayons, scissors do learners have access to? Please specify

Sowati and Hlanganakahle respondents noted no shortage or resources

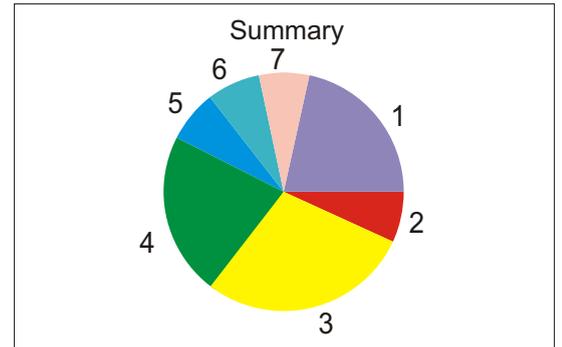


Response	Fill
1. Shortage of scissors	Light Purple
2. Shortage of lesson plans	Red
3. Shortage of teaching materials	Yellow

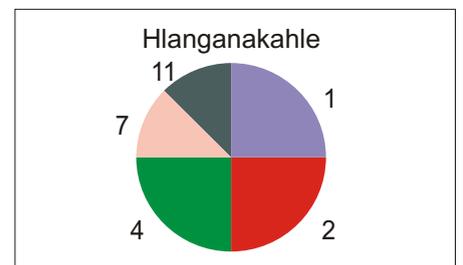
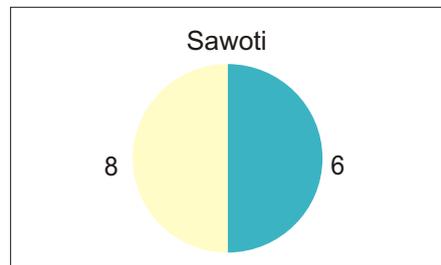
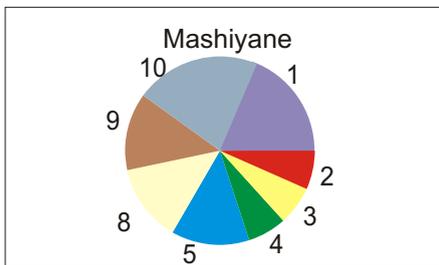
Question 8: How willing do you think parents and community members would be to participate in a health programme being taught to children? Would they, perhaps, attend workshops, recitals etc? Please specify.



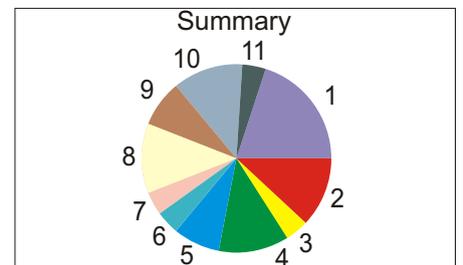
Response	Fill
1. Participation already exists and will continue	1
2. Resistance due to lack of participation of parents	2
3. Participation would be positive if there is low/no cost	3
4. Parents/community would attend workshops	4
5. Community can be influenced by teaching from within community	5
6. Should have parents meeting	6
7. Some persuasion is required	7



Question 9: What are the positive and negative aspects of school health education programmes you have experienced.



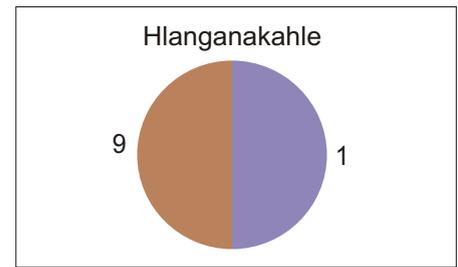
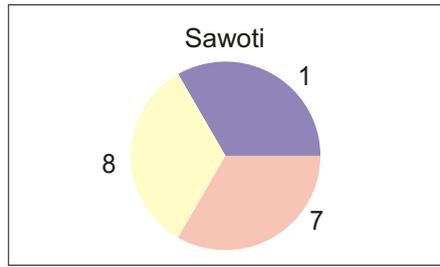
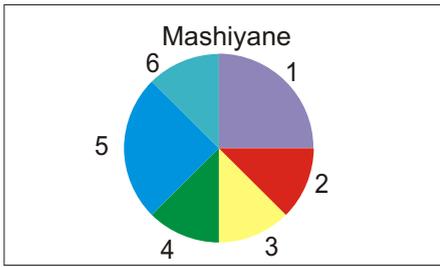
Response	Fill
1. Positive: Cleaning of toilets	1
2. Positive: Washing hands after using toilet	2
3. Positive: Keeping classrooms clean	3
4. Positive: Collection of waste	4
5. Positive: Development of health and hygiene self awareness	5
6. Positive: Parents and teachers respond positively	6
7. Positive: Growing school gardens	7
8. Negative: Still lack of water and sanitation facilities	8
9. Negative: Programmes can contain irrelevant topics/issues	9
10. Negative: Shortage of facilities to promote health and hygiene	10
11. No negative comments	11



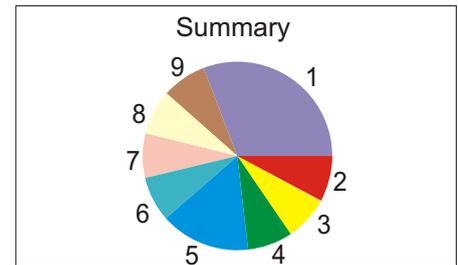
Question 10: Would you be interested in trailing a basic health and hygiene education programme which included input of teachers/educators?

Respondants from all schools answered positively. This was emphasised by a desire by two respondents from Sowati who indicated that they would like this disseminate this learned knowledge to others.

Question 11: Any further suggestions or comments n the questionnaire.



Response	Fill
1. No comments	Purple
2. Happy to receive support to help learners and community	Red
3. Want involvement to strengthen current health programmes	Yellow
4. Include competition to encourage health and hygiene awareness	Green
5. Would like sponsorship	Blue
6. Would like continuous workshops on health issues	Cyan
7. Need sufficient cleaning utensils at schools	Pink
8. Learners need to know how to keep schools clean	Yellow
9. Mobile clinics should visit schools	Brown



APPENDIX B

Lesson Plans for Health and Hygiene Programme for Rural Primary School Learners

Aims

- 1) To provide a format which can be shaped in further drafts in an attempt to offer an appropriate and successful health and hygiene programme for lower primary school learners
- 2) Allow for a holistic, cross curricula educational experience for learners and educators
- 3) To give educators and other community stakeholders an opportunity, in theory, to comment on the education of their children
- 4) To further learners' education regarding health and hygiene issues that may concern them

Educators Note: Please note that this document is a draft of a proposed programme. Therefore, your comments would be welcome in order to develop the programme further.

You will notice that the resources required for this programme are quite 'low-tech.' The reason for this is that school communities need to be able to reproduce lessons themselves if programmes are to be reproduced successfully. Hence, resources for programmes need to be readily accessible to rural educators. However, this does not mean that programmes must be uncreative and lacking in stimulating material which helps provide a rewarding experience both for learners and educators alike. These lessons are designed for learners aged from 6-8 years

Lesson 1

Title:	What is healthy?
Objectives:	To find out what learners know about health To encourage learners to contribute to class discussion
What you need:	Blackboard and chalk
What to do:	1) Ask the class to tell you about healthy aspects in their lives 2) Record these answers on the board 3) Encourage learners to contribute by using stimuli questions if necessary. e.g.: What foods do you think are healthy? How often should you wash your bodies? What exercises/games do you do that are healthy? Where should you get fresh drinking water from? 4) With the help of the class, draw a picture on the board of a "healthy learner" using the information gained from the class discussion.
Conclusion:	To reinforce healthy ideas raised during the lesson, ask a few learners to tell you about what they have learned about being healthy.
Comments on lesson:	(A section that educators can use to record positive or negative aspects of the lesson and ideas for extension lessons)

Lesson 2

- Title: I can be healthy too!
- Objectives: To show children ways they can be healthy
To encourage learners self awareness
To encourage fine motor coordination via artistic expression
- What you need: A4 blank paper (if paper supply is low, Croxley college exercise book unruled 72 pages might be an economical alternative if pages are cut out of the book)
Pencil crayons or crayons
- What to do: 1) Ask learners what they remember of the “healthy learner” from the previous lesson. Allow learners to express opinions, guiding them where necessary.
2) Instruct children to draw a picture of them doing healthy activities.
3) Advise learners to do their best work as they can take this work home to show their families.
4) While learners are busy with the task, educators can move around the classroom guiding the learners or perhaps even writing short sentences on the learners pages helping them describe their work.
- Conclusion: Choose some of the best work and let the learners describe their picture to rest of the class, reinforcing healthy ideas children are learning. Make sure learners take their work home so the learners can show their families what they are learning
- Comments on lesson:

Lesson 3 and 4

- Title: What are germs?
- Objectives: To introduce learners to the causes of ill-health
Use craft as a method of reinforcing message
- What you need: Blackboard and chalk
Play dough for the whole class
- What to do: 1) Ask learners if they know what germs are and write the “right” answers on the board.
2) If learners are unable to give useful responses, the educator can give a short lecture explaining that germs are so small and that they can make you sick if they get into your body.
3) In other words, you don’t want germs in your body as they can be bad for you.
4) The educators can draw an example of what a germ might look like on the board.
5) Invite a few children to draw their versions of germs on the board and allow for learners to comment on whether they think that’s what germs look like.
6) For the craft part of the lesson distribute the play dough and allow learners to model what they think germs look like.

NB: Before learners play with the play dough, make sure they wash their hands, as germs can be passed around in the dough.

Conclusion: Choose some models and have children explain them to the class. This can help reinforce what germs are in the minds of the learner

Comments on lesson:

Lesson 5 and 6

Title:	What can germs do?
Objectives:	Assist learners to make the link between germs and where germs can be found in their environment. Help learners understand link between germs and ill-health. To give learners an opportunity to practise listening and fine motor skills.
What you need:	Germs storybook A4 sheets of paper Pencil crayons or crayons NB. Prizes for best posters e.g. Colouring- in book
What to do:	<ol style="list-style-type: none">1) Read the class the storybook "Germs". Repeat if necessary, as there are many concepts to absorb in this lesson. (The text for this book is included in the appendix.)2) To reinforce ideas raised in the story, initiate class discussion on where learners might find germs in their environment.3) Distribute A4 sheets and pencil crayons or crayons and instruct learners to draw a picture of where they think germs may be in their environment. Inform learners that this is a competition so they must do nice work! Artwork will be viewed by parents on Parents' day at the end of the health course and colouring books awarded to learners with the best posters
Conclusion:	In order to reinforce where germs can be found in the learners environment, drawings can be displayed around the classroom or in the school foyer in readiness for Parents' Day (see appendix)
Comments on lesson:	

Lesson 7

Title:	Getting ready for school!
Objective:	Reinforce simple health and hygiene message related to school-going. Encourage self expression in learners via simple drama/singing lesson.
What you need:	Copy of getting ready for school in either English or Zulu (Included in Appendix) Can substitute "Cleaning Our Hands" poem for "Getting Ready for School" (both included in appendix).
What to do:	<ol style="list-style-type: none">1) Educator can make links with the story book. Informing students that they will now sing a song about health ideas raised in the story.2) Educator can teach learners two lines at a time, working out hand and body actions to go with the poem. Repeat until learners can recite without too much help from the educator
Conclusion:	Educator to make the point that it is important to be clean and healthy at school.
Comments on Lesson:	

Lesson 8

- Title: How to make our water healthy? (i)
- Objectives: To teach learners simple ways they can ensure the water they drink is healthy
Identify places where learners can get safe water so that they help prevent stomach upsets or diarrhoea.
- What you need: Plastic bottles with cap for each learner in the class
- What to do: 1) Educator can begin lesson with a mini lecture on germs:
- i) Inform learners that germs can do us harm if they are in the water we drink. Drinking unhealthy water can cause stomach upsets or diarrhoea
 - ii) Educator can draw a water bucket with tiny “germs” in it to illustrate the point;
 - iii) Make the point that if we want to be healthy, we must drink clean water;
 - iv) One way to make sure you have healthy water is to use your own water bottle. (Educator can now show the class a water bottle).
The bottle must be clean to make sure there are no germs in it. It must have a lid to prevent spills. It must not have cracks as sometimes germs can live in cracks and you will also lose water. You can fill your water bottle from home - after your boiled water is cool. Or, if there is safe water at school, you can fill your water bottle at school. Tell learners that if they use the water bottle to carry safe water when they go to school etc., they will always have safe healthy water.
- 2) Distribute water bottles to each learner and arrange for learners to help fill with safe water.

NB: Educator may have to arrange a bucket of safe water before this lesson if water resources at school are limited.

Conclusion: Reinforce instruction with the idea that drinking water must be free from germs so they remain healthy and have less chance of getting stomach upsets and diarrhoea.

Comments on lesson:

Lesson 9

Title:	How to make our water healthy (ii)
Objectives:	Further learners' understanding of how to make water safe by drawing on some hygiene practices.
What you need:	A4 sheets, lead pencils, crayons
What to do:	<ol style="list-style-type: none">1) Ask learners about their water bottle experience e.g.: Who is using them? Do they like them? Encourage learners to continue to use them.2) One very easy way (but dangerous for learners) to make water healthy is to boil water, as it kills bad germs. Ask learners who boils water at their house, e.g.: mother, granny, sister?3) Learners must stay away from fire when water is being boiled as it can be dangerous. Pots of water are heavy and if spilled, learners can be burned.4) Once boiled water is cooled, someone at home can help learners put boiled water into clean plastic bottles so that the whole family can have clean water to drink, so that the family is healthy.5) Ask children to draw a picture of someone at home boiling water with them (learner) at a safe distance. Learners can take this picture home to Mom and Dad to show them what they are doing at school.
Conclusion:	Reinforce to children to link between clean water and health. If we have clean water to drink, we can be more healthy and have less illness.
Comments on Lesson:	

Lesson 10

Title:	How to make our water healthy (iii)
Objectives:	To teach learners simple ways to make water healthy for themselves and their families.
What you need:	Clear and clean 25l or similar container Learners water bottles
What to do:	<ol style="list-style-type: none">1) Reinforce idea that germs that may be in water must be killed before water is safe to drink. Unsafe water with germs in it can make learners unhealthy.2) Boiling water kills diseases as it "burns" the bad germs. The sun can do the same thing, only we need longer time than it takes to boil water.3) Water in clear container or similar container, must be left in the sun for 24 hours, then it is safe to drink.4) Coloured containers where the sun cannot penetrate are not good and germs won't be killed. The light must be able to penetrate the container easily.5) Place these containers somewhere safe in the sun. Make sure containers have lids to prevent dirt from entering the container.6) THE FOLLOWING DAY: Learners can pour this water into their water bottles or keep it in the containers to be used during school time.

NB: The containers must be clear and left outside for the full 24 hours or the experiment won't work. Educators may choose not to do this experiment if resources are not available and learners are too young to understand. It is probably more suitable for higher grades.

Conclusion:	Reinforce idea that this "recipe" for making clean water must be followed accurately or water will not be safe.
Comments on Lesson:	

RECIPE FOR PLAY DOUGH

INGREDIENTS

- 2 Cups cake flour (500ml)
- 1 Cup salt (250ml)
- 2 Tablespoons cooking oil (10ml)
- 4 Teaspoons Cream of Tartar(20ml)
- 2 Cups water (500ml)
- +/- 2 Teaspoons food colouring (10ml)

METHOD

- 1) Place all ingredients into a medium sized pot and mix well
- 2) Place on stove on medium heat
- 3) Stir constantly for about 15 mins or until rubbery
- 4) Remove from stove
- 5) Remove play dough from pot and place on board to cool
- 6) Once cooled place in a plastic bag or sealed plastic container for storage

Amasu Ezifundo zezempilo nenhlanzeko yabafundi bezikole ezincane zasemaphandleni

Izinhloso

Ukunika isimo esingabunjwa emibhalweni engaphelele yaphambilini ukuzama ukunikela ngohlelo lwezempilo nenhlanzeko olufanele kanye nolunempumelelo kubafundi bezikole ezincane. Ukuvunyelwa kokwelashwa kwawowonke umuntu kunokuba kuze kube nezimpawo zesifo. Ukunika abafundisi kanye nezinsika zomphakathi ithuba, kumhlahlandlela, ukuncoma ekufundisweni kwabantwana babo. Ukuthuthukisa/ ukuqhubezela imfundo yabafundi kubandakanya iziphakamiso zezempilo nenhlanzeko ezingabathinta.

Isexwayiso kubafundisi

Ngicela niqaphele ukuthi lelidokodo/lombhalo wumbhalo ongaphelele wesiphakamiso sohlelo Ngakho-ke, izincomo zenu zingemukelwa ukuze kuthuthukiselwe phambili uhlelo.

Nizoqaphela ukuthi amasu adingekayo aloluhlelo awulwazi oluphansi kakhulu. Isizathu salokhu ukuthi umphakathi wezikole udinga ukuziveza wona ngokwawo lezifundo, uma izinhlelo zingavezwa futhi ngempumelelo. Okwamanje, amasu alezindlela adinga ukwenziwa kubafundisi basemaphandleni.

Nakuba, lokhu kungasho ukuthi izinhlelo zingabe nawo amandla futhi zehluleke ekuqhubezeleni impahla yokusiza ukukhipha umklomelo wekilasi kubafundi kanye nabafundisi ngokufanayo.

Isifundo 1

Isihloko:	Yini eyimpilo?
Izimpokophelo:	1) Ukuthola ukuthi abafundi bazini ngempilo 2) Ukukhuthaza abafundi ukuzinikela kwingxoxo yase kilasini
Okudingayo:	Ibhodi noshoki
Okumele Ukwenze:	1) Cela ikilasi ukuba likutshela ngezibonelo eziyimpilo ezimpilweni zabo 2) Zibhale ebhodini lezimpendulo. 3) Khuthaza abafundi ukuzinikela ngokusebenzisa imibuzo eyimbangela uma ku dingekile njengokuthi: Yikuphi ukudla ocabanga ukuthi kuyimpilo? Nijwayele ukuyi geza kangaki imizimba yenu? Yimiphi imidlalo eniyenzayo eyimpilo? Niwatholaphi amanzi amahle okuphuza? 4) Ngosizo lwekilasi dweba isithonbe ebhodini "Somfundi Onempilo" usebenzise imfundiso oyithole kubafundi kwingxoxo yasekilasini
Isiphetho:	Ukuqinisekisa ngemibono eyimpilo ephakanyiswe ngesikhathi sesifundo, cela abafundi abambalwa bakutshela Ukuthi yini abayifundile ngokuba nempilo

Isifundo 2

- Isihloko: Nami ngingaba nempilo!
- Izimpokophelo: Ukukhombisa abantwana izindlela abangaphila ngazo.
Ukukhuthaza abafundi ukuzinakekela.
- Okudingayo: Iphepha elingenalutho A4 uma engatholakali kahle
1 Croxley College engadwetshiwe enamaphepha awu 72 kungakuhle uma amaphepha engadatshulwa/engakhishwa ebhukwini amacrayon angamapensela noma amacrayon.
- Okumele Ukwenze: 1) Buza abafundi ukuthi yini abayikhumbulayo ngomfundi ophilile!
Esifundweni esidlule bavumele abafundi baveze imibono, ebasa lapho kudingeke khona.
2) Yalela abafundi ukuba badwebe izithombe zabo benze izinto eziyimpilo.
3) Beluleke abafundi ukuba benze umsebenzi wabo ube muhle ngoba bazowuthatha bewuse emakhaya ukuyokhombisa imindeni yabo.
4) Ngesikhathi abafundi bematasa ngomsebenzi wabo umfundisi angehla enyuka ezungeza ikilasi ebheka abafundi noma mhlawumbe ababhalele imisho emifushane emaphepheni abo ebasiza ngokuchaza umsebenzi wabo.
- Isiphetho: Khetha eminye yemisebenzi emihle bese ubavumele abafundi ukuba bachaze izithombe zabo kwabanye abafundi, ukuqinisa imibono eyimpilo abantwana bayafunda. Qinisekisa ngokuthi abafundi bayawuhambisa emakhaya umsebenzi wabo ukuyokho mbisa imindeni yabo ukuthi bafundani.

Isifundo 3 kanye 4

- Inggikithi: Yini Amagciwane?
- Izimpokophelo: Ukwazisa abafundi ngezimbangela zokuguliswa ukungabi nampilo. Sebenzisa ubuciko njengendlela yokuqinisekisa umlayezo.
- Okudingayo: Ibhodi noshoki iplay dough (inhlama yokudlala yekilasi lonke).
- Okumele ukwenze 1) Buza abafundi uma bazi ukuthi ayini amagciwane bese "ubhala" izimpendulo eziyizo ebhodini.
2) Uma abafundi bengakwazi ukukunika izimpendulo ezibalulekile, umfundisi angabanika isifundo esifushanyana esichaza ukuthi amagciwane mancane kakhulu futhi angakwenza ugule uma engena emzimbeni wakho. Ngamanye amagama, awafuneki amagciwane emzimbeni wakho ngoba angamabi kakhulu kuwe.
3) Abafundisi bangadweba umfanekiso wokuthi igciwane licishe libukeke kanjani ebhodini.
4) Mema abantwana abambalwa ukudweba okwabo ukuhunyushwa kwamagciwane ebhodini bese uvumele abafundi ukuba bancome kulokhu abacabanga ukuthi amagciwane abukeka ngakho.
5) Ngokwengxenye yobuciko yesifundo yaba inhlama yokudlala bese uvumele abafundi benze lokhu abacabanga ukuthi amagciwane ayikho.

N.B: Ngaphambi kokuba abafundi badlale ngenhlama qiniseka ngokuthi bayazigeza izandla, ngoba amagciwane angathelelana ngokuzungeza kwenhlama

- Isiphetho: Khetha ayizibonelo bese abantwana bawachaze ekilasini. Lokhu kungasiza ukuqinisekisa ukuthi ayini amagciwane emqondweni womfundi

Isifundo 5 kanye 6

- Inggikithi: Amagciwane
- Okumele ukwenze: Angenzani siza abafundi ukwenza isihlanganiso phakathi kwamagciwane kanye nokuthi angatholakalaphi amagciwane endaweni yabo. Lekelela abafundi bazi isihlanganiso phakathi kwamagciwane nokwesweleka kwempilo. Ukunika abafundi ithuba lokufunda ukulalela kanye nokusebenzisa imizwa yokubona ukuthinta, Nokwenza.
- Okudingayo: 1) Ibhuku elixoxa ngamagciwane
2) Ishidi lephepha eliyi A4 Amacrayoni amapensela noma amacrayoni
- N.B:Umklo melo wesithombe esihle kakhulu njengebhuku lemibala.
- Okumele Ukwenze: 1) Fundela ikilasi incwadi ngendaba yamagciwane. Phinda uma kudingekile njengoba kunemiqondo eminingi engatholakala kulesifundo. (Bheka Appendix C)
2) Ukuqinisekisa imibono ephakanyisiwe endabeni, vulela ingxoxo ekilasini ekutheni abafundi bangawatholaphi amagciwane endaweni yabo.
3) Yaba ama A4 shidi kanye namacrayon ayipensela noma amacrayoni bese ulayela abafundi ukudweba isithombe sokuthi kulaphi lapho becabanga khona ukuthi amagciwane angatholakala khona endaweni yabo. Bazise abafundi ukuthi lokhu kuwumncintiswano kumele benze umsebenzi umsebenziomuhle wobuciko oyobukwa abazali ngo "suku lwabazali" ekupheleni kwesifundo sezempilo futhi amabhuku emibala ayonikwa abafundi abanezithombe ezinhle kakhulu.
- Isiphetho: Esikhundleni sokuqinisekisa ukuthi angatholakala amagciwane ezindaweni zabo abafundi, imidwebo ingakhonjiswa ngaphakathi ekilasini noma ehholo lesikole lapho kulindelwe abazali ngosuku lwabo. Bheka (isengezo)

Isifundo 7

- Inggikithi: Lungela ukuya esikoleni!
- Izimpokophelo: Qinisekisa ngemilayezo elula yezempilo nenhlanzeko ephathelene nenqubo yesikole. Khuthaza ukuzisholo kubafundi njengemidlalo yasesiteji elula/nezifundo zokucula.
- Okudingayo: Ikhophi yokulungela ukuya esikoleni ngeSingisi noma ngesiZulu (Ifakiwe kwi sengezo) Ungafaka ukuhlanzwa kwezandla esikhundleni "sikalungela ukuya esikoleni". (Zombili zifakwe kwisengezo).
- Okumele Ukwenze: 1) Umfundisi angenza izehlukaniso ngebhuku lezindaba ngokubonisa abafundi ukuthi sebengacula iculo ngemibono yezempilo ephakanyiswe endabeni.
2) Umfundisi angafundisa abafundi imigqa emibili ngesikhathi, basebenzise izandla nemizimba belingise bahambisane nenkondlo. Phinda phinda ukuze abafundi basholo ngaphandle kosizo olukhulu lukathisha.
- Isiphetho: Umfundisi kumele abeke lokuthi kubalulekile ukuhlanzeka nokuphila esikoleni.

Isifundo 8

- Inggikithi: Singawenza kanjani amanzi ethu abe nempilo? (I)
Izimpokophelo: Ukufundisa abafundi izindlela ezilula zokuqiniseka ukuthi Amanzi abawaphuzayo ayimpilo.
Khetha izindawo lapho abafundi bengathola khona amanzi Aphephile, ukuze basize ukuvimbela izinkinga zesisu Esihambisayo.
- Okudingayo: Ibhodlela lepulastiki elinesivalo lomfundi ngamunye ekilasini
Okumele ukwenze:
- 1) Umfundisi angaqala isifundo ngentshumayelo encanyana ngamagciwane.
 - i) Luleka abafundi ukuthi amagciwane angasenza sigule uma esemanzini esiwaphuzayo. Ukuphuza amanzi angenayo impilo kungabanga inkinga yezisunoma izisu ezihambisayo.
 - ii) Abafundisi bangadweba ibhakede lamanzi elina "magciwane" amancane phakathi ukufakazela iphuzu;
 - iii) Yenza iphuzu lokuthi uma sifuna ukuba nempilo kumele siphuze amanzi ahlanzekile;
 - iv) Indlela yinye yokuqiniseka ukuthi unamanzi anempilo ukusebenzisa ibhodlela lakho (umfundisi usengakhombisa abafundi ibhodlela lamanzi);
 - v) Ibhodlela kumele lihlanzeke ukuqinisekisa ukuthi awekho amagciwane kulona. Kumele libe nesivalo esivimbela ukuchitheka. Akumele libe neminkenke ngoba kungenzeka amagciwane ahlale kuwo umnkenke bese udlule ulahlekelwe ngamanzi.
 - vi) Ungaligcwalisa ekhaya ibhodlela ngamanzi ngemuva kokuba esebilisiwe aphola amanzi. Noma, uma ekhona amanzi aphephile esikoleni, ungaligcwalisa khona esikoleni ibhodlela lakho.
 - vii) Tshela abafundi ukuthi uma besebenzisa amabhodlela amanzi ukuphatha amanzi aphephile uma beya nawo esikoleni njll. kumele njalo bebe namanzi ahlanzekile.
 - 2) Yaba amabhodlela amanzi kubafundi ngamunye ukusiza abafundi ngokufaka amanzi aphephile.
- NB: Abafundisi bangalungisa amabhakede amanzi aphephile ngaphambi kwalesifundo uma izindlela zamanzi esikoleni zilingene.
- Isiphetho: Qinisa imiyalelo enomqondo wokuthi amanzi aphuzwayo kumele angabi nawo amagciwane kumele ahlale enempilo amathuba abemancane. Okuhlushwa izisu njengezisu ezihambisayo.

Isifundo 9

- Inggikithi: Singawenza kanjani amanzi ethu abenempilo? (ii)
- Izimpokophelo: Abafundi phambilini bayazi ngokuthi bangawenza kanjani amanzi aphephe ngokudweba eminye yemizamo yenhlanzeko.
- Okudingayo: Ishidi A4,
Ipensela lomsizi,
Amacrayoni
- Okumele ukwenze: 1) Buza abafundi ngekhono lamabhodlela abo amanzi e.g.: Obani abawasebenzisayo? Bayawathanda? Bakhuthaze abafundi ukuqhubeka nokuwasebenzisa.
- 2) Inye indlela elula (kodwa iyingozi kubafundi) ukwenza amanzi abe impilo ukuwabilisa, ngoba amagciwane amabi ayafa. Buza kubafundi ukuthi ubani owabilisayo amanzi ekhaya njengo mama, ugogo, usisi?
- 3) Abafundi kumele baqhele emlilweni uma amanzi ebila ngoba angabanga ingozi. Amabhodwe amanzi ayesinda futhi uma engachitheka abafundi bangasha.
- 4) Ngesikhathi amanzi abilisiwe esepholile, omunye ekhaya angasiza abafundi ngokufaka amanzi abilile esigubhini sepulastiki, ukuze wonke umndeni ube namanzi ahlanzekile okuphuza, ukuze umndeni uhlale uphilile.
- 5) Cela abafundi ukuba badwebe isithombe somunye ekhaya ebilisa nabo amanzi ngendlela ephephile. Bangasithatha lesithombe basiyise emakhaya ukuyokhombisa umama noma ubaba ngomsebenzi abawenza esikoleni.
- Isiphetho: Gcizelela kubantwana ukugxila phakathi kwamanzi Ahlanzekile kanye nempilo . i.e. Uma sinamanzi ahlanzekile okuphuza, singaphila kakhulu futhi libe phansi kakhulu izinga lokugula.

Isifundo 10

- Inggikithi: Singawenza kanjani amanzi ethu abe nganempilo?(iii)
- Izimpokophelo: Ukufundisa abafundi izindlela ezilula ukwenza amanzi abe Nempilo ngokwabo nangokwemindeneni yabo.
- Okudingayo: Isigubhu esikhanyayo futhi esihlanzekile esiwu 25/ noma Okunye okufanayo kwamanzi. Amabhodlela amanzi abafundi.
- Okumele ukwenze: 1) Qinisekisa umqondo wokuthi amagciwane Asemanzini. Angabulawa ngaphambi kokuthi amanzi aphuzwe. Ngokuphephile. Amanzi angaphephile anamagciwane kuwo angenza. Abafundi bangabi nampilo.
- 2) Amanzi abilayo ayazibulala izifo njengoba “eshisa” amagciwane amabi. Nelanga ngokunjalo lenza into efanayo, kuphela. Sidinga ngaphezulu kunesikhathi asithathayo ukubila.
- 3) Amanzi asesitsheni esikhanyayo noma kwesifanayo, kumele sibekwe elangeni amahora awu 24, ngemva kwalokho azobe eselungele ukuphuzwa.
- 4) Izitsha zamanzi ezinombala lapho kungangeni khona llanga azilungile futhi amagciwane awafi. Ukukhanya kumele kufinyelele kalula esitsheni.
- 5) Beka lezigubhu elangeni lapho kuphephe khona. Qiniseka ngokuthi izigubhu zinezivalo ukuvimbela Ukungcola kungangeni emanzini.
- 6) NGOSUKU OLULANDELAYO: Abafundi bangawathela emabhodloleni abo amanzi noma agcinwe khona ezigubhini ukuze bawasebenzise ngesikhathi sesikole.
- N.B: Izigubhu kumele kube ngezikhanyayo futhi zishiywe Phandle amahora awu 24 agcwele nakuba inhlolovo ingeke isebenze. Abafundisi kumele bangakhethi nhlobo ukuyenza lenhlolovo uma amasu engekho futhi abafundi besebancane kakhulu ukuqonda. Kufaneleke kakhulu emazingeni aphezulu.
- Isiphetho: Qinisekisa umqondo wokuthi “leResiphi” yokuhlazwa. Kwamanzi kumele ilandelwe ngokucophelela ngaphandle kwalokho amanzi angeke aphephe.

APPENDIX C

A story about... **GERMS**

Germs are so tiny we can't see them, except with a microscope



GERMS LIVE EVERYWHERE ...

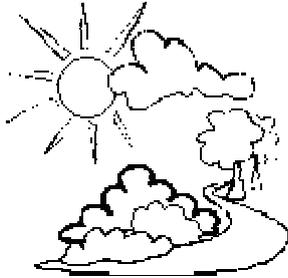
1

In our bodies...



2

In our environment...



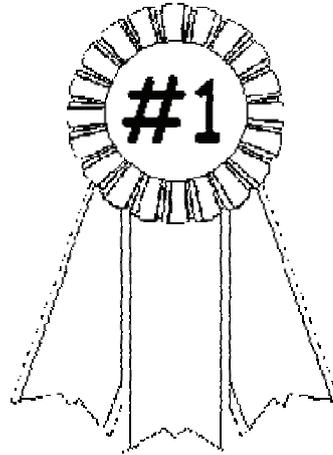
3

In our homes...



4

Some germs do not hurt us...



5

But some germs can make us ill...



6

“Bad Germs” can make us ill, when they get into our bodies

I THINK I AM GOING TO BE SICK



7

There are many ways bad germs can get into our bodies



“Bad Germs” can get into our bodies if we drink bad water



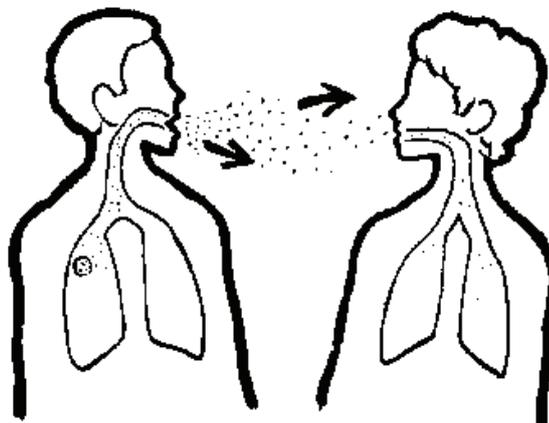
“Bad Germs” can get into our bodies if we do not keep clean, so remember to bath.



“Bad Germs” can get into our bodies if we eat bad food



or if we get infected from someone else



BUT WAIT !!!

It isn't all bad news

12

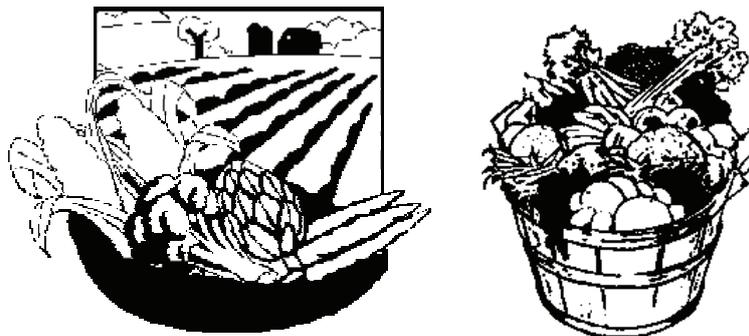
You can help stop "Bad Germs" getting into our bodies ...



HERE ARE SOME EASY WAYS !

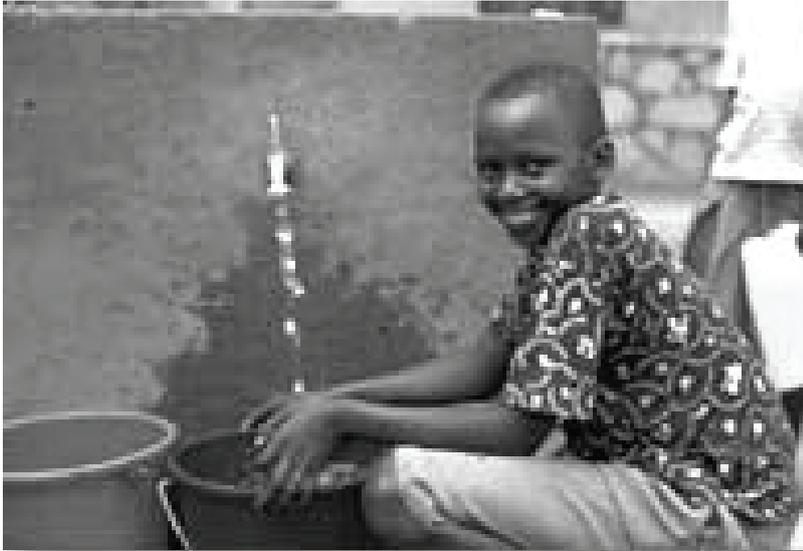
13

Eating healthy foods helps make you strong and healthy



14

Drinking clean water !



15

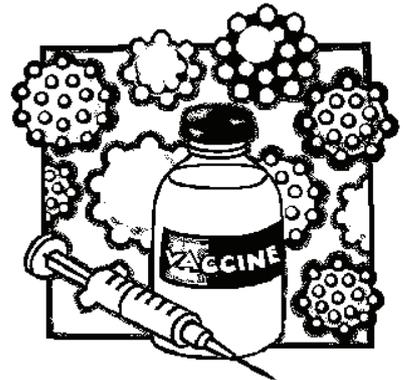
Bathing in clean water !



Visiting your clinic...



and listening to the Doctor or Sister's advice



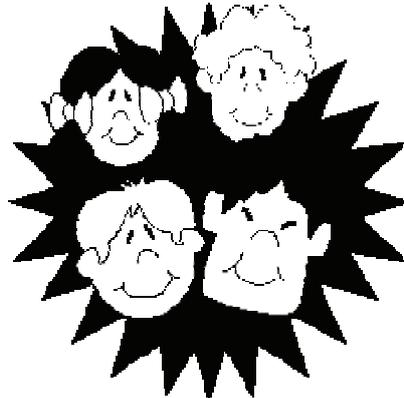
17

REMEMBER!! Happy kids are healthy kids!



18

BE HAPPY! AND PRACTICE HEALTHY LIVING EVERYDAY.



AMAGCIWANE

Amagciwane mancane kakhulu ngeke sikwazi ukuwabona ngqo ngaphandle kokusebenzisa isibonisakhulu (imicroscope).



AMAGCIWANE AHLALA NOMA KUPHI...

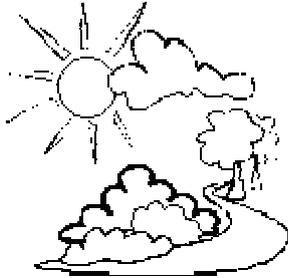
1

Emzimbeni yethu...



2

Endaweni yethu...



3

Emakhaya ethu...



4

Amanye amagciwane awasilimazi...



5

Amanye amagciwane angasigulisa kabi...



6

“Amagciwane amabi” angasigulisa kabi, uma engena emzimbeni yethu.

I THINK I AM GOING TO BE SICK



7

Ziningi izindlela lapho amagciwane engangena ngazo emizimbeni yethu.



“Amagciwane amabi” angangena emizimbeni yethu uma siphuza amanzi amabi

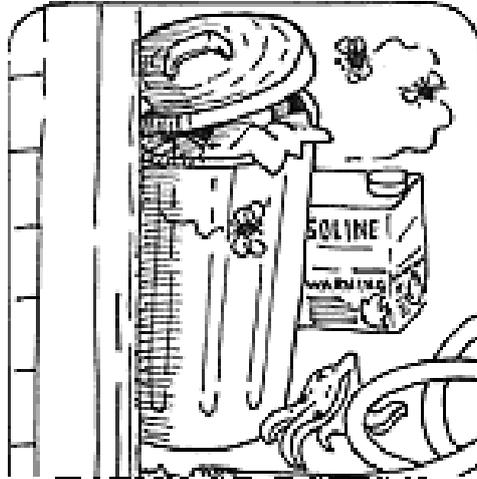


**I DON'T THINK I SHOULD
DRINK DIRTY WATER**

“Amagciwane amabi” angangena emizimbeni yethu uma singayigcini ihlanzekile.

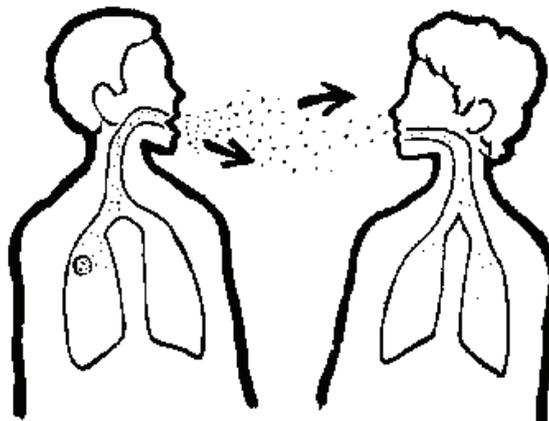


“Amagciwane amabi” angangena emizimbeni yethu uma sidla ukudla okungalungile..



**SMELLY OR ROTTEN
FOOD ISN'T GOOD FOOD**

noma ngokuthelelwa omunye ngesifo.



KODWA LINDANI !!!

12

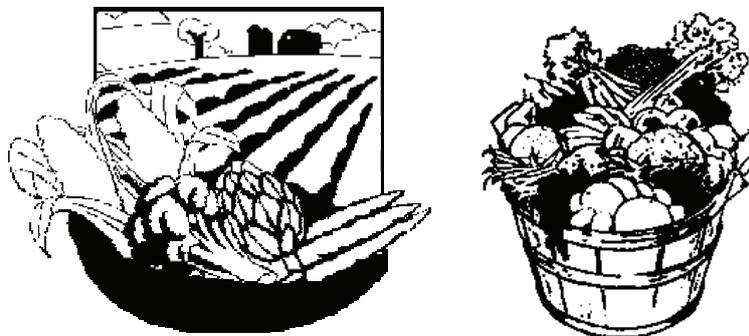
Singasiza ukuvimbela “amagciwane amabi” angangeni emizimbeni yethu...



NAZI EZINYE IZINDLELA EZILULA !

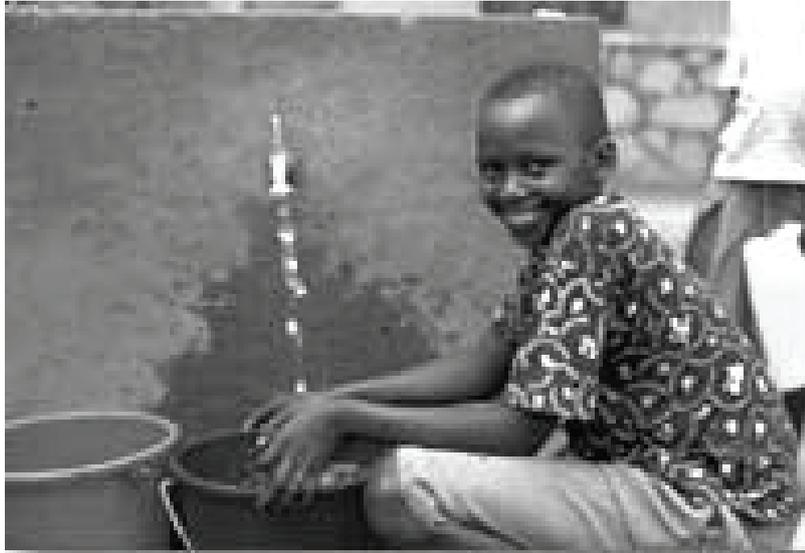
13

Ukudla ukudla okunempilo!



14

Ukuphuza amanzi ahlanzekile!



15

Ukugeza emanzini ahlanzekile!



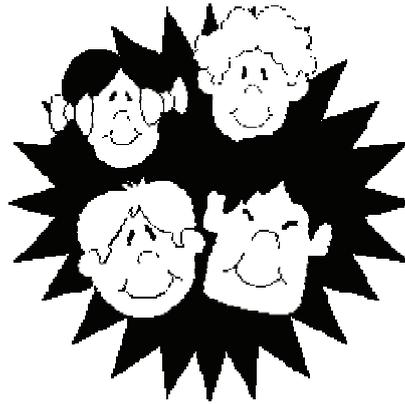
Ukuvakashela emtholampilo wakho...



Abantwana abathokozile bangabantwana abaphilile !



JABULANI!!!



APPENDIX D

Comments on Lessons and Responses to Questionnaire in Piloted Health and Hygiene Awareness Programme:

Lesson 1

Title: What is healthy?

Objectives: To find out what learners know about health.
To encourage learners to contribute to the class discussion.

Educator comments:

- Learners understood the intended message and could relate it to activities they undertake at home.
- Some learners were confused and had many questions about germs and cleanliness.
- The lesson encouraged learners to discuss issues important to health.
- Not all learners had good knowledge of health issues but the lesson was helpful in developing this knowledge.
- The lesson helped learners to identify healthy activities.
- Learners could relate water to health and hygiene.

Lesson 2

Title: I can be healthy too!

Objectives: To show children ways they can be healthy.
To encourage learners self awareness.
To encourage fine motor coordination via artistic expression.

Educator comments:

- The lesson was helpful to identify healthy activities and explain what germs are.
- Learners remembered valuable information from Lesson 1 and were able to relate it to this lesson.

Lesson 3 and 4

Title: What are germs.

Objectives: To introduce learners to the causes of ill-health.
Use craft as a method of reinforcing message.

Educator comments:

- Many learners did not know what germs were.
- The lesson was helped to learners to understand what germs are.

Lesson 5 and 6

Title: What can germs do?

Objectives: Assist learners to make the link between germs and where germs can be found in their environment.
Help learners understand link between germs and ill-health.
To give learners an opportunity to practice listening and fine motor skills.

Educator comments:

- The free format of the lesson was helpful and the learners were very enthusiastic.
- The lesson was helpful in explaining where germs are found and their significance in health and hygiene.

•

Lesson 7

Title: Getting ready for school!

Objectives: Reinforce simple health and hygiene message related to school-going.
Encourage self expression in learners via simple drama/singing lesson.

Educator comments:

- The drama and songs generated enthusiasm in the learners.
- This enthusiasm translated into learners cleaning the school grounds on the day of the lesson.
- The lesson was able to relate the significance of good health and hygiene practices in getting ready for school.

Lesson 8

Title: How to make our water healthy (i).

Objectives: To teach learners simple ways they can ensure the water they drink is healthy.
Identify places where learners can get safe water.

Educator comments:

- Most learners drank water from unclean sources and did not know how to treat it.
- The lesson provided treatment options to learners which they were enthusiastic to communicate to their parents.

Lesson 9

Title: How to make our water healthy (ii).

Objectives: Further learners' understanding of how to make water safe by drawing on some hygiene practices.

Educator comments:

- The lesson was able to demonstrate to learners the link between water treatment practices used at home (boiling and adding Jik) and health and hygiene.

Lesson 10

Title: How to make our water healthy (iii).

Objectives: To teach learners simple ways to make water healthy for themselves and their families.

Educator comments:

- Learners were effectively introduced to an alternative and cheaper method for treating water (24hr exposure to sun in clear container).

Results from Questionnaire:

- Q1: Do educators have enough background information on health and hygiene issues to reproduce these lessons effectively?
Responses: Most educators responded yes.
- Q2: For which classes could you use this programme?
Responses: Educators felt the programme was relevant for all classes up to Grade 7.
- Q3: If you had to adapt any of these lessons to make them more suitable, how would you do this?
Responses: Utilizing pictures and posters
Visiting learners' houses for practical demonstration.
Including health and hygiene materials (soap, toilet paper and hand-washing buckets).
Include more group activities.
- Q4: Must these lessons be revised to be relevant to larger classes?
Responses: More time must be allocated to undertake the lessons.
- Q5: Should parents be included in assisting in the lessons?
Responses: Parents would encourage learners to be more involved.
- Q6: Should the lessons be translated into isiZulu?
Responses: This would encourage younger learners to become more involved.
- Q7: Would you be interested in implementing this programme on a trial basis?
Responses: All educators were very enthusiastic to be involved.
- Q8: Do you have any further comments/suggestions?
Responses: All educators wanted the programme to be continued and include the community.

APPENDIX E

GETTING READY FOR SCHOOL

I'm washing my body
and brushing my teeth
my uniform is neat
and my underwear is neat
my shoes are polished
Get ready! Get ready!
walk fast on the road
the school bell is ringing
to call us to school
the teacher is waiting with
work on the board

LUNGELA UKUYA ESOKOLENI

ngigez' umzimba wami
ngigez' amaziny' ami
izingubo zami zesikole zihlanzekile
nezingubo zami zangaphansi zihlanzekile
izicathulo zami zipholiswe
Lunga! Lunga!
hamba ngokushesha emgwaqeni
insimbi isiyakhala
ukusibizel' esikoleni
uthisha uselindile
ngomsebenzi ebhodini

CLEANING OF OUR HANDS

You take your right hand
and you take your left hand
put a bit of soap and rub it all around
you wash between your fingers
rinse your hands clean
dry them with a towel
no germs can be found!

UKUHLANZWA KWEZANDLA ZETHU

Uthatha isandla sakho sokudla bese
uthatha isandla sakho sobunxele
faka imbijane yensipho bese
uyihlikihla uzungeze izandla zakho
ugeza phakathi kweminwe yakho
zimhlambe ngamanzi ahlanzekile bese
uzesula ngethawula elomile futhi elihlanzekile
awekho amagciwane angatholakala