The University of the Western Cape

Faculty of Community and Health Sciences

Building a Health-Promoting Schools Conceptual Framework Model as a Strategy to Address Barriers to Learning and to Promote Healthy Development of School-Aged Children in Rwanda

A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophiae in the Department of Physiotherapy, Faculty of Community and Health Sciences, University of the Western Cape.

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ABSTRACT

After suffering almost total collapse. Rwanda has made impressive post-genocide progress. Many children of school going age are now attending school, but regrettably, only half complete primary school. High numbers of orphans, disabled children and a growing number of children from child-headed households still suffer the consequences of the poverty inherited from the past. Health problems include HIV/Aids, STIs, malaria, tuberculosis, enteric diseases, mental health problems, hunger and malnutrition. Use of drugs and substance abuse, unwanted pregnancies, lack of support services, unavailability of teaching and learning materials, inflexible curricula and poor teaching methodologies also contribute to learning breakdown. It is against this background that this thesis was conducted to investigate the development of a health-promoting schools model to provide an appropriate strategy to address barriers to learning and to promote healthy development of school children in Rwanda. Two research questions were the focus of this research, first, how does a health-promoting schools model provide an appropriate strategy to address barriers to learning and to promote healthy development of school-aged children in Rwanda and second, what are the participants' views on and understanding of the model and its potential use in their schools? A mixed methods research design that employed both qualitative and quantitative approaches was used.

The study followed sequential implementation: Phase 1 was concerned with the identification of the components for the model. It was a case study of four schools, two rural schools and two urban schools in Kigali City. The sample included 60 teachers, pupils, principals and parents from schools and nine key informants who were policymakers from the Ministries of Education and Health and Social Welfare, line institutions and the UNICEF. Data collection strategies included focus group discussions, semi-structured, in-depth individual interviews, a transect walk and observations. Data analysis was through content analysis. Eight themes emerged out of the data: school leadership and management; school health policies; pupil wellbeing; school partnership with parents, families and local communities; school health services; factors affecting teaching and learning for all children; teacher wellbeing; and a healthy physical school environment. These themes became the components that informed the development of a health-promoting schools model. In Phase 2, the degree of understanding of this proposed model and its components were investigated in each school community. A

cross-sectional survey was conducted in 92 public primary schools across the country. The study sample included 1196 school participants and most of the key informants from Phase 1. Quantitative data were analysed using SPSS, version 19. Qualitative data from the written comments were analysed using content analysis to identify recurrent categories. All the participants understood the model and its components because of the explanation received during the workshop presentations, interactive group discussion, the relevance of the model's components to their schools' life aspects; its simplicity and clarity, its use of the Kinyarwanda language and its graphic depiction. School participants identified the physical environment of the school, the school health services and the aim for solutions as needing the greatest support to develop, while key informants chose school health services, pupil wellbeing, school leadership and management and school health policies. Of the participants, 99% indicated that there was no need to add extra components to the model. The health-promoting schools model that has been developed could provide an appropriate strategy in Rwanda to address barriers to learning and to promote healthy development of school-aged children since it takes a holistic ecological approach to address barriers to learning at multiple systemic levels of influence.
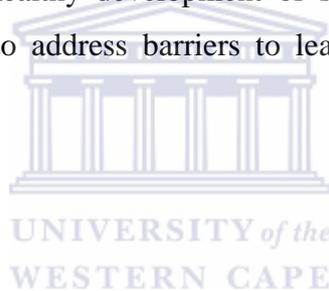
KEY WORDS

Health-promoting schools; conceptual framework; model; strategy; barriers to learning; healthy development; school children; Rwanda**.**

DECLARATION

I, **Egide Kayonga Ntagungira,** declare that *Building a health-promoting schools conceptual framework model for schools as a strategy to address barriers to learning and to promote healthy development of school children in Rwanda* is my own work. It has not been submitted for any degree or examination in any other university, and all the sources I have used or quoted have been indicated and acknowledged by complete references.

Full name: **Egide Kayonga Ntagungira**

Signed...................................... Date................................

DEDICATION

I dedicate this piece of work to God Almighty; thank you Lord; you have given me sufficient grace, strength, perseverance, good health and wisdom from the beginning through to the end of this PhD journey so that I could realise my dream. Although the journey seemed tough, your grace kept me strong.

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ABBREVIATIONS

|	
Aids	Acquired immunodeficiency syndrome
CDC	Centres for Disease Control
CPR	*Conseil Protestant du Rwanda*
R2	Rural school number two
ROR	Republic of Rwanda
SENP	Special Educational Needs Policy
SHE	School for Health in Europe
SHS	School Health Services
SNEC	*Secrétariat Nationale de l'Enseignement Catholique*
SPSS	Statistical Package for Social Scientists
STIs	Sexually transmitted infections
U1	Urban school number one
U2	Urban school number two
UNESCO	United Nations Education, Scientific and Cultural Organisation
UNICEF	United Nations International Children's Emergency Fund
UN	United Nations
UPE	Universal primary education
USA	United States of America
UWC	University of the Western Cape
VSO	Voluntary Service Organisation
WCPT	World Confederation of Physical Therapy
WHO/AFRO	World Health Organisation African Region
WHO/WPRO	World Health Organisation Western Pacific Region
WHO	World Health Organisation

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CHAPTER 1: INTRODUCTION

This chapter offers the background to the study, and its relevance to scholarly undertaking in the field of health promotion, with particular focus on health-promoting schools, is discussed. The challenges concerning primary education and health in these schools and the way they affect the health status of schools and their communities are also discussed. The problem statement, aims, and objective, as well as the research questions, the rationale for the study and the outline of chapters in the study are presented.

1.1 Background to the Study

Rwanda is an ambitious, forward-looking, developing country in east Africa, despite the almost total collapse it suffered during the 1994 genocide that shattered the whole country. The 1994 genocide affected all sectors, particularly education, health and infrastructure; social capital and relationships were destroyed. Obura (2003) stated that the education system was particularly targeted for destruction:

> The education system was particularly targeted during the conflict: teachers and educated, thinking people were singled out for assassination, and pupils and teachers were both victims and perpetrators of the genocide in state and church schools. As a result, schools were ransacked and destroyed, as was the Ministry of Education. Few teachers were left. Little documentation or school supplies remained (p.17).

Obura added that even teachers participated in genocide, schools became sites of violence and resources of all kinds were destroyed, which led to the total collapse of the education system and an erosion of faith in the education system (Obura, 2003). Masire et al. (2000) made a similar claim—that the consequences of genocide upon the education system can hardly be exaggerated. Many schools and education facilities were destroyed during the genocide. Over three-quarters of nearly 1,800 primary schools were physically destroyed, and many pupils, teachers and school administrators were killed, fled the country or participated in the genocide themselves in public and church schools. The roles of schools and teachers in the genocide cannot be underestimated. They fuelled racial hatred and perpetrated violence that led to a deep human devastation that destroyed the social fabric of the Rwandan society (Scheweisfurth, 2006).

It is important to note that people did not wake up and start slaughtering others; the government had laid a fertile ground for such to happen; however, the causes for such social injustices are beyond the scope of this study. Shyaka (n.d.) claimed that the former government had institutionalised discrimination, oppression and social injustices, poor management and unequal distribution of national resources. Its political powers favoured the climate of corruption and exclusion, and jobs and schools were distributed unequally in favour of groups in power. This situation complicated social relations, resulting in the frustration of the underprivileged that culminated in the 1994 genocide.

The health system was destroyed and Rwandans lives were devastated. Rodriguez and Samuels (2011) stated:

> Genocide left a million lives dead, a legacy of poverty, ill-health, and human devastation. Thousands were injured or disabled, and there were innumerable rape cases, which subsequently led to an HIV/AIDS explosion as well as a major reduction in the number of adult men and large numbers of orphans. With no infrastructure left, almost no human resource and widespread displacement, a completely new country had to be built (p, 6).

According to Shyaka (n.d.), the genocide led to the deterioration of the national economy and left people in extreme poverty, with the social problems and harsh living conditions associated with unemployment, deep deprivation of human needs and scarcity of resources, an over-burdened health system, broken communities and a weak education system.

Despite immende suffering, Rwanda has made impressive improvements in both its health and education sectors. In the health sector, there has been remarkable improvement in the overall health status of Rwandans, which is reflected by the remarkable increase in life expectancy since the genocide, improved immunisation coverage, family planning and HIV/Aids care, reduction in malaria and improved infrastructure, to mention but a few (Rodriguez & Samuels, 2011). Ndaruhutse, (2011) contended that Rwanda has achieved not only nearly universal coverage of education and healthcare services but has also overcome the discrimination that had taken root within the Rwandan society.

> The near universal coverage of education and health services demonstrates the provision of more inclusive services to the general population, which is likely to have a positive effect on state-society relations, social cohesion and thus state-building, as compared with the pre-1994 quota system in education, which was

both ethnically divisive, detracting from social cohesion and peace-building, and far from offering universal access (p, 10).

The country can be credited for its steadfast development, attributed to its visionary political leadership that is strongly committed to rebuilding the country, particularly in an effort to improve the health and wellbeing of all citizens through universal healthcare (WHO, 2009) and universal primary education to all school-going children (World Bank, 2011).

To undo the legacy of the past, the first strategy was to amend the constitution such that it reflected all Rwandans rather than those in power, as was the case in the former government. The new Constitution of 2003 was amended in order to correct the mistakes of the past as the country was faced with competing priorities and development agendas (Republic of Rwanda [RoR], 2003). The new constitution states that primary education is compulsory. It is free in public primary schools. The first education policy, post-genocide, was adopted in 1998 to reshape the education system that had been destroyed. The policy was to bring about a new orientation and to restructure the Rwandan education system. Because the country was entering a new phase that was developmental, the education sector needed a new policy to meet the international development targets, such as universal primary education (UPE) and education for all (EFA). The Education Sector Policy of 2003 was adopted, which stated that

Education is a fundamental human right and an essential tool to ensure that all Rwandese citizens; women and men, girls and boys realise their full potential (Rwanda Ministry of Education, 2003, p. 4).

Other policies, such as a Girls' Education Policy, to bring about universal primary education and gender parity, which was adopted in 2008, and the Special Educational Needs Policy of 2007 were passed to give all children an opportunity to access education. The Early Childhood Development Policy of 2011, the Fee-Free Education Policy of 2003, the Nine Years Basic Education Policy of 2008 and other relevant education policies were adopted to ensure that the MDGs and EFA international conventions were on track to be achieved by the 2015 timeline. Within the health sector, the government of Rwanda established the Health Sector Policy of 2004 that focused on addressing the constraints of demand (Rodriguez & Samuels, 2011).

These policies are embedded in Rwanda's Economic Development and Poverty Reduction Strategy (EDPRS), which provides a medium-term framework for achieving Rwanda's long-

term development aspirations, as embodied in Rwanda Vision 2020, the 7-year Government of Rwanda programme and the Millennium Development Goals (RoR, 2011). All Rwanda's achievement hinges on the proactive policies and reforms mentioned earlier but also on peace and stability as well as strong commitment to reconciling Rwandans after genocide (Rodriguez & Samuels, 2011).

1.1.1 Primary Schools and Education System in Rwanda

In Rwanda the education system starts with pre-primary, kindergarten or nursery that is voluntary and attended by only 1% of the children. Early learning facilities are accessed by only a few children because there are few, distant and expensive, which makes affordability and accessibility difficult. Early learning programmes are not tuition free and mostly considered a luxury catering for the 1% of the urban middle class children.

The compulsory public education starts with 6 years of primary school and finished with a national exam (P6). After these 6 years of primary education, the successful children that have passed the national exam can either proceed to lower secondary Senior1-Senior3 commonly known as Tronc Commun, which leads to upper secondary (Senior 4- Senior 6) and University education, or children may joint the community school, or technical vocational training (VET) or they can start work.

The primary schools are of three types: public primary schools, state-subsidised schools and purely private schools. Public schools are funded and managed directly by the government, while state-subsidised schools are funded by the government but are run by nongovernmental organisations under two main umbrella groups: the *Secrétariat Nationale de l'enseignement Catholique* (SNEC) and the *Conseil Protestant du Rwanda* (CPR). While private primary schools are managed and run by the individuals or business owners. More than 71% of all primary schools fall under the state-subsidised category, and about two-thirds of these are under SNEC management. The private sector accounts for only 1.5% of the schools and 0.7% of the national enrolments (World Bank, 2004). Basic education starts with non-compulsory pre-primary for children aged 3-6 years. This level of education is not state-financed and is accessed by a small number of children whose parents can afford to pay the fees. The primary school level caters for children of the 7-12 age group, is fee-free and compulsory, with a net enrolment rate of 95% (UN, 2009). The Rwandan Government has a political commitment to

improve education at all levels, most especially at the basic education level where both access and quality is the priority of the government, with 2,341,146 school-aged children attending school, more than ever before in the history of Rwanda (World Bank, 2011).

1.2 Problem Statement of the Study

Although Rwanda has achieved the MGD targets on gender parity, and is close to ensuring universal primary education by the 2015 deadline, it still has a long way to go in the realisation of universal primary education and education for all because completion rates remain low and only half of the children complete primary school education (World Bank, 2011). The reality is that most children are not benefiting from the fee-free education as other factors, other than fees, keep them out of school (Nkurunziza et al., 2012). Schools are characterised by high numbers of orphans, estimated at 315,300, and high numbers of disabled children, estimated at 27,353, in primary schools in 2012 (Rwanda Ministry of Education, 2012), and even higher numbers of child-headed households due to the legacy of the 1994 genocide (Thaxton, 2009). Schools face challenges of inadequate infrastructure, with a pupil to classroom ratio of 70.7:1, only a few schools having separate toilets for girls and boys, only 66% of the primary schools having water, and only 25% being supplied with electricity. The pupil to qualified teacher ratio is 61.6:1 and insufficient teaching and learning resources exist, for example, the ratio of pupil to textbook is estimated at 1.6:1 (Rwanda Ministry of Education, 2012).

Furthermore, primary school communities grapple with endemic poverty, HIV/Aids, STIs, and malaria (WHO, 2009; Williams et al., 2012). Tuberculosis, unwanted pregnancies, worm infections, mental health, hunger and malnutrition, sight problems, drugs and substance abuse; inadequate health education, absence of support services for pupils and school staff, and an unfriendly school environment are realities in primary schools. Poor sanitary and hygiene practices act against the efforts to achieve universal primary education (UPE) (Balsera, 2011; Huggins & Randell, 2007; Rwanda Ministry of Education, 2010; WHO, 2009). The absence of parental and community involvement in schools (Balsera, 2011; WHO, 2009) and a lack of skills, knowledge, and positive attitudes and behaviours make school children vulnerable to health-compromising situations (Rwanda Ministry of Education, 2010a). Poor learning conditions related to inappropriate school infrastructures (World Bank, 2011), poor teaching

methodologies that are teacher-centred, unavailability of teaching and learning materials, effects of a poor school climate and negative attitudes of teachers have a serious impact on learning (Balsera, 2011). These lead to low achievement, low completion rate and high repetition and dropout rates that subsequently hinder school children from achieving their full potential to become healthy, responsible, productive members of society (WHO, 1997b).

1.3. Rationale for the Study

To offset the earlier mentioned barriers to learning and achievement of school children, this study was conducted to develop a health-promoting schools model for Rwanda in an effort to address such barriers to learning and to promote healthy development of school-aged children. The proposed model would provide a holistic framework on which schools could base their actions and interventions to influence the whole-school development in order to make schools health-promoting and inclusive. A health-promoting school model is based on the "settings" approach, as described in the WHO Ottawa Charter (1986):

> Health is created and lived by people within the settings of their everyday life; where they learn, work, play and love. Health is created by caring for oneself and others, by being able to take decisions and have control over one's life circumstances, and by ensuring that the society one lives in creates conditions that allow the attainment of health by its members (WHO, 1986, p. 3).

A health-promoting school model supports the whole school's organisational development and change. At the heart of a health-promoting school are a child's wellbeing and its development as a whole human being. It takes into account the child's psychosocial needs by ensuring that the school environment is supportive of learning, barrier-free and inclusive and that curricula are adaptive and flexible to accommodate all the children's needs, irrespective of their socio-economic background and other individual characteristics. According to the World Health Organisation (1997), a health-promoting school can address many of the major social, behavioural and health challenges, such as HIV/Aids and sexually transmitted diseases, violence and injury, unintended pregnancy and poor reproductive health, helminthic infections, poor nutrition and food safety, poor sanitation and water control, lack of immunisation, poor oral health, malaria, respiratory infections, psychological problems, problems associated with the lack of physical exercise, and alcohol, tobacco, and illicit drug

use. Promoting the health of children through schools is an important goal of WHO, UNICEF, UNESCO, and other international agencies (WHO, 1997c).

Because 42% of the Rwandan population are under the age of 15 years (Binagwaho, 2009; RoR, 2012; WHO, 2009), schools can serve as appropriate venues to reach many children for educational improvement and health-promotion interventions. A health-promoting schools model has been advocated for and internationally recognised by the World Health Organisation (WHO) as a model of 'best practice', encouraging all nations worldwide to implement it to reduce the burden of disease through health-promotion and disease-prevention approaches (WHO, 1996a).

The available evidence indicates that schools can contribute significantly to the health and wellbeing of children, which is in accordance with the Millennium Development Goals, which state that every child has the right to education, health and safety (Buijs, 2009). Schools, more than any other institution, can influence school children's health to improve the wellbeing and competence of children and adolescents (WHO, 1996b). School children need to be provided with the necessary resources to enable them to grow and flourish. This can be achieved by transforming schools into health-promoting avenues supportive of learning and healthy development. Hoyle et al, (2008) argued that schools should prepare all students to maximise their potential, to contribute to the common good, and to live a full and rewarding life, consequently enabling all children to achieve as much of their creative, intellectual, and social potential as possible and preparing them to live successfully and contribute actively in their communities, leaving no child behind. The former Director General of the World Health Organisation stated that

> health is inextricably linked to educational achievement, quality of life, and
> economic productivity. By acquiring health related knowledge, values,
> skills, and practices, children can be empowered to pursue a healthy life and
> to work as agents of change for the health of their communities. (cited in
> Nakajima, 1996, p. 1)

In order to identify and conceptualise the components for the development of a health-promoting schools model for Rwanda, the following research questions were set and the aims and objectives needed to realise the overall goal of the study were articulated.

1.4. Research Questions

RQ1: How does a health-promoting schools model provide an appropriate strategy to address barriers to learning and promote healthy development of school children in Rwanda?

RQ2: What are the participants' views on and understanding of the developed model and its potential use in their schools?

1.5. Research Aims

This study had two aims:

1. To develop a health-promoting schools model based on a health-promoting schools conceptual framework that is appropriate to address barriers to learning and to promote healthy development of school-aged children in Rwanda.
2. To describe the views of participants on, and their understanding of, the proposed model and its potential use in their schools.

1.6 Objectives

To achieve the first research aim and answer the first research question, the following objectives were set:

1. To identify the school health policies
2. To explore the school's physical environment
3. To describe the school's social environment
4. To identify the personal health skills of the school community
5. To explore the integrated school health services
6. To explore the school and community links.

To achieve the second research aim and answer the second research question, the following objectives were set:

1. To describe the participants' understanding of the model and its components
2. To describe the participants' views of the appropriateness of the components for their schools

3. To identify the component that the participants would choose to start action on as entry point to becoming a health-promoting school

4. To identify the participants' ranking of the relative importance of components in which they would need the most support in developing at their schools to become health-promoting schools

5. To identify the participants' suggested changes to the model components for its future use for their schools

1.7 The Conceptual Framework for the Study

This study is informed by the health-promoting schools (HPS) conceptual framework based on the action areas for health promotion outlined in the Ottawa Charter. In 1995, the World Health Organisation produced a set of guidelines towards which schools aspiring to the status of health-promoting schools were required to work. The five action areas outlined in the Ottawa Charter were reframed and redefined to fit a school setting, with slight variations from the statements outlined in the Ottawa Charter (WHO, 1986). *Building public policy* (WHO, 1986) was reframed as the *school health policies* (WHO, 1996b) component of the framework, and *create supportive environments* (WHO, 1986) was split into two separate components, the *physical environment of the school* and the *school's social environment* (WHO, 1996b). *Strengthen community action* (WHO, 1986) was reworded as the *community component* (WHO, 1996a), *develop personal skills* (WHO, 1986) was renamed as the *personal skills* (WHO, 1996b) component, and *re-orient health services* (WHO, 1986) was changed to the *health services* (WHO, 1996a) component. Therefore, the health-promoting schools framework covers the six areas that reflect the five priority action areas identified in the Ottawa Charter (1986): school health policies; physical environment of the school; the school's social environment; community links; personal health skills and health services (WHO, 1996b). The following sections describe these components in detail.

1.7.1 School Health Policies

These are clearly defined and broadly promulgated directions which influence schools' actions and resource allocation in areas which promote health. The HPS framework emphasises that the school policies should be documented and approved practices that influence the school's actions in promoting the health and wellbeing of its students, staff, their

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families and the wider community. According to WHO (1996b), the policy directions ensure that the school has policies on healthy food, that it is totally smoke-free and prohibits alcohol and illicit psychoactive substances in all activities, and that it upholds equity principles by ensuring that girls and boys have equal access to school resources. Other policy areas are formal procedures in place relating to the distribution of medication, first aid, control of helminths and other parasites, sun protection, health screening, and closure in the event of emergencies or other circumstances that might endanger a student's health. Policies on a safety plan for implementation in the event of natural or other disasters and on the control of HIV/Aids, including its safe management, are also included (WHO/WPRO, 1996).

1.7.2 The Physical Environment of the School

This encompasses buildings, grounds, equipment for both indoor and outdoor activities, and the areas surrounding the school. This component requires schools to provide a safe, secure, clean, sustainable, and healthy environment for learning. This component ensures that the school provides a safe environment for the school community and adequate sanitation and water, upholds practices which support a sustainable environment in which students are encouraged to take care of the school facilities, and endeavours to enrich learning by ensuring that the physical conditions are the best they can be (WHO/WPRO,1996).

1.7.3 The School's Social Environment

The school's social environment is important in fostering good relationships among and between students, staff, parents and the wider community. It is a combination of the quality of the relationships among staff, among students, and between staff and students and is often strongly influenced by the relationships between parents and the school, which, in turn, are set in the context of the wider community. It is also influenced by senior staff from within the school and the health and education personnel who visit the school, all of whom provide role models for students and staff by the attitudes and values they display in their social behaviour. This component can ensure that the school ethos or climate is supportive of the mental health and social needs of students and staff. The school should create an environment of care, trust and friendliness that encourages students' school attendance and involvement in their learning and all the activities and programmes of the school. The school needs to provide appropriate support and assistance to students who are at a particular disadvantage relative to their

colleagues and ensure a fully inclusive environment in which all students are valued and their differences respected. The school should be attentive to the education needs of parents and how these can influence the wellbeing of students (WHO/WPRO, 1996).

1.7.4 Community Links

This component emphasises that a school should have connections and partnerships with families, communities, organisations and other stakeholders or key local groups who support and promote health and wellbeing of the students and staff. According to WHO (1996), a health-promoting school is one where parents are closely consulted about and involved in the school's health-promotion activities. This component therefore helps to ensure that family and community involvement in the life of the school are fostered and that the school is proactive in linking with its local community (WHO/WPRO, 1996).

1.7.5 Personal Health Skills

This component requires schools to have both formal and informal curricula that offer students age-related and age-appropriate knowledge and attitudes to, understanding of and skills in health that will enable them to become more autonomous and responsible in individual and community health matters. The curriculum should be designed to approach health issues in a coherent and holistic way and to improve students' theoretical understanding of health issues and how to apply this in practice. Teachers need to be adequately prepared for their roles as key participants in health-promoting schools. Other key stakeholders should also be given the opportunity to gain skills relevant to health-promoting schools (WHO/WPRO, 1996).

1.7.6 School Health Services

The school should have access to and provide healthcare and health promotion services. The local and regional health services have a responsibility for child and adolescent healthcare and education through the provision of direct services to students and in partnership with the school. Basic health services that address local and national needs must be available to students and staff. Local health services should contribute to the school's health programme and health services should be included in the teachers' training (WHO/WPRO, 1996).

1.7.7 Conclusion to Conceptual Framework

The above conceptual clarification provides the background to understanding the research questions and the mapping of the relationships between the concepts in order to understand how they were investigated prior to the fieldwork. The conceptual clarification is intended to provide a sense of what was looked for in the field and also how the analysis and interpretation will apply this framework to the study findings.

1.8 Outline of Chapters

This study is divided into six main chapters:

Chapter 1 introduces and provides the overall background that brings the context of the study to the fore. The problem statement, aims, research questions and objectives of the study are iterated. The significance, rationale, the conceptual framework that guided the study and clarification of concepts in the study and the outline of chapters are also presented.

Chapter 2 offers an overview of the theoretical framework that underpins and frames the study. It provides a description of the study, the ecosystemic theory, and how it frames the study within the Rwandan schools' context. This chapter locates and focuses the study within the existing body of knowledge in the field of health promotion and health-promoting schools. In general, in this chapter, a set of conceptual and empirical researches, conducted by other scholars, are reviewed and analysed to highlight the most relevant analogies with the research topic.

Chapter 3 provides background information on the case study and the specific context. The qualitative component is divided into four sections: 1, 2, 3 and 4. Section 1 offers a detailed account of the research methodology employed in Phase 1 of the study. It presents the research approach, paradigm, design, and it motivates why it was appropriate to adopt the exploratory, descriptive contextual case-study design for this current study. In it, a detailed description of the case-study schools, methods of data collection and analysis, the role of the researcher as an instrument for data collection as well as the strategies to ensure trustworthiness are discussed. It closes with a detailed discussion of the procedures and ethical considerations that were followed during the course of the study. In section 2, the study findings from the interviews, focus group discussion transcripts, transect walk and

observations in form of field notes are presented under the eight themes that emerged out of the data. In section 3, findings are discussed and contextualised within the ecosystemic theory, as the frame of reference to the study, in relation to the literature for the study. The findings are contextualised within the Rwandan context and also in the global body of knowledge. In section 4, the eight themes that emerged from the data are used to construct and present the proposed health-promoting schools model for Rwanda.

Chapter 4: The quantitative component is focused on in Phase 2, to describe the participants' understanding of the model and its components. It is organised under four sections. In section 1, an overview of the methodology adopted for this phase of the study is presented and the research design, study population and sampling approaches, data collection and analysis approaches are described as well as the ethics statement and the limitations of the study. Section 2 presents the findings from the analysis of the participants' views of their understanding of the model and its components based on their responses in the questionnaire and the written comments that participants gave to support their closed-ended responses. In section 3, the findings are discussed in relation to the ecosystemic theory, to contextualise the study in the light of the relevant literature, locally and internationally. It closes with the presentation of the model and its structure, based on the participants' feedback.

Chapter 5: The summary and conclusion provide an overview of the study process and procedures undertaken during the implementation of the study. It presents the background of the study, the problem statement, research questions, aims and objectives and significance of the study. It also provides the study research paradigm and research design, the data collection, analysis and study findings for both Phase 1 and Phase 2 of the study. It further offers the limitations encountered during the course of the study and gives recommendations for future practice.

Chapter 2, a review of the literature, follows. It locates and focuses the study in the existing body of knowledge within the Rwandan context and internationally. It also provides the theoretical framework that places the study within its scholarly context.

CHAPTER 2: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

This chapter locates the study in the wider body of relevant literature; it presents the theoretical framework and the literature review as well as an overview of the methodology. The theoretical framework provides an organised contextualisation of the study. The study methodology describes the course of the study.

2.1. Literature Review

The literature review is focused on the existing body of knowledge, using the search terms *barriers to learning, schools, Rwanda, school-age children,* and *health-promoting schools framework/model,* separately and in combination, in EbscoHost, ERIC, Science Direct, Sabinet, SCIRUS, MEDLINE, Pubmed and Google Scholar database search engines.

In this chapter, theories and concepts in the field of school development are critically reviewed and a comprehensive theoretical framework provided, which may help the reader to understand better where the research fits into the existing body of literature.

The literature review underlines the links between the field of study and the research by presenting a chronological description of the main theoretical approaches applied to school development, together with a solid review of relevant empirical studies, with a particular emphasis on health-promoting, whole-school development programmes. Finally, concluding remarks will be made.

2.2. Theoretical Framework

The theoretical framework that underpins the study is Bronfenbrenner's ecosystemic theory of human development. Bronfenbrenner (1979; 1992; 1994), in his ecosystemic theory, argued that to understand human development, one must consider the entire hierarchy of ecological systems in which growth occurs. Bronfenbrenner (1992) conceived the ecological environment as a set of nested systems, each inside the other, like a set of Russian dolls, moving from the innermost to the outside. These systems include microsystems, mesosystems, exosystems and macrosystems,

The microsystem is the most proximal to the developing person and is comprised of the relationships between a developing person and the immediate environment. A microsystem is a pattern of activities, social roles and interpersonal relations experienced by the developing person in a given face-to-face setting, with particular physical, social and symbolic features that invite, permit, or inhibit engagement in sustained, progressively more complex interaction with, and activity in, the immediate environment. These include settings such as family, school, peer group and workplace. It is within the immediate environment of the microsystem that proximal processes operate to produce and sustain development, but as the above definition indicates, their power to do so depends on the content and structure of the microsystems (Bronfenbrenner, 1989; 1992). The microsystem encompasses the systems within the school, such as teachers, pupils, school administration, curriculum, pedagogy of teaching, classroom interactions with peers and teachers and school staff, the quality and quantity of the interpersonal and intrapersonal relationships, and the overall school climate and condition of the physical classroom, learning and teaching environment. All these factors form the microsystem of the school and can either promote effective teaching and learning or create barriers to learning.

In this study, the mesosystem comprises the interaction of more than one setting, such as school and family interactions. According to Donald et al. (2002), a mesosystem is a set of microsystems associated with one another; hence, what happens at home or at school in peer groups can influence how children respond at school. Observing this level helps in examining how the interaction between the school and the family can contribute to learning and teaching or vice versa.

The mesosystem includes the linkages and processes taking place between two or more settings containing a developing person (for instance, relations between home and school or school and workplace). In other words, a mesosystem is a system of microsystems, such as the impact of two-way communication and participation in decision-making by parents and teachers (Bronfenbrenner, 1979; 1989; 1994).

The exosystem comprises the linkages and processes taking place between two or more settings, at least one of which does not contain the developing person, but in which events occur that directly influence processes within the immediate settings in which the developing person lives. For example, a child's exosystem involves the relationship between home and

parent's workplace, while a parent's exosystem might be the relationship between the school and the neighbourhood peer groups. Other examples would be the institutions and practices that affect learning and teaching, without the child or the teacher necessarily being part of them (Bronfenbrenner, 1979; 1989).

The macrosystem consists of the overarching patterns of microsystem, mesosystem, and exosystems characteristic of a given culture or subculture, with a particular reference to the minor systems, bodies, bodies of knowledge, material resources, customs, life styles, opportunity structures, hazards, and life-course options that are embedded in each of the broader systems. Later, Bronfenbrenner (1992) added a fifth context or system, which he called the *chronosystem*, which refers to change over time. The chronosystem encompasses change or consistency over time, not only in the characteristics of the person but also the environment in which that person lives (changes over the life course in the family structure, socio-economic status, employment, place of residence, or the degree of stress and level of ability in everyday life) (Bronfenbrenner, 1994).

Bronfenbrenner's ecosystemic theory is relevant to this study for it focuses on an understanding of barriers to learning from the complex multiple interconnected ecosystemic levels of the system in the social context (Bronfenbrenner, 1986; Donald et al., 2002). The ecosystemic theory allows understanding of the barriers to learning from a broader view, beyond the individual, to consider the barriers within other systems, such as the school, the family, peers, communities, neighbourhoods and the broader society. Since the barriers to learning are not only within the individuals or in school, ecosystemic theory allows insight into understanding barriers to learning from the broader socio-economic and cultural influences at multiple interconnected systemic levels, whose collective interactional effects either contribute to effective learning or create barriers to learning (Swartz, 2007).

Applying Bronfenbrenner's (1979) ecosystemic theory in this study allows one to view the school as a system nested within its social context and how it interacts with other systems and subsystems above and below or next to it (Donald et al., 2002). According to Bronfenbrenner (1979), human beings' development does not happen in a vacuum but in ever-changing environments such as homes, family, neighbourhood and schools, which he referred to as *microsystems*. Among the others, the school is the most important microsystem, in which people's interactions are intensified and the quality and quantity of children's experiences

during their stay at school influence their development. In other words, to ensure positive experiences for children at school, which shape their development, requires that schools provide children with a favourable environment (Bronfenbrenner, 1979). According to Bowen (2004), the mesosystem level extends one's understanding of the school as an open system that interacts with both insiders and outsiders who form the other systems such as the parents, families of the children, teachers, parents' committees, neighbourhoods, communities and organisations, and local networks between the school and its wider local community. The socio-demographic features of the local community, the support structures in the community and behaviours and value expectations all contribute to the welfare of children, school staff and their communities.

According to Bronfenbrenner (1994), Bowen (2004), and Donald et al. (2010), the exosystem level helps in understanding how the school is influenced by other supra systems: the district directorate of education, the education system and related policies, community resources that support children and staff, school structures, management, resources and material supplies and allocation, teacher recruitment, deployment, development and training, availability of support services and accessibility to schools. It is essential to understand the school policies, practices, programmes, rules and regulations that guide the school at this level. Policies on curriculum, school and class size, behaviour and learning expectations and wellbeing of all in school are influenced by the district policies. The moral development, participation and involvement in extra-curricular activities and pastoral care are other areas of interest in a school that are, in most cases, influenced by the supra systems and which the ecosystemic theory helps to understand.

According to Bronfenbrenner (1992; 1994) and Donald (2010), schools operate within a broader socio-cultural, political and historical context at the macrosystemic level. Donald et al. (2010) added that examining the macrosystemic level allows an understanding and analysis of how schools operate in a larger system: influence of the provincial and national policies related to curriculum development, school health policies, national programmes, processes and practices, the education systems and related policies, as well as the support services and salary structure of teachers. The overall assumption of the ecosystemic perspective is that different levels of system in the social context influence one another continuously so that the whole is more than the sum of its parts.

According to Bronfenbrenner (1994), it also important to consider the chronosystem in order to understand how things change over time. In this study, analysis of the chronosystem helps in understanding how schools in Rwanda have transited from the time of genocide to the democratic Rwanda and how this transition has contributed to effective learning or created barriers to learning.

2.3. Barriers to Learning

The concept of barriers to learning is an international phenomenon. According to Landsberg, Krüger and Nel (2005), a barrier is an obstacle or circumstance that keeps people or things apart; it prevents communication and bars access to advancement. Lean and Colucci (2010) described barriers to learning as factors, conditions or situations that obstruct or impede academic progress, which can be temporary or permanent, whose effects can be mild, such as low marks, to severe, leading to school dropout. Landsberg et al. (2005) claimed that barriers to learning are complex and may be traced at multiple levels: within the learner, school, educational system or in the broader socio-economic and political context. The Center for Mental Health in Schools (2002) supported the latter—that barriers to learning and teaching should be considered in relation to the complex broader contexts of socio-political, economic and societal factors, which have pervasive influences on learning and teaching. In addition, the Center for Mental Health in Schools (2002) claimed that there are many reasons for wanting to differentiate barriers to learning at multiple levels so that they can be prevented, as some barriers to learning are much easier to overcome than others. The main reason for the differentiation is to identify barriers to learning that stem from the way schooling is conducted, an approach applied by Engelbrecht and Green (2001), which showed that barriers to learning are created not only by the manner in which education is organised and delivered but also because of socio-economic barriers in a particular context. Daniels (2006) supported the above view—that other important systems of which the child is part, such as the family system and the neighbourhood system, whose constituents have the potential to create a negative cycle of barriers to learning, should be taken into account. Although the contextualisation of the barriers to learning and teaching at multiple systemic levels is crucial, it is also important to understand each particular barrier to be able to address it at a particular level.

2.3.1 Barriers to Learning in Rwanda

The barriers to learning in the Rwandan context cannot be understood independently of the broader, interacting ecological, social, environmental, cultural, economic and political contexts. Rwanda has gone through difficult times that have affected all the aspects mentioned above, and their impact on the education system and other sectors cannot be underestimated. Barriers to learning are related to socio-economic and political factors; inappropriate curricula; dilapidated schools buildings; HIV/Aids; disability; language problems, gender bias; substance abuse; violence; and negative attitudes of parents, teachers, and the community.

2.3.1.1 Socio-economic barriers

Huggins and Randell (2007), in their study that investigated gender equality in education in Rwanda, pointed out that poverty in families remains a significant barrier to disadvantaged groups, such as orphan-headed households or street children, who cannot avail themselves of education at any level. Poverty in families not only prevents children from receiving education but also forces them out of school, despite the availability of fee-free education. According to Nkurunziza et al. (2012), Belsera (2011), and Huggins and Randell (2007), school children do not always benefit from the fee-free education policy as costs, other than school fees, force them out of school. These authors concur that costs for books, uniforms and school lunches are significantly high for most families, and as a result, many parents withdraw their children from school before completion of their primary education because of these small but unaffordable expenses. Nkurunziza et al. (2012) added that, in some families, children lack basic needs such as food and clothes. In addition, Belsera (2011) and the World Bank (2011) argued that the fee-free education is not entirely free as parents incur other small school costs, such as money to motivate teachers. As a result, parents who are economically disadvantaged lack financial resources to meet such costs and decide to take their children out of school, thus affecting their acquisition of education. Poverty affects learning in different ways. Nkurunziza et al. (2012) also noted that families with many children sometimes concentrate on one child's education, while depriving other siblings of their right to education. They keep them in the family business and performing other domestic chores or even send them to work for money in order to contribute to the family income. Other researchers, further afield, have reported similar findings. Adelman and Taylor (2006)

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claimed that barriers to learning may arise from restricted opportunities associated with poverty, difficult and diverse family conditions and lack of enrichment opportunities, all of which have a serious impact on the potential of children to learn. Lean and Colucci (2010) added another view, claiming that economic challenges related to unemployment in families are a potential barrier to learning. Equally important to note is that poverty not only affects learning and teaching at the family-home level, but poverty in schools has also been said to affect learning and teaching. According to Huggins and Randell (2007), the Rwanda Ministry of Education (2008b; 2010) and the World Bank (2004; 2011), public schools in Rwanda suffer challenges of inadequate facilities and resources necessary for effective learning and teaching. The WHO (2009) reported that the incidence of poverty is still high in the country, with 57% of the population living below the poverty line, 37% of which live in extreme poverty.

2.3.1.2 Politically related barriers to learning

The Rwandan Special Educational Needs Policy (2007) stated that the barriers to learning in Rwanda are due to the deep impact of the 1994 genocide in the Rwandan society. It has caused a persistently high level of poverty, irrespective of economic improvements. The effects of the genocide on schools, families, communities and the entire Rwandan society cannot be overemphasised. Obura (2003) posited that the genocide led to the total collapse of the education system, crumbling social fabric and complete erosion of faith in education, while Masire et al. (2000) added that over 1,800 schools were completely destroyed and the Ministry of Education was not spared. The 1994 genocide not only claimed a million lives but also left many orphaned. According to the WHO (2009) report, the impact of the genocide can be mostly seen in the social sector, where 22,535 children are in host families, 7000 are street children, 3751 children are in centres for unaccompanied children, and 100,956 of children live in households managed by children, many injured or disabled (Rodriguez & Samuels, 2011). While schools became slaughterhouses and sites of violence (Obura, 2003), a large number of families also inherited life-long hardships and devastation, and discrimination and oppression took its toll (Shayaka, n.d.). These effects therefore have a bearing on children's capacity to learn and on the overall state of schools. In the opinion of Lewis (2009), the 1994 genocide resulted in an increase in disability in Rwanda, not only as a direct result of the violence but also because of the breakdown of health, absence of vaccination programmes,

and lack of rehabilitation services. It also resulted in an increased interest in disability issues, at least in relation to disabled genocide survivors. This has not necessarily translated into an increase in reliable statistics on disability.

2.3.1.3 Inappropriate curriculum

According to the Rwandan Ministry of Education (2008b), the primary school curriculum is inflexible and falls short of responding to the social needs of school children, which makes it inappropriate for children's educational and developmental needs. Huggins and Randell (2007) held a similar view—that the curriculum and its delivery methods are gender-biased and do not employ student-centred teaching methodologies so do not stimulate children to learn and are extremely theoretical as well as being insensitive to gender and age particularities of children in classroom.

2.3.1.4 Barriers related to school buildings

The Rwandan Special Educational Needs Policy (2007) showed that school infrastructures impose barriers of inaccessibility for some children, especially those with disabilities. The World Bank's (2011) study on Rwanda's primary education indicated that poor learning conditions, characterised by inadequate and inappropriate, inaccessible and unfriendly school structures, imposed barriers to learning, while Karangwa et al. (2010) claimed that inaccessible school structures in Rwandan primary schools make school attendance impossible for children with disabilities. Schools also lack important facilities such as electricity, water and adequate classrooms, which makes the school environment unsupportive of learning (World Bank, 2011). Bad light has also been cited in some studies as a barrier to learning. Good natural light is the ideal, and evidence indicates that having a view from the classroom leads to positive health outcomes for both teacher and pupil wellbeing. Lack of light is not only uncomfortable but also makes it virtually impossible to see what has been written. Sometimes, children are not even aware of how little they can see because of poor lighting and or high glare (Hughes, 2010). While schools grapple with challenges to achieve universal primary education, Huggins and Randell, (2007) reported that Rwandan schools suffer a lack of sanitary facilities to the extent that menstruating girls miss school because schools cannot afford them the required privacy, thus affecting their school attendance and their performance. The Rwanda Ministry of Education (2010) also found that it faced a

challenge in dealing with inadequate and poorly maintained toilets, absence of clean water points outside the toilets, lack of appropriate toilet facilities for the hygiene needs of girls, lack of bins for solid waste, poor body and personal hygiene, and unhygienic conditions in classrooms and in and around the schools, all of which cause learning barriers. Hughes (2010) noted that school toilets are key areas in schools and often too little attention is given to them. The author added that most children choose not to use dirty toilets and rush home at the end of the day, which is both unhealthy and prevents learning from taking place. Poor attendance is encouraged if pupils need to go home to use the toilet.

2.3.1.5. HIV/Aids as a barrier to learning

According to the Rwanda Ministry of Education (2007b), the main barriers to accessing quality education for a number of children are the impacts of HIV/Aids and other related health issues. In 2007, the Ministry estimated there were 26,000 persons living with HIV in Rwanda. Williams et al. (2012) stressed that the HIV/Aids pandemic threatens schoolchildren's health and their capacity to succeed in school, a situation complicated by stigma and discrimination of children infected and affected by HIV/Aids and the absence of support services (Rwanda Ministry of Education, 2010) at all levels in school (Karangwa et al., 2010). Although Rwanda has a low prevalence of HIV/Aids, estimated at 3% in the population aged 15-49, limited data on the HIV prevalence among school-aged children in other regions is available (WHO, 2009). Landsberg, Krüger and Nel (2005) claimed that the effect of the pandemic on millions of children in South Africa is disastrous as community structures and assistance from the government and NGOs is not sufficient to provide for the needs of so many orphaned children. The authors also argued that these children have little hope of attaining academic achievement and no hope for the future.

2.3.1.6 Disability

Studies by Karangwa et al. (2010) and Nkurunziza et al. (2012) showed that children with disabilities in Rwanda experience social exclusion and deprivation. Thomas (2005) reported incidences where children with learning disabilities were expelled from school because they were not progressing academically and often needed to repeat grades. Lewis (2009), in a study on disability, observed that 10% of the school children in Rwanda were disabled. However, the study fails to provide segregated data on disability. Lewis added that although a Special

Educational Needs Policy exists, a link between the absence of support for children with special educational needs and school dropout rates has been shown. Lewis (2009) listed the forms of disabilities among school children; these include visual and hearing impairments, physical disabilities, intellectual disabilities, epilepsy, albinism and the effects of trauma. According to Lewis (2009), deaf children in Rwanda are denied their right to education as they remain behind at home while their siblings attend school. This is because of an education system that does not cater for disabled children, as the system has traditionally been non-inclusive.

2.3.1.7 Attitudinal barriers

Belsera (2011) found that an unsupportive school climate and the attitude of teachers towards children have a serious bearing on learning. According to Belsera, children's different psychosocial needs have always been neglected, despite their potential effect on learning. The author attributed this to the fact that teachers have no understanding of the emotional needs of school children, which causes learning breakdown. Discriminatory attitudes among pupils and staff towards children who are deaf and blind are potential barriers to learning that contribute to their failure to attend school and lead to them dropping out of school because of unsupportive relationships. Furthermore, Huggins and Randell (2007) reported that patriarchal-biased discrimination, which favours boys' education over girls', is also a barrier to learning. The authors added that girls suffer most as their parents still place no value on their education and prefer to keep them at home, doing domestic chores, as a way of preparing them to be become future good wives and mothers. Girls are assigned responsibilities such as family care, fetching water, gathering firewood, and taking care of their younger siblings as well as aged and sick relatives, especially those with HIV/Aids. These responsibilities keep girls from regular school attendance or reduce their time for studies, which eventually affects their school achievement and their progression to secondary education (Huggins & Randell, 2007; Nkurunziza et al., 2012).

2.2.1.8 Substance abuse

According to the Rwandan Ministry of Education (2010), children often use alcohol, tobacco and drugs such as marijuana, causing a breakdown in learning, a situation exacerbated by lack of parental support and supervision for Rwandese school-aged children. Donald et al. (2002)

and Lean and Colucci (2010) pointed out that schoolchildren's use of alcohol or drugs is a matter of grave concern.

2.2.1.9 Language of instruction as a barrier to learning

Belsera (2011) reported that children in Rwanda do not understand the language of learning, which makes learning difficult. Pupils learn in Kinyarwanda up to Grade 3, and from Grade 4 to Grade 6, they are compelled to follow their studies in English, which they do not understand and which impedes their learning, hence making their staying in school a challenge. Donald et al. (2002) also contended that language difficulties block communication, instruction and the teaching process. Landsberg et al. (2005) described a similar case in South Africa—most learners received school instructions from Grade 5 in a second language, usually English, in which neither teachers nor pupils had skills, which complicated the provision of education, thus leading to learning problems and underachievement.

2.2.1.10 Gender-based violence

In Rwanda, gender-based violence, sexual harassment and intimidation in the school environment, and the associated trauma is reported to force girls to drop out of school and abandon school for good (Huggins & Randell, 2007). Although literature on gender-based violence in schools in South Africa is sparse, it has become a serious concern there too. According to Prinsloo (2006), girls experience sexual harassment and assault at school by male learners and educators, with the possibility of unwanted pregnancies, and suffer emotional pressure and loss of self-respect. The Rwanda Ministry of Education (2007b) pointed out that violence against female students makes school attendance difficult or impossible without specific support to make it possible.

2.2.1.11 Long distances between home and school

Unavailability of or limited access to schools, related to the geographical area and school distribution, limits children from attending school if their families live far from schools, especially disabled children who are unable to walk miles from their homes (Karangwa et al., 2010). Karangwa et al. (2010) and Nkurunziza et al. (2012) emphasised that long distances between children's homes and schools in Rwanda significantly contribute to learning

breakdown as many children are prevented from attending schools when they are located over 10 kilometres away and the children are unable to walk that far, given their young age. According to the Rwanda Ministry of Education, (2007b), travelling long distances to school creates obstacles to regular school attendance and is particularly difficult for children with physical disabilities that limit their mobility.

2.4 Use of Health-Promoting Schools to Address Barriers to Learning

Since barriers to learning are complex and have an impact on learning at multiple levels, a health-promoting schools approach provides an organised framework to address barriers to learning. A health-promoting school takes an ecosystemic perspective that not only examines barriers to learning from an individual perspective but also from multiple systemic levels of environment. A health-promoting school has a holistic comprehensive approach to whole-school development to address barriers to learning. Wyn et al. (2000) defined a health-promoting school as one that takes action and places priority on creating an environment that will have the best possible effect on the health of students, teachers and school community members and which recognises the interaction and the connection between its curriculum, policies, practices and partnerships. Lee (2002) maintained that a health-promoting school goes beyond addressing behavioural change and takes into account organisational structural change, for instance, improving the school's environment, both social and physical, the curriculum, teaching and learning to foster school effectiveness. It also takes into account social outcomes, such as attitudes and behaviours, and does not focus only on the academic achievement of students. Thomas et al. (1998) and Lee (2002) observed that a health-promoting school embodies a holistic, whole-school development ecosystemic approach to health promotion in which a broader health-education curriculum is supported by the environment and ethos of the school.

Despite the limited evidence about the effectiveness of the health-promoting schools framework, the HPS has been credited for its comprehensiveness in addressing multiple complex school health and education needs (Booth & Samdal, 1997) . This is particularly so for multifaceted programmes and interventions that are not only focused on the classroom interventions but also combine the classroom programmes with the changes to the school ethos and environment, with links to the family and community involvement, which are the

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most effective. Applying the eco-holistic model of health-promoting schools not only addresses the school's physical environment but also influences the psychosocial environment of the school and introduces organisational structural changes to bring about change in schools (Pearson et al., 1996). The implementation of the HPS model within a holistic approach, as a "whole-school" initiative, without being restricted to curriculum-based strategies, has been able to promote better health behaviours (Lemerle, 2005; Pearson et al., 1996). St. Leger (2001) and Inchley et al. (2007) suggested that HPS should not be seen as a discrete endeavour but as a new way of thinking that permeates all aspects of school life and links to the core objectives of the school. The HPS approach can provide an effective framework for health-promotion practices in schools and have a positive impact on outcomes relevant to both health and education (Inchley et al., 2007). The positive outcomes in health and education are attributed by researchers to the way schools are led and managed, the participation of students and how they are treated by teachers, and how schools engage the local community. These factors build a protective environment, promote health and reduce health-risking behaviours (Colquhoun et al. 1997; Scriven & Stiddard, 2003; Simovska, 2012; Stewart-Brown, 2006; Sun & Stewart, 2007). Because of its holistic approach, HPS is based on the intersectoral collaboration and participation of the stakeholders at different levels in decision-making processes. It is multidimensional and multidisciplinary in approach, as opposed to its sister framework FRESH that addresses school health issues from a more narrow view of school health or addresses school health issues one at a time.

2.5. The FRESH Framework

After realising that ill-health among school children across the globe was undermining the efforts towards the realisation of education for all, UNESCO, UNICEF, WHO, and the World Bank, at the Education for All World Forum in Dakar in 2000, jointly initiated a common structure for a school-health initiative known as the FRESH framework (Focusing Resources of Effective School Health). The FRESH Framework was based on two bold contentions: first, the goal of universal education cannot be achieved while the health needs of children and adolescents are unmet, and second, a core group of cost-effective activities can and must be implemented, together and in all schools, in order to meet those needs and thus deliver on the promise of education for all. The partners (UNESCO/UNICEF/WHO/the World Bank) declared that the debate over the role of school health in an effort to provide basic education

to children and young people was thus resolved. The FRESH framework supports the view that policies and practices that ensure that children are healthy, thus able to learn, are essential components of an effective education system. Tang et al. (2009), in a survey among FRESH partners, indicated that the framework served as a basis for school-health advocacy in governments and provided them with some measure of optimism. The available evidence shows that the FRESH framework has been effective in combating a number of health issues. In contrast, Stewart-Brown (2006) found compelling evidence that when behavioural outcomes are achieved with the FRESH framework, they are not always sustained over time, hence posing a challenge to ensuring consistency in implementation of more effective strategies. Tang et al. (2009) claimed that the FRESH framework has shown no evidence of sustained behavioural change and has had little impact on the emerging, more complex or insidious risks to health because the framework does not holistically address the underlying social determinants of health, such as the broader socio-economic factors and their implications on the academic outcome of students. Adelman and Taylor (2006) maintained that addressing barriers to learning requires a comprehensive, multifaceted, integrated approach that takes into account the development of the whole school because barriers to learning are complex and cannot be addressed at an individual level. School-wide approaches are needed to address barriers to learning and teaching comprehensively, in order for students and teachers to succeed.

2.6. Whole-School Development

The South African Department of Education (2001) refers to whole-school development as developing the school in all its aspects as an organisation so that it is in a context that supports and encourages the provision of quality and innovative education, with the ultimate goal of improving quality of teaching and learning. To Donald et al. (2002, 2010), whole-school development is consistent with the ecosystemic framework as it considers the development of all the aspects of school life in order to promote effective teaching and learning. In the opinion of Schmuck and Runkel (1994), whole-school development refers to

> a coherent, systematic planned and sustained effort at school self-study and improvement, focusing explicitly on change in formal and informal procedures, processes and norms, or structures. The goal of organisational development include improving both quality of life of the individual as well as

organisational functioning and performance with a direct or indirect focus on educational issues (p.5).

Lazarus, Davidoff and Daniels (2000) described whole-school development as a comprehensive approach to school development, which focuses on the following aspects of school life: leadership and management, organisational culture, relationships, individual development and commitment, and teaching and learning. Furthermore, Donald et al. (2002) listed the key elements of whole-school development: identifying school culture; planning strategy, structure and procedures; providing technical support, human resources, leadership, management and governance; and considering the social context of the school.

In the view of Donald et al. (2002), these aspects are interrelated, interdependent and linked at microsystemic, mesosyetemic, exosystemic and macrosystemic levels, with recursive interactions within and between them. The purpose of whole-school development is to bring about change geared towards whole-school improvement such that schools can achieve their goal of effective teaching and learning in order for children to benefit from their education (Donald et al., 2010). Whole-school development requires that all the subsystems are considered at multiple levels to ensure that they all work together to achieve quality learning and whole-school improvement. Therefore, for whole-school development to occur requires that all the stakeholders be brought on board and that each contributes optimally towards the effectiveness, improvement and development of the school. According to Donald et al. (2002), Fullan (1992), Dalin (1998), and De Jong (2000a, 2000b), whole-school development encompasses concepts such as school effectiveness, school improvement and school organisational development. Such practices, in turn, create an enabling school environment for effective teaching and learning as their implementation minimises the barriers to learning and teaching (Hopkins, 1996). De Jong (1999), in a review of six studies, concluded that the key elements for whole-school development were school environment, parental involvement and support, shared vision and goals, professional leadership, high quality teaching and learning, high expectations, and a sense of community within the school.

One of the whole-school development approaches, recognised as best practice internationally, is the health-promoting schools framework. Moolla (2011) considered that whole-school development refers to the change of the *entire* school environment, including its surrounds, physical environment, the psychosocial aspects of the ethos and climate, teachers, pupils,

school management and management personnel, parents and other stakeholders involved in the life of a school, such as learning and school development.

2.7. Health-Promoting Schools

The health-promoting schools model is a World Health Organisation initiative to promote the health of young people in schools in Europe (Tjomsland et al., 2009).

According to WHO (1993),

> A health-promoting school aims at achieving healthy lifestyles for the total school population by developing supportive environments conducive to the promotion of health. It offers opportunities for and requires commitments to, the provision of a safe and health enhancing social and physical environment (p.2).

Saab (2009) and Weare, (2001) maintained that in order to promote health, a comprehensive whole-school development approach involving all aspects of the school as an organisation is needed. Thus a health-promoting school is a

> place where all members of the school community work together to provide students with integrated and positive experiences and structures which promote and protect their health. This includes the formal and informal curricula in health, the creation of a safe and healthy school environment, the provision of the appropriate health services and the involvement of the family and wider community in efforts to promote health. (WHO, 1996b, p. 2)

The features that distinguish the health-promoting schools (HPS) framework from other frameworks, such as FRESH, are well documented. According to Tjmosland (2009) and Kickbusch (2003), one is that HPS recognises that the health and wellbeing of students and staff are not only influenced by individual choices but are also influenced by the context in which they learn, work and play. In the opinion of Tjmosland (2009), HPS is a multifaceted approach that attempts to build supportive physical and social school environments that promote students' capacity to make healthy choices and to develop positive attitudes and relationships through life skills and to create links with the community. St. Leger (1999) claimed that HPS has been enthusiastically embraced internationally, where the six components enshrined in the HPS framework guidelines have been applied: school health policies, physical environment of the school, school's social environment, community links, personal health skills, and health services.

The WHO (1999) report stated that, along with the six components mentioned above, schools were further guided in becoming health-promoting by applying the following tenets:

1. Fosters health and learning with all the measures at its disposal and in its remit;
2. Engages health and education officials, teachers, students and parents and the community leaders in efforts to promote health;
3. Strives to provide a healthy environment, school health education, and school health services along with school/community projects and outreach, health promotion programmes for staff, nutrition and food safety programmes, opportunities for physical education and recreation, and programmes for counselling, social support and mental health promotion;
4. Implements policies, practices and other measurements that respect an individual's self-esteem, provide multiple opportunities for success, and acknowledges good efforts and intentions as well as personal achievements;
5. Strives to improve the health of school personnel, families and community members as well as students and works with community leaders to help them understand how the community contributes to health and education. (WHO, 1999, p. 19)

The health-promoting schools model has become the international model of best practice even if definitions and concepts of the model vary, based on the circumstances of the developing context. Booth and Samdal (1997) identified the key components that unify all HPS models as the formal curriculum, the school ethos (the social climate), the physical environment, the policies and practices of the school, the school health services, and the school-home-community interaction.

2.8. Health-Promoting Schools Models

According to the Australian Health-Promoting Schools Association (n. d.), health-promoting school models differ nationally and internationally. In a personal communication, O. Samdal (September 1, 2012) stated that the health-promoting schools model differs locally, nationally, regionally and internationally because each is highly context-specific, taking into account special cultural aspects and needs. The HPS models are built on the Ottawa Charter principles of health promotion, emphasising the empowerment and influence of the users, that is, the school staff and students, but no specific models have been developed. Rather, the schools

themselves have been encouraged to develop approaches based on their specific needs. The other reason mentioned by Samdal was that little systematic evaluation of health-promoting school initiatives has taken place, so it is thus difficult to identify specific models that can be implemented in any context. Simovska (2012) explained that, in practice, the concept of health-promoting schools has been interpreted differently in different cultural, geographical and educational contexts, thus obtaining a wide range of meanings.

Different interpretations emphasise different aims and expected outcomes of health-promoting schools. Jensen and Simovska (2002), in a publication mapping different models of health-promoting schools used in different countries, observed that the models of health-promoting schools use different visual ways of illustrating the model at work in the particular country in which they are developed. However, because they are all informed by the Ottawa Charter (WHO, 1986), they share certain identifiable commonalities (Cushman, 2008). Similarly, Jensen and Simovska (2002) commented that a variety of approaches and many different ways in which components of health-promoting schools were constructed, reconstructed and deconstructed over time are employed in different educational and cultural contexts. They emphasised that dynamic interplay exists among various political, social, economic and other aspects, which influences what priorities are set and which methods are implemented in the development of the health-promoting schools approach in each particular country. Jensen and Simovska (2002) made the important assumption that it is not possible or desirable to create a model of a health-promoting school that is universal to all countries as needs and circumstances differ. Every model is a result of dialogue and consensus among its constructors and has meaning within a certain value framework in a particular context. They maintained that a health-promoting school is more of a process of contextual interpretation than an outcome of the implementation of the global principle (Jensen & Simovska, 2002).

The following section presents examples of health-promoting schools models and their components from different countries and continents, for example, the Australian, New Zealand, Polish, Icelandic and United States of America's health-promoting school models. The purpose of presenting HPS models from different contexts is to show how these models are context-specific, based on the needs, priorities and circumstances of different countries. They take different graphic shapes and have different components. Each model is a result of the context of its development. A comparison of the models is made at the end.

2.8.1 The Australian Health-Promoting Schools Model

This model is composed of three intersecting components: curriculum, teaching and learning; school organisation, ethos and environment; and partnership and services. For each component, feasible activities have been developed to enable schools to attain the health-promoting schools status. Australian schools have embraced the HPS model for its cost-effectiveness, efficiency and efficacy. The model is built on the intersectoral collaboration between health and education sectors in an effort to promote wellbeing of individuals and communities (Renwick, 2006). The three components synergistically form a health-promoting school. The curriculum, teaching and learning component encompasses health topics integrated into other subjects, a planned sequential curriculum, student-centred teaching, experiential teaching and pre-service and in-service training. The school organisation, ethos and environment component encompasses the following: health-promoting schools policy, a caring ethos underpinning social interaction, respect for diversity, social justice, staff health and social welfare, occupational health and safety, resource allocation for health, clean physical activity areas, passive recreation areas, and shade. The partnerships and services component includes school community members' involvement in initiatives about development and implementation of school health policies and programmes; school welfare services; community use of school facilities; alliances formed with health, welfare and local community agencies; and school health services that include screening, immunisation, education of teachers and parents, expert advice on referral and policy development.
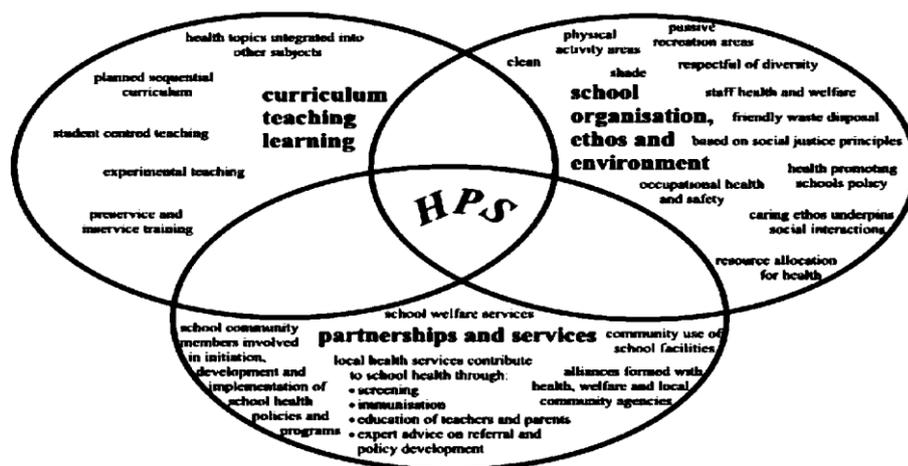
Figure 1. **The Australian health-promoting schools model**

(Source: Adapted from Renwick, 2006).

2.8.2 New Zealand Health-Promoting Schools Model

The model is comprised of three intersecting components, which include curriculum, teaching and learning, school organisation and ethos, and community links and partnership, as presented in Figure 2 below:

Figure 2. **The New Zealand model of health-promoting schools.**
(Source: Adapted from the support manual, New Zealand Ministry of Health (2003).

The model has been embraced by New Zealand health and education practitioners to assist in planning for strategies to enable the implementation of the health-promoting schools concept and to make sure that the implementation is co-ordinated within the three components. The curriculum, teaching and learning component includes key school community issues, skills, knowledge, attitudes, teaching and learning methods, comprehensive, sequential health and physical education programmes, as well as resources, ensuring that health is integrated across different curriculum areas. The school organisation and ethos component includes relationships (staff, students and community), school organisation and practices, policies and codes of behaviour, physical, social and emotional environment, health as an integral part of whole-school management, and planning. The community links and partnerships component includes the involvement of the wider school community in health-promotion activities, in line with the needs of the school community. This involves positive working relationships on which to build collaboration and partnership, particularly between parents and health service providers, but also between health and education sectors.

2.8.3 Polish Health-Promoting Schools Model

Barnekow et al. (2006) described the Polish model as a comprehensive model operating within the education sector but influenced by the health sector. It takes into consideration many cultural factors of the user but also gives attention to particular needs of different

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schools. The model is intended to create conditions and develop activities that foster the wellbeing of the school community members and individual actions for their own health and that of others. The model is based on Maslow's hierarchy of needs, with an open top. At the bottom are two levels relevant to conditions required for effective activities within a school context. The middle part of the model represents the three main directions of health-promoting schools activities. The open top of the model represents expected and unexpected outcomes of the activities characteristic of health-promoting schools (Barnekow et al., 2006).
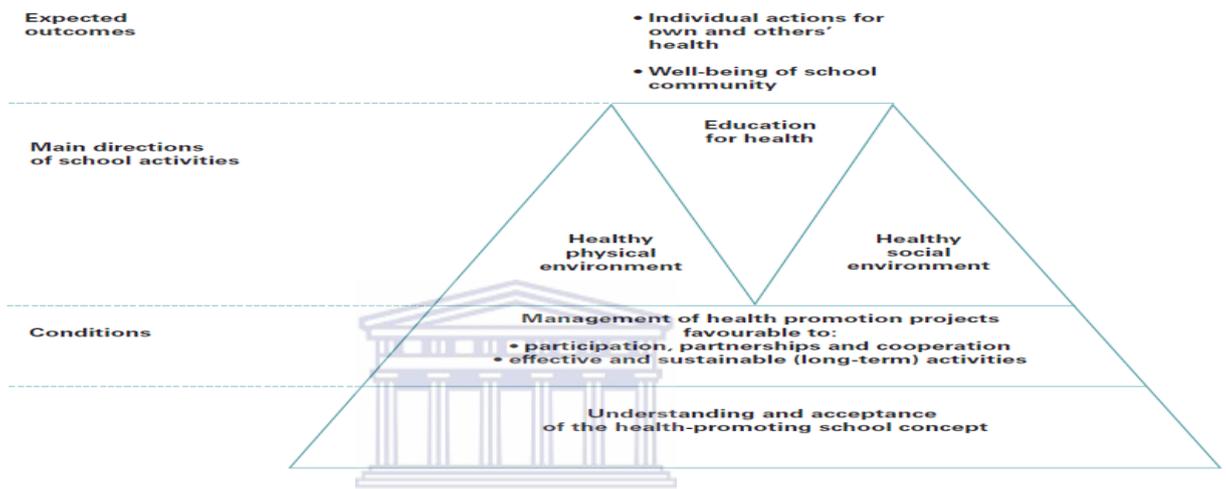
Figure 3. **The Polish health-promoting schools model**
(Source: Adapted from Barnekow et al., 2006).

2.8.4 Icelandic Health-Promoting Schools Model
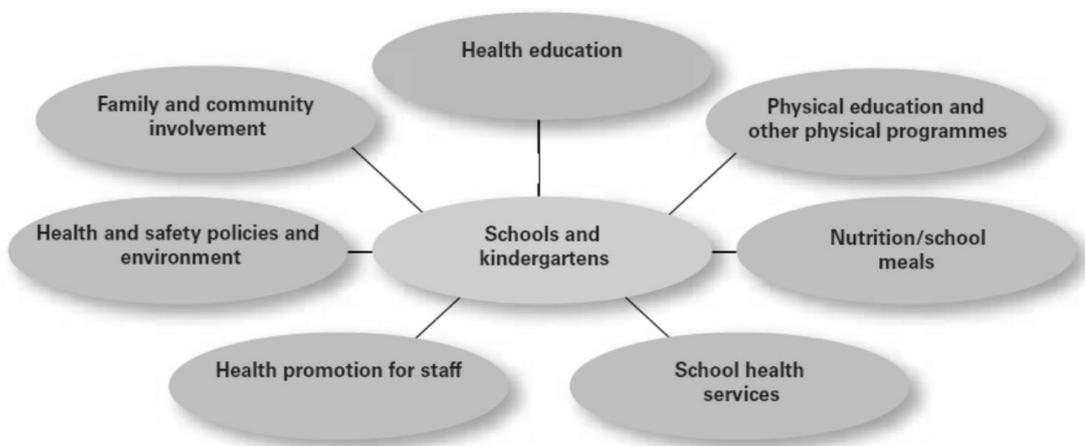
Figure 4. **The health-promoting schools model in Iceland.**
(Source: Adapted from Barnekow et al., 2006).

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Barnekow et al. (2006) the health-promoting schools model in Iceland was developed to support schools wanting to engage in health promotion in its wider range. It covers seven components that include family and community involvement, health education, physical education, nutrition and school meals, school health services, health promotion for staff, health and safety policies and the environment (see Figure 5 below). To achieve this entailed involvement of all the stakeholders in planning together the possible strategies to improve the school system (Barnekow et al., 2006).

2.8.5 The United States Co-Ordinated School Health Model
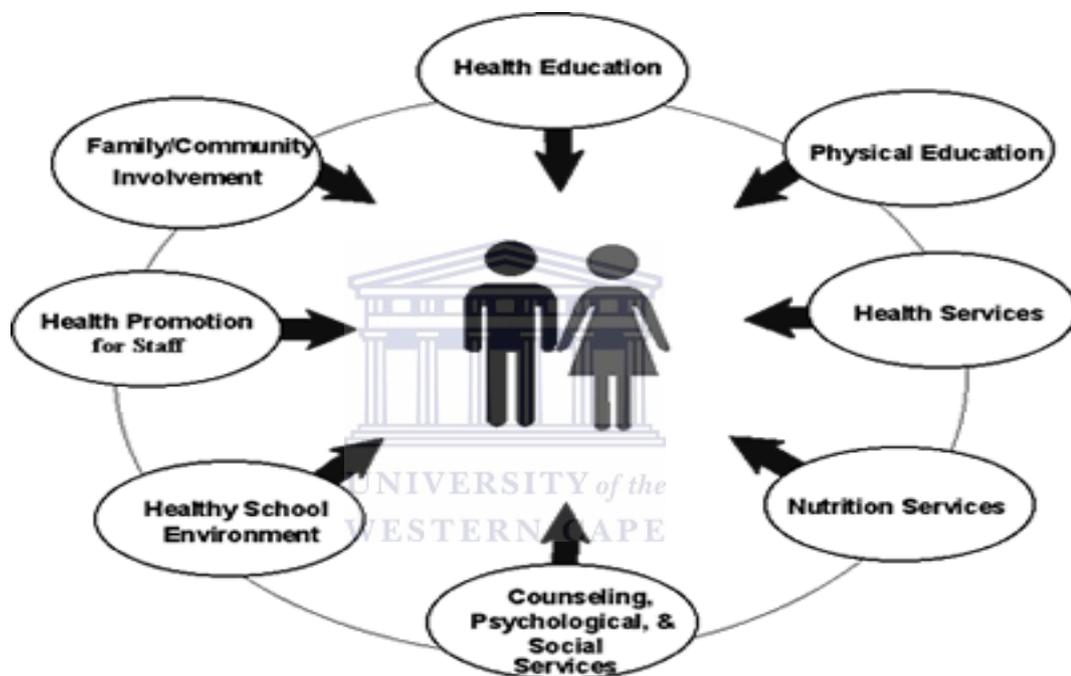
Figure 5. U.S Co-Ordinated School Health Programme (CSHP)

(Adapted from Bogden (2006*). CDC's coordinated school health program*.

The co-ordinated health model for schools is composed of eight interlinked and interrelated components, which include the following tenets:

➢ Health education is a planned, sequential curriculum that addresses the physical, mental, emotional, and social dimensions of health;

➢ Physical education is a planned, sequential curriculum that provides learning experiences in a variety of activity areas that all students enjoy and can pursue throughout their lives;

➢ Health services are provided by health professionals and available to students to appraise, protect, and promote health, including counselling and educational opportunities;

➢ Nutrition services provide access to a variety of nutritious and appealing meals that accommodate the health and nutrition needs of all students;

➢ Counselling and psychological services are services provided by professionals to improve students' mental, emotional and social health;

➢ Healthy school environment involves the physical and aesthetic surroundings and the psychosocial climate and culture of the school that affect the wellbeing of students and staff;

➢ Health promotion for staff provides opportunities for the staff to improve their health status through health assessment, health education, and health-related fitness activities;

➢ Family and community involvement is an integrated school, parents and community approach for enhancing the health and wellbeing of students. (Allenworth & Kolbe, 2009; Deschesnes et al., 2003; Samdal, 2008)

2.8.6 Comparison of Health-Promoting Schools Models

Although the health-promoting schools are context-specific, they share some commonalities and differences. All the models are comprehensive and multifaceted in approach. They cover various aspects of school life that provide many learning opportunities for the schools in context. Each of these models has been developed based on the Ottawa Charter "action areas" of health promotion. All the models are built on the intersectoral collaboration between the health and education sectors. However, the Australian and New Zealand models make this intersectoral collaboration explicit, while the Polish model mentions partnerships and co-operation without making it clear who is intended to collaborate and co-operate with whom. All the models were built with the intention to create supportive environments, conducive to promoting wellbeing of the school students and school staff. The Australian and New Zealand health-promoting schools models are similar in structure and content. Both models are depicted in intersecting circles with HPS in the centre. The Australian, New Zealand, Icelandic and US models are more explicit in terms of components compared to the Polish model. The US and Icelandic models offer health education and nutritional services, which are not clear in other models. The US and the Icelandic models have seven similar components, with the exceptions of counselling and psychological social services, which are

included in the US co-ordinated schools health model. The US, Australian and Icelandic models emphasise the health promotion of the school staff and of the entire school community.

Equally important to note are *differences* between these health-promoting school models. For example, not all models offer counselling and psychological social services to students. This may reflect the context-specific needs. In the Australian and New Zealand models, health education is integrated across curricula in health subjects, while the US and Icelandic models offer health education as a subject; otherwise, it is not clear if it is also integrated across curricula. While the Australian and New Zealand and Icelandic models explicitly have school policies in their components, in the US and Polish models, school policies are not included.

The structures for the US, Icelandic and Polish models are different, with the US model depicted in a circle with two children, male and female, central to the circle, with arrows to indicate how the components in the model contribute to their wellbeing. The Icelandic model makes it clear that the model also serves kindergarten schools, something that other models do not show. The Polish model is based on Maslow's hierarchy of needs and places greater emphasis on respect for cultural diversity and local school needs. Under the US model, the social environment is covered under physical education, but in the Australian and New Zealand models, social environment falls under ethos and school organisation. In the Polish and Icelandic models, it is unclear where this important aspect of the HPS model is addressed.

The Australian model makes its expectations for discipline and behaviour clear, while these remain unclear in other models. It also emphasises an in-service and a professional development component for their schools that other models do not have. The Polish HPS model emphasises evaluation of the HPS activities that other models do not indicate. Important to note is that these differences are the ones that make these models context-specific and that they are fully respected.

2.9 The Link between Physiotherapy and Health Promoting Schools

This section discusses the link between the physiotherapy discipline and the health promoting schools framework. The World Confederation of Physical Therapy (WCPT) defined physiotherapy as "services to people and populations to develop, maintain and restore maximum movement and functional ability throughout the lifespan" (WCPT, 2002). Health promotion refers to "the process of enabling people to increase control over and to improve their health" which includes developing supportive environments (World Health Organization, 1986). In the WHO Health Promotion Glossary, "settings for health" are defined as the place or social context in which people engage in daily activities in which environmental, organizational and personal factors interact to affect health and wellbeing. The settings identified by the World Health Organization include; Healthy Cities, Villages, Municipalities and Healthy Islands, Schools, Health Promoting Hospitals, Healthy Marketplaces and Health Promoting Workplaces projects (WHO, 1998). The focus for this current study is on schools as a setting for health thus the concept of health promoting schools.

In practice there is a potential link between physiotherapy and health promoting schools through health promotion despite the core profession particularities and the underlying philosophical underpinnings. The common links is that both disciplines originates from health field and they are both population focused on and in practice utilise the social model of health. Physiotherapists and other health professionals have been challenged to embrace the social model of health rather than the biomedical model that has limited health services within the hospitals, clinics and centre, failing to reach out to the communities with complex health needs using the settings approach (Canadian Physiotherapy Association, 2005).

The UNESCO Salamanca Statement (1994: Section D, 49) emphasises the importance of support services for schools to ensure all children can learn, in its framework for action where it states that: "Provision of support is of paramount importance for the success of inclusive educational policies". The United Nations, in its standard Rules on the equalization of Opportunities for Persons with Disabilities, reaffirms the importance of support services. It

states that to ensure equal opportunities for people with disabilities requires adequate and appropriate support services (United Nations, 1993a).

Such international legislative conventions concerning the promotion of inclusive education have had significant influences on physiotherapy model of support provision. Struthers, (2005) contends that physiotherapists are required to shift from a medical model of support to an educational or social model of support. As a result physiotherapists and other therapists are expected to support educational rather than medical goals (Connolly & Anderson, 1978; McLaurin, 1984; Swinth & Hanft, 2002; Thompson & Lillie, 1995). Law and colleagues refers to this paradigm shift by therapists as a holistic or ecological model of education support that involves the shift from mainly providing direct support for individual learners, who were diagnosed with problems that therapists could treat, to mainly providing indirect support for all learners through the therapists' support for teachers and parents (Law et al. 2002), a philosophy underpinning the health promoting schools framework. In other words therapists are required to shift from direct support to indirect support physical therapy support services, often called consultation that occurs when physiotherapists use their knowledge and skills to help school children without direct interaction between the two. That is to say, physiotherapists collaborate with educational professionals to enable them implement specific activities (Sergi, 1996). However, because physiotherapists have the ultimate responsibility for the children's physiotherapy program, there is always an element of direct contact with children in an indirect support service provision model.

According to Dunn (1988) there are three models of support provision used by physiotherapists and these include: direct service provision, monitoring and consultation. Dunn, (1988) Struthers, (2005) and Bundy (1995) contend that direct service provision entails the use of specific techniques with an individual learner or small group of learners either inside or outside the classroom. It is however acknowledged that this approach requires therapists to have vast knowledge and use of clinical judgement, e.g. knowledge of musculoskeletal system and the control of movements to gain motor skills. For Struthers, (2005), direct service provision approach is still used internationally despite the need for indirect support. Struthers warns about the danger of "pull-out" nature of direct service

provision, where the learner is taken out of the classroom and treated in a separate area, with little or no carry-over of skills and considerable possibility of suffering social embarrassment on the child's side for it affects the child's learning time when withdrawn from classroom.

The monitoring model of service provision entails the therapists teaching the teacher, parent or another person how to perform a particular activity/procedure with a learner and then monitoring how this person is performing the procedure or the activity (Bundy, 1995; Harn et al., 1999 and Struthers, 2005). Dunn, (1988:719) asserts that such procedures may include "activities of daily living, positioning and handling, reach and grasp, fine motor skill development, or coordination needs". However, Harn et al., (1999) warns that for the monitoring model to be efficient the therapist should be clear about the specific educational need of the learner.

According to (Bundy, 1995) the consultation model of service provision works best when the need is to change the school environment, that is both human and non-human environment, as well as the school system such that the learner may succeed at school. Despite the three models of support provision described by Dunn (1988), the international literature recommends the indirect support provision as the one that provides positive outcomes (Struthers, 2005), a similar approach used in health promoting schools practice.

This calls for the support services including physiotherapy as well as other relevant services by other therapists to offer educational support services and these include physiotherapists, occupational therapists, speech therapists and language therapists (Peters-Johnson, 1996).

According to the Canadian Physiotherapy Association, (2002), physiotherapy is an independent self-regulated, well-positioned health care profession with the necessary education and experience to address the needs of health promotion and disease prevention, both on an individual basis as well as that of the community.

Sergi, (1999) posits that physiotherapy as an educational support service can focus on removing barriers from school children's ability to learn, helping school children develop skills which increase their independence in the school environment, and educating school personnel about the different considerations required for school children with disabilities. The author adds that physiotherapists are responsible of identifying motor function abnormalities, joint mobility limitations and other neurophysiologic dysfunction that prevent school children

from participating in educational activities. It is further argued by Sergi that physiotherapists in schools not only examine but also intervene to improve students' functional abilities in school classrooms, hallways and other areas that may be part of the educational environment.

Sergi (1999) further asserts that physiotherapists work with teachers to help school children acquire functional abilities necessary to access educational materials and move about the school in order to function better in classrooms, the lunchroom or restrooms. The author contends that physiotherapists may work with school children or with the school personnel on adapting or modifying their equipment/ or materials. Other assistance according to Sergi include but not limited to helping school children participate in activities outside of the school through mobility on field trips, sports events, on playgrounds and within the community, but also teach alternative methods, and facilitate the use of assistive devices. For Sergi, school physiotherapists work with other educational professionals, members of the community and families to help all school children engage in their educational activities.

In the USA, Levangie accused physiotherapists of using "inappropriate and outmoded systems for providing services" (Levangie, 1980:774). In addition, Struthers, (2005) adds that physiotherapists were criticised for continuing with a medical model of support and not being a supportive part of the educational process and giving low priority to providing support for and sharing knowledge with teachers, parents, other professionals and the community. However, according to Levangie, physiotherapists were afraid of losing their professional identity, a situation caused by lack of professional and legislative guidelines defining their responsibilities in this regard (Levangie, 1980). In response to these professional and legislative guideline gaps, professional associations and government agencies drew guidelines and policies about the implementation of Public Law 94-142, including the "Guidelines for physical therapy practice in educational environment" by the American Physical Therapy Association (McLaurin, 1984; Struthers, 2005:65).

In its vision, the Canadian Physiotherapy Association, (2002) highlighted that health care is broader than acute care and institutional services and must include self-care, health promotion, disease prevention, community support, ambulatory primary care and rehabilitation services, the components of health care that physiotherapy contributes to. Perreault, (2008) and Madeleine et al. (2010) highlight the conceptual and practical links between the fields of physiotherapy and health promotion. The authors note that both

physiotherapy and health promoting schools use health education as a strategy for improving health.

2.10 Summary and Conclusion

Chapter 2 presented the literature review for the study. It began by presenting the organisation of the review, using the key search terms and database engines. The chapter proceeded with a description of the theoretical framework that guided and grounded the study within its theoretical base, after which the literature review that informed the study was discussed. The ecosystemic theoretical perspective was explored and discussed. The findings of the literature review concerning the barriers to learning and the role of a health-promoting school in addressing barriers to learning were presented and examined in detail. The concepts of the FRESH framework, whole-school development and health-promoting schools models were discussed and applied to the current study. The chapter also presented other health-promoting schools models and a comparison between them was made to assess their similarities and differences. In Chapter 3, the development of the health-promoting schools for Rwanda is described.

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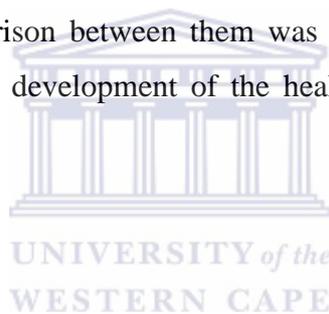
CHAPTER 3: HEALTH-PROMOTING SCHOOLS MODEL DEVELOPMENT

In this chapter, Phase 1 of the study, which was aimed at developing a health-promoting schools model for Rwanda is presented. It is organised into four sections: Section 1 covers the methodology and Section 2 presents the findings. In Section 3, the findings are discussed and in Section 4, the proposed health-promoting schools model for Rwanda that has been developed from the findings is described.

3.1. Section 1: Methodology

In this section, the research aims and research questions, and a detailed discussion of the research design used in the study are presented. A description of the study context, approaches used to select the schools and participants and the criteria for inclusion in the study sample are discussed. The development process of the interview-guide and its implementation for data collection is described. The methods used for collection of data, and the justification for their appropriateness in this study, are detailed. The procedures undertaken to analyse the data, together with an elaboration of how the data were transcribed, translated and analysed, are described. The procedures taken to enhance the trustworthiness of the findings and ethical approaches in this study are listed.

3.1.1 The Study Aims and Research Questions

This phase of the study was aimed at developing a health-promoting schools model based on a conceptual framework that is appropriate to address barriers to learning and to promote healthy development of school-aged children in Rwanda. The research question for this phase of the study was

> RQ1: How does a health-promoting schools model provide an appropriate strategy to address barriers to learning and promote healthy development of school-aged children in Rwanda?

To achieve the research aim and answer the research question, the following six objectives were set:

1. To identify the schools' health policies,

2. To explore the schools' physical environment,

3. To describe the schools' social environment,

4. To identify the personal health skills among the school children

5. To explore the integrated schools' health services, and

6. To explore the school and community links.

3.2 Overview of Study Methodology

The choice of the study design for this inquiry was driven by the research questions and the aims of the study. I, the researcher, realised that neither qualitative nor quantitative approaches were sufficient to answer the overarching research questions and the purpose of the study. Thus, I took a pragmatic stance, deciding to use both qualitative and quantitative approaches in order to achieve the aims and objectives of the study. One research question lends itself to qualitative methods and the other to quantitative methods. Onwuegbuzie and Leech (2005) asserted that certain research questions lend themselves more to quantitative approaches, whereas other research questions are more suitable for qualitative methods. Thus, the mixed methods research approach was chosen to guide this inquiry.

3.2.1 Mixed Methods Research Design

The mixed methods research approach was the preferred approach for this study. A qualitative research approach is applied in the development of the model, while a quantitative research with also a qualitative component is employed to evaluate the developed model. According to Onwuegbuzie and Leech (2005), the purposes of qualitative research are those of theory building, whereas in quantitative research, most typical purposes are those of theory testing and theory modification. Thus, both qualitative and quantitative research techniques were used in order to gain a more complete understanding of the schools' health-promoting and inclusivity conditions by collecting and analysing qualitative and quantitative data, using multiple strategies and approaches.

The proponents of mixed methods research design suggest different reasons for using mixed methods and these include the following:

> *Answering different research questions*: Creswell and Plano Clark (2007) and Doyle et al., (2009) argued that mixed methods research helps answer the research questions that cannot be answered by quantitative or qualitative methods alone and provides a greater repertoire of tools to meet the aims and objectives of a study.

> *Offsetting weaknesses and providing stronger inferences*: Snape and Spencer (2003) viewed strategies appropriate to different types of research questions as complementary. Onwuegbuzie and Johnson (2006) posited that the goal of using mixed methods is to utilise the strengths of two or more approaches by combining them in one study. Doyle et al. (2009), Bryman (2006) and Creswell et al. (2003) argued that utilising a mixed methods approach can allow for the limitations of each approach to be neutralised while strengths are built upon, thereby providing stronger and more accurate inferences.

> *Completeness*: Creswell et al. (2004) asserted that neither quantitative nor qualitative methods are sufficient in themselves to capture the trends and details of the situation. Thus, using a combination of research approaches provides a more complete and comprehensive picture of the study phenomenon.

> *Explanation of findings*: Doyle et al. (2009) argued that mixed methods studies can use either research approach (quantitative or qualitative) to explain the data generated from a study using the other research approach. This is particularly useful when unanticipated or unusual findings emerge. For example, findings from a quantitative survey can be followed up and explained by conducting interviews with a sample of those surveyed to gain an understanding of the findings obtained.

> *Triangulation*: According to Doyle et al. (2009) and Creswell and Plano Clark (2007), mixed methods allows for greater validity in a study by seeking corroboration between quantitative and qualitative data.

> *Illustration of data*: Doyle et al. (2009) and Creswell and Plano Clark (2007) claimed that using a qualitative research approach to illustrate quantitative findings can help paint a better picture of the phenomenon under investigation. Bryman (2006) suggested that this is akin to putting 'meat on the bones' of dry quantitative data.

> *Hypotheses development and* testing: Doyle et al. (2009) and Creswell and Plano Clark (2007) suggested that a qualitative phase of a study may be undertaken to develop hypotheses to be tested in a follow-up quantitative phase.

> *Instrument development and testing*: A qualitative study may generate items for inclusion in a questionnaire to be used in a quantitative phase of a study (Creswell & Plano Clark, 2007; Doyle et al., 2009;).

This study employed a mixed methods research approach in order to develop the model but also, at the same time, to cover almost all the other rationales for using the two traditions.

3.2.2 Exploratory Sequential Design

This design started with qualitative data, to explore schools' health status, based on the six health-promoting schools framework guidelines (see section 3.4.1), in an attempt to identify the themes and constructs and to develop the model that informed Phase 2.
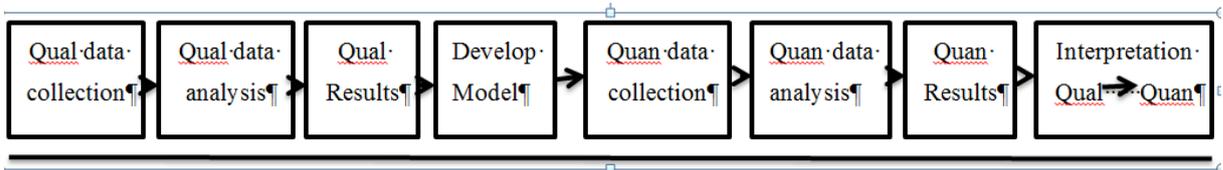
Figure 6. **Exploratory sequential design.**

(Source: Taxonomy development model adopted from Creswell and Plano Clark, 2011, p.76).

The health-promoting and inclusiveness experiences of schools were first explored through participants' views by collecting and analysing data qualitatively. The emergent themes were used to develop the health-promoting schools model that was subsequently evaluated in the quantitative phase (Phase 2) of the study (Creswell & Plano Clark, 2011). In a sequential approach, quantitative or qualitative data collection may serve as a basis for the next data collection and analysis stage. This approach is ideal when one phase can contribute to the next phase and enhance the entire study (Creswell et al., 2004; Hanson et al., 2005). Creswell (2009) asserted that the exploratory sequential design is particularly useful when a researcher needs to develop and test a model because no proven model is available and when variables are unknown. The following section presents an illustration of the all-over study methodology in Figure 7.
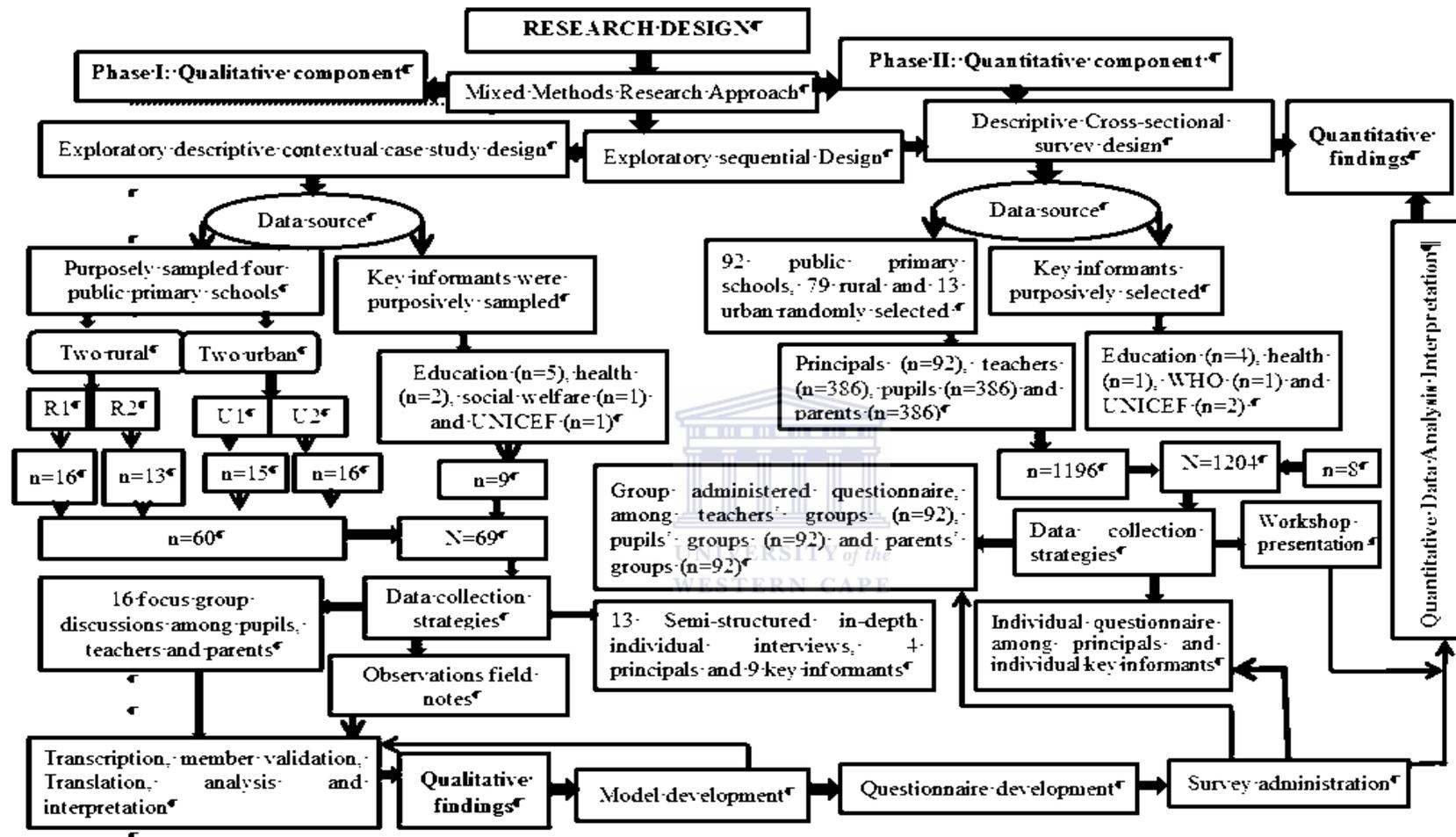
Figure 7. **Research design flowchart**

The nature of the research aim and research question demanded a specific research approach and design in order to address the overall research goal.

3.2.3 The Research Approach and Design

In the following section, the research paradigm and its philosophical underpinnings within which the study is grounded are presented. The constructivist-interpretive paradigm that guided the choice of research methods employed for this study is described.

3.2.3.1 The research paradigm

A research paradigm is a set of beliefs and assumptions that guide thinking and inquiry (Denzin & Lincoln, 1994; Morgan, 2007). Hanson et al. (2005) asserted that the philosophical assumptions of a paradigm can be understood in terms of epistemology (how we know what we know), ontology (the nature of reality), axiology (the place of values in research) and methodology (the process of research). Morgan (2007) stated that paradigms influence the questions that researchers pose and the methods they employ to answer them. The research question called for the use of the constructivist-interpretive paradigm as a theoretical lens to understand the research phenomena. This paradigm is based on the assumption that reality is constructed (ontology). Denzin and Lincoln (2005) described a research paradigm as a frame of reference that is employed to organise observations, experiences and ways of thinking in order to make sense of the world and phenomena within it. I, as the researcher, went to the field with an open mind to learn how participants experienced, understood, structured and interpreted the multiple realities of the school health situation in their social context (epistemology), using multiple approaches to discover the dynamic complexities of these multiple realities (methodology) within the cultural and societal values (axiology).

Mertens (1998) advocated for the use of the constructivism-interpretive paradigm because knowledge is socially constructed by people active in the research process, saying that researchers should attempt to understand the complex world of lived experience from the point of view of those who live it. Similarly, Blaikie (2000) contended that the investigator goes into the social world to attempt to understand the socially constructed meanings and then re-interprets the meanings in social, scientific language and develops this into theories. In other words, knowledge is constructed by the participants and interpreted by the researcher

through the relationship between the researcher and the researched. The constructivism-interpretive paradigm is appropriate for this study because it merges well with the grounded theory used in the study and it applies to both qualitative and quantitative research traditions (Creswell & Plano Clark, 2007).

3.2.3.2 Research design

According to Yin (2003), a study design refers to an action plan that guides the research from the questions to the conclusions. It includes steps for collecting, analysing and interpreting evidence and findings. The choice of the study design for this inquiry was driven by the research questions and the aims of the study (See section 3.1.1). An exploratory descriptive contextual case-study design was employed.

3.2.3.3 Exploratory descriptive contextual case study design

Because of its explorative, descriptive and contextual features, qualitative research (Marshall & Rossman, 1999) provides the most appropriate research design to explore and describe the attributes of school health promotion and inclusiveness within the schools' natural context and the participants' natural world. The development of a health-promoting schools model in the context of Rwandan schools is a new area and, as a result, little is known about what the components of a suitable health-promoting schools model should be. Marshall and Rossman (2011) indicated that exploratory studies are usually conducted to investigate little-understood phenomena, to identify or discover important categories of meaning and to generate hypotheses for further research. The exploratory case-study research design was chosen as the appropriate design through which to understand the schools' health status and conditions in which schools operated. This allowed me to explore questions of "what", "how" and "why" about the health promotion practices in schools, beliefs, values and attitudes, and processes by which these attitudes and behaviours were constructed from the participants' worldview. Lewis (2003) proposed that case-study designs should be used where no single perspective can provide a full account or explanation of the research issues, and where understanding needs to be holistic, comprehensive and contextual. For Yin (2003), a case-study design should be considered when

(a) the focus of the study is to answer "how" and "why" questions;

(b) one cannot manipulate the behaviour of those involved in the study;

(c) one wants to cover contextual conditions because they are relevant to the phenomenon under study; or

(d) the boundaries are not clear between the phenomenon and the context.

Observing the case of a single school would not have allowed for a complete understanding of the complexities of school health; thus, a number of schools were sampled, taking into account rural and urban perspectives. This helped to capture both the breadth and depth of health-promotion realities, to inform the model development. Yin (2003) described how multiple case studies can be used to either predict similar results or predict contrasting results, and evidence created from this type of study is considered robust and reliable, but it can also be extremely time consuming and expensive to conduct.

3.3.1 Research Setting

The study was conducted in the four selected public primary schools. Two rural schools (R1 and R2) were selected from the two provinces: R1 from the Eastern Province, R2 from Northern Province. The two urban schools (U1 and U2) were selected from Kigali City. These schools exhibited common features that made them information-rich schools from which more about the conditions and situations, processes and practices, attitudes and beliefs in which health promotion in schools is manifested could be learned.

The Eastern Province and Northern Province share similar historical, political, economic and social characteristics, as described in detail under the section on schools' description and criteria of inclusion. The two Provinces were established in January 2006 as part of the government decentralisation of local administration programme. The four districts in these Provinces and Kigali City, from which the schools were drawn, were also established then. The U1 and U2 schools became part of the city in the 2006 decentralisation programme and this partly explains why these schools exhibit features similar to their rural school counterparts.

3.3.1.1 Primary schools in Rwanda

Primary schools in Rwanda are organised under three categories: public, public-subsidised and private. Primary education is mostly provided by the public sector and the public-subsidised schools, with private primary schools, mostly based in Kigali City, accounting for only 1% of the provision of primary education and owned by private institutions and non-governmental organisations (Hayman, 2005). According to Obura (2003), 70% of primary schools in Rwanda are owned by faith-based organisations, while almost all the primary schools are public-subsidised. Private primary schools are considered to be better equipped than their public counterparts, in terms of human and material resources, but there is little difference between public and state-assisted primary schools (World Bank, 2004). The primary school education is 6 years. However, some primary schools have been transformed into 9-year schools, offering the full 9 years of basic education (6 years of primary and 3 years of lower secondary education). The schools of interest for this study were public primary schools.

3.3.1.2 School inclusion criteria

The characteristic features of the schools that would provide the best cases to provide insight into the school-health situations that schools experience were first determined. This is consistent with Merriam's (2009) claim that to find the best case to study, the researcher needs first to establish the criteria that will guide the case selection and then select a case that meets those criteria. The eligible schools were public primary schools offering 6 years of primary education, established by UNICEF and requiring support.

3.3.2 Sample

The four schools were selected on the assumption that from these schools, I would be able to gain an insightful and comprehensive understanding of the multiple dimensions of the school-health status, to inform the model development. Selection of different schools was not about comparing schools, as this is not a comparative study, but about looking at the schools' health situation from varying perspectives, contexts and settings to guage the depth and breadth of the schools' health status. Lewis (2003) noted that selecting research settings and populations involves identifying those which, by virtue of their relationship with the research questions,

are able to provide the most relevant, comprehensive and rich information. The Rwanda Ministry of Education recommended the four schools for the current study in order to gain information about the schools' health situation in these two Provinces and in Kigali City. Schools were thus selected purposively. Silverman (2000) contended that purposive sampling allows researchers to choose a case because it illustrates some features or process in which they are interested. Patton (2002) argued that the logic and power of purposive sampling lies in selecting information-rich cases that allow in-depth understanding of the phenomena rather than offering empirical generalisations from a sample to a population. The next section provides a description of the case-study schools.

3.3.2.1 School R1

School R1 is located in a rural village, 122 km from Kigali City. The school shares premises with a Catholic church and a private secondary school in its vicinity. The school is surrounded by the homes and gardens of the local community and has no clear physical boundaries, such as a fence showing school land and community boundaries. Small-scale farming is the main occupation of the community. The majority of the people around the school till the land for food and sell the surplus to earn money for other needs. Very few members of the community are formally employed.

R1 was one of the schools mandated to implement catch-up and double-shift programmes to allow all pupils the opportunity to access education. The Catch-up Education Programme (CEP) is a programme supported by UNICEF to allow older children, above primary school age, who have dropped out of schools to go back to school and the unschooled to attend school. Although this is a good initiative, it may constrain the scarce or unavailable instructional resources and materials. Observation showed that R1 still has infrastructural challenges that do not allow the school to accommodate all the school-age children needing education, despite the implementation of the double-shifting programme, in which pupils attend school in shifts—a certain number of pupils attend school in the morning and others in the afternoon. To cope, teachers use school grounds for five classes, which are conducted under trees, three classes are held in an incomplete building and one in the shadow of the school building. Among the other challenges, the school lacks developed playgrounds, and as a result, sports and recreational activities are not promoted in school. The school was found to have few latrines, in relation to the number of users, which affected the school's sanitary

practices. Due to the shortage of latrines, staff and pupils used the same latrines, without gender considerations. R1 also lacked both water and electricity supplies.

Other challenges in R1 included high illiteracy of the school community, school dropout, child labour and poverty in families, and disproportionate distribution of schools in the area. Too few schools in the area means that each school has a wide geographical catchment area so pupils and teachers need to travel long distances to and from school or find transport, which poses another challenge. However, R1 has a school feeding programme that serves lunch to pupils and teachers to improve school attendance, to manage hunger and malnutrition among schoolchildren and to improve their school attendance and is well known for its hospitality to outsiders..

3.3.2.2 School R2

R2 is situated 36 kilometres from Kigali City in a rural village. The school is relatively small and in a critical condition, with poor physical school infrastructure in a state of disrepair. The roofs of classrooms leak, some lack windows, others have broken windows and the school is under-resourced.

Investigation showed there are no other schools or other social structures in the vicinity, and this meant that R2 catered for large numbers of children from various catchment areas, which made it not only overcrowded, with large class sizes, but also meant that teachers and pupils travelled long distances to and from school. This situation was aggravated by lack of public transport in the community. Inadequate classrooms and double shifts, whereby some pupils attend the school in the morning and others in the afternoon, for the lower classes from Grades 1-3 were observed at the school. R2 lacked playgrounds and school land was relatively small. The school has no water and this complicates sanitation practices in school.

The school is surrounded by the homes and gardens of the local community and has no clear physical boundaries such as a fence showing school boundaries. The community has encroached deeply onto school land, thus making school expansion impossible. The school is known as a poor, needy, underserved and under-resourced school, serving a socio-economically deprived community. Small-scale farming is the most widely practiced economic activity for the people in the area. Tilling the land and attending markets are

common activities within the school's immediate environment. The school does not have a close working relationship with its immediate community because the community does not identify the school as *theirs* but considers the school as a threat that at some time might lead to expropriation of their land for expansion. Community members were reported to have quarrelled with the school because they claimed that children entered their gardens and spoiled their crops. At R2, parents hardly ever come to school although it is welcoming to outsiders and is open to them to share the experiences of school life.

3.3.2.3 School U1

School U1 is an urban school, situated in a peripheral suburb of the Kigali City. There is a Catholic Church in the vicinity but no other schools in the area. U1 has a wide geographical catchment area, which makes it overcrowded. It is boxed in by community homes and gardens, and it became part of the city in the 2006 Decentralization of Local Administration plan, which expanded the city and the provinces.

The school infrastructure has been upgraded and three new classroom blocks of almost 10 classrooms have been built, but most of the school's structures are old and in a poor state. Despite the additions, the school continues to experience the problem of inadequate classrooms, aggravated by land shortage as the community has encroached on school land, making further school development and expansion impossible. As in other case-study schools, UI also has a problem of poor sanitation. The immediate school environment is socio-economically disadvantaged, surviving predominantly on tilling the land and conducting small businesses to earn a living. Although now considered as part of the city, the school and its community still lead a rural life. Most of the community members are unemployed and usually uneducated. R1 has a tap-water supply, although it does not always run. The school atmosphere is calm and teachers and the researcher observed that teachers collaborated among themselves and valued each other. The school principal is friendly, welcoming and warm. Her office is always open to those who need to see her.

3.3.2.4 School U2

U2 is situated on a highway in an urban area in a peripheral suburb on the outskirts of Kigali City, formally part of the rural area before the 2006 expansion of the Kigali City boundaries.

U2 was established in 1978 by the Catholic Church, in collaboration with parents, in response to the increased number of school-age children in the community who were attending church then. U2 initially started as a Sunday school, but the number of children doubled every year. Parents from the church volunteered to teach the children as there were no qualified teachers to provide teaching. Later, U2 became a registered public primary school, until it was destroyed in the 1994 genocide. U2 became functional again after the 1994 genocide. The school has been rehabilitated and expanded to accommodate school-age children, but because there are no other primary schools in the area, the school faces the challenge of serving a wide catchment area, which causes overcrowding.

The school has adopted the double-shifting programme as a means to cater for large numbers of children, with some children attending school in the morning and others in the afternoon. This has over-strained the teachers, who have to teach both shifts. Poor sanitation, lack of water supply, shortage of school land and lack of sports and recreation in the school were the other reported challenges of U2. The school serves a poor, socio-economically disadvantaged community, as the majority are unemployed and survive on tilling the land. The school has access to the highway, which has eased transport problems for some teachers, but others walk long distances to and from school.
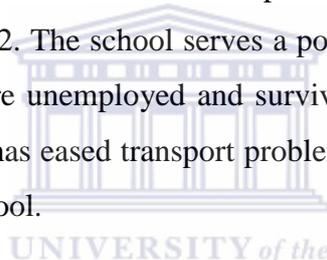
3.4 Sampling of the Participants and Their Selection Criteria

It was not enough to choose schools without choosing whom to interview, so that I might observe and learn from their insight and gain an understanding of the state of school health in public primary schools. The following section describes the sampling of the participants and their selection criteria.

3.4.1 Study Population

It was quite impossible to consult everyone in the selected schools and concerned ministries and agencies. To choose people who were knowledgeable or working with schools or involved in policies about school-health promotion was therefore crucial. Since school health and health promotion in schools are multi-layered in manifestation and involve a wide range of stakeholders, as illustrated in Table 1, it was important to include all those concerned.

3.4.2 Sample

Table 1. *Sample for Interviews*

Institution (n=9)	Sampling population	Gender	Reason for interviewing	
Schools (n=4)	R1 Principal (n=1)	Male	School principals understand the vision and direction of the schools. They have a long standing experience in education system and leadership and management of schools.	o
	R2 Principal (n=1)	Male	Same reason for interviewing	o
	U1 Principal (n=1)	Female		o
	U2 Principal (n=1)	Female		o
Ministry of Education (n=5)	Ministry of education official I	Male	He was a policy maker, understands education system, school practices, needs and challenges and direction of education.	o
	Directorate of Health Education Official II	Female	Has long standing experience about health education practices, needs and challenges.	o
	Directorate of primary education Official III	Female	Has long standing services experience in the ministry and knowledgeable about the research question.	o
	Directorate of National Curriculum Development official IV	Male	Has long standing experience in the curriculum development, teaching and learning challenges in schools	o
	Inspectorate General of Education official	Male	Has long standing experience in inspection of schools in both rural and urban school setting and had a wealth of knowledge	o

Table 2 *Sample for focus group discussion*

School (n=60)	Sampling population	Gender	Inclusion criteria	Reason for interviewing
Rural (n=27)	R1 teachers (n=6)	3 male, 3 females	3 years teaching experience in the school, willingness to participate.	They have a long standing experience of school practices procedures, and values.
	R1 pupils (n=6)	3 male, 3 females	Grades 4-6, Aged between 12-16 years, prefects, and willing to participate.	This group of pupils were knowledgeable in school practices and could articulate their needs and those of others
	R1 parents (n=3)	1 male, 2 females	Members of Parents and Teachers Committee, living near the school, and willing to participate.	School parents' committee were knowledgeable about school life and practices
	R2 teachers (n=6)	3 male, 3 females	Same as above	Same as above
	R2 pupils (n=6)	3 male, 3 females		
Urban (n=29)	U1teachers (n=6)	3 male, 3 females	Same as above	Same as above
	U1 pupils (n=6)	3 male, 3 females		
	U1 parents (n=2)	2 males		
	U2 teachers (n=6)	3 male, 3 females		
	U2 pupils (n=6)	3 male, 3 females		
	U2 parents (n=2)	3 males		

The sample was comprised of 69 individuals, and 13 in-depth individual interviews and 11 focus group discussions were conducted for this study. McMillan and Schumacher (2006) asserted that purposeful samples seem small, ranging from 1 to 40 or more, because the insights generated from the qualitative inquiry depend more on the information-richness of the cases and the analytical capabilities of the researcher than on the sample size. Ritchie and Lewis (2003) noted that qualitative samples for a single study involving individual interviews are often below 50, while for the group discussion samples, the equivalent figures are around 90 to 100 (12 to 14 groups).

Table 3. *Sample for walk*

Sampling population	School (n=60)	Gender	Inclusion criteria	Reason for the walk
R1 Principal (n=1) R1 teachers (n=6)	**Rural (n=29)**	1 male 3 male, 3 female	Same as for the Focus group discussions	Researcher gets to know and become familiar with participants.
R1 pupils (n=6)		3 male, 3 female		To maximise participation of all the members of the school community
R1 parents (n=3)		1 male, 2 female		For participants to know their school more.
R2 Principal (n=1) R2 teachers (n=6)		1male, 3 male, 3 female		For participants to have a sense of purpose while they assess their school needs
R2 pupils (n=6)		3 male, 3 female		
U1 Principal (n=1) U1teachers (n=6)	**Urban (n= 31)**	1 male 3 male, 3 female		To provide preliminary findings to help the researcher have an insight into understanding of school's health status.
U1 pupils (n=6)		3 male, 3 female		To obtain of findings that will help to fine-tune the interview guide.
U1 parents (n=2)		2 male		To prepare participants for interviews and discussions.
U2 Principal (n=1) U2 teachers (n=6)		1 male 3 male, 3 female		
U2 pupils (n=6)		3 male, 3 female		
U2 parents (n=2)		3 male		

3.5 The Researcher-as-Instrument

Patton (2002) posited that the researcher is the instrument of both data collection and data interpretation because a qualitative strategy includes having personal contact with and drawing close to the people and the situation under study. As a human being is the instrument of data collection and analysis, it requires that the investigator carefully reflects on, deals with and reports on potential sources of bias and errors. In this study, I, the researcher, acknowledge my position and role in formulating the questions that were asked, deciding on the methods to collect the data, collection of data, and analysis and interpretation of the data. It is therefore necessary to account for how I managed and controlled the entire project to ensure the trustworthiness and authenticity of the study.

I am a physiotherapist by profession and have been in practice for more than 12 years. I am a lecturer at the Kigali Health Institute, which has, since 2013 been merged with the University of Rwanda, College of Medicine and Health Sciences, School of Allied Health Sciences, Department of Physiotherapy. Besides teaching, I am involved in supervision of students' dissertations in my department and across departments at the university. I have taught a research methodology course across departments and am on the Committee of Research Consultancy and Ethics at the university. I have been involved in health-promotion outreach programmes in schools since 2005 as part of my physiotherapy practice and have undertaken several training courses on health-promoting schools and health management. I am familiar with both qualitative and quantitative research approaches and have been trained in conducting interviews and surveys. During this study, I remained self-reflective and self-monitoring throughout the research process by using the following strategies, in order to maintain the authenticity of the study:

➢ I kept a reflective journal in which I regularly recorded my reactions, actions, decisions, experiences and biases so I would continually be aware of personal assumptions or biases that emerged during the process of research, to avoid allowing them to interfere with the interpretation of participants' viewpoints.

➢ I consulted with colleagues and peers who regularly debriefed me with self-reflection and self-awareness questions throughout data collection, data analysis and interpretation of the preliminary findings. The data coding process was examined particularly by my peers for consistency and accuracy of interpretation, which helped

me to control any biases. These debriefings committed me to interpreting and reporting the study findings from the participants' perspectives on the school-health situations in the schools with fairness and neutrality.

➢ The processes of data collection, analysis and interpretation were regularly discussed with and supervised by the principal supervisor, who always posed self-reflection questions that heightened my self-awareness and helped me to put aside any biases and assumptions that emerged throughout the entire research process.

➢ I asked for more clarifications from the participants during interviews and focus group discussions in order to uncover the underlying hidden facts and meaning to avoid misinterpretation or replacing participants' meanings with my preconceived ideas or life experiences and assumptions. The fact that I understood the participants' culture and language, and was familiar with the schools' contextual background, helped provide insight into what participants said and meant. Coming from the same background helped me to overcome complexities of non-verbal body communication, contributing to the accurate interpretation of the meaning that participants brought to the discussion about the state of school health. Arthur and Nazroo (2003) indicated that sharing some aspects of cultural background or experience may be helpful in enriching a researcher's understanding of participants' account, of the language they use and of the nuances and subtexts.

3.6 Data Collection Methods

The methods used to collect data for this inquiry included in-depth individual interviews, focus group discussions, the transect walk and observations in the form of field notes. Similar methods of data collection were suggested by Snape and Spencer (2003), who said that observation, in-depth interviews and focus group discussions are the most useful methods of data collection in qualitative research. Rule and John (2011) stressed that case-study researchers are advised to collect data from more than one source, using more than one method for the purposes of triangulation. The following section describes the preparation for the fieldwork.

3.6.1 Preparation for Data Collection and Interview Guide Development

The process of data collection involved seeking permission to conduct the study from the relevant institutions, holding preparatory meetings with heads of institutions as well as developing the data collection instruments and ensuring that ethical procedures were followed.

I developed, translated and piloted the interview guide (see Appendices F & G). The interview guide was developed based on the six components of the health-promoting schools framework guidelines for the World Health Organisation, Western Pacific Region (WHO/WPRO, 1996b):

1) school health policies,

2) physical environment of the school,

3) school's social environment,

4) community links,

5) personal health life skills, and

6) health services.
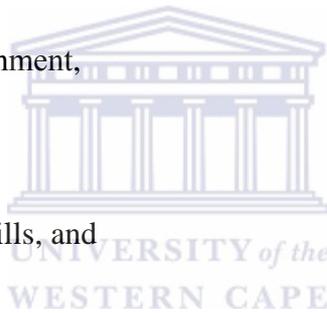
3.6.2 Translation of the Interview Guide

The six components, together with their checkpoints in the guidelines, were translated from English to Kinyarwanda, the participants' primary language. Two professional, native bilingual translators, who were fluent and competent in both English and Kinyarwanda, with both culture and language similar to that of the participants, did the forward and backward translation of the interview guide. One translated the interview guide from English to Kinyarwanda and the second did the backward translation 'blindly' from Kinyarwanda back to English. A session was arranged to compare the two versions for consistency in words and meaning; there were no significant discrepancies and only small adjustments were made. I, the researcher, am fluent in Kinyarwanda as it is my primary language, which allowed me to

assess the quality of the translation and to capture the breadth and depth of the interviews and discussions.

3.6.3 Piloting the Interview Guide

The interview guide was pilot tested on two focus groups of teachers, two focus groups of pupils and one in-depth individual interview with the principal at a local public primary school, prior to the data collection for the main study. The purpose of piloting the interview guide was to ensure its consistency, structure, content, coherence and clarity, to enable participants to provide comprehensive, coherent details about their experiences concerning the school-health situation in public primary schools. The length and the interval of interview sessions, as well as the number of interviews that could be conducted in a day, were decided on after the pilot study. I checked whether the interview guide topics generated data that were consistent with the study objectives and overall coverage of the research question. Arthur and Nazroo (2003) claimed that piloting the interview guide is a critical part of research, to find out whether it allows the participants to give a full and coherent account of the central issues and incorporate issues they think are important. In the next section, the training of the research assistants is described.

3.6.4 Training of the Research Assistants

Two research assistants were recruited and trained on how to prepare for the interview session. This involved knowing how to load batteries into the tape recorder, keeping spare batteries, being aware of technical issues (for instance, a faulty tape recorder), organising venues, and serving tea and coffee to the participants before the interview session began. Other duties performed by the research assistants concerned issuing of transport allowances to the participants and ensuring that logistics were in place. Otherwise, they were not involved in conducting interviews, but rather focused on logistics.

3.6.5 Gaining Access to Schools and Participants

Permission to conduct the study was sought from and granted by the Rwanda Ministry of Education prior to data collection. A letter was sent to the district education directors (see Appendix A). I followed up with the district directors, and they verbally granted permission and offered contact details of school principals. Principals were contacted one by one by

phone. I introduced myself and explained the study and the need to visit the school. School principals were enthusiastic about the study. Two visits were made to each school. The first visit was to familiarise myself with the school, submit the ethics documents, negotiate the timetable for the interviews and submit requests for use of the venue to the school principals. A subsequent visit was requested and granted at each school, to learn more about the schools, select participants, agree on the data collection timetable and confirm the venue. Research assistants were trained, access to the schools requested and the participants' consent was sought for interviews (see Appendices B & C). For pupils under 18 years, parental consent and pupil assent were sought (see Appendices D & E).

3.6.6 Individual Interviews as a Method of Data Collection

Thirteen semi-structured individual interviews were conducted among the key informants and school principals using the interview guide (Appendices F & G). Nine individual participants were from Ministries of Education and Health, and relevant agencies working with schools, while the other four individuals were school principals of the four case-study schools (See Table 1). Ritchie (2003) claimed that individual interviews are probably the most widely used method in qualitative research. They provide an opportunity for detailed investigation of people's personal perspectives. Ritchie went on to note that individual interviews allow in-depth understanding of the personal context within which the research phenomena are located and for very detailed subject coverage. The interview started with a general question: *How health-promoting and inclusive are the public primary schools of Rwanda?* I guided the interview, listening carefully and probing for breadth, depth and clarifications about health conditions in schools. Some of the probing questions emerged from the interview while others were from the interview guide. I avoided asking leading questions, to learn from the participants without imposing meaning onto their meanings and interpretations of the schools' health-promotion situation. I maintained good rapport with interviewees so the interview became a comfortable, relaxed conversation. Each interview lasted for an hour, as most of the key informants were pressed for time and could not stay beyond an hour. To end the interview, the tape recording was replayed to verify with participants if their intended meaning in the situation had been accurately captured. Finally, after the tape recorder was switched off, I thanked the interviewees for their participation and for the information they had provided.

3.6.7 Focus Group Discussions as a Method of Data Collection

Focus group discussions were used to collect data among teachers, pupils and parents. The aim was to gain varied perspectives regarding school-health situations in order to generate understanding of diverse opinions. The interactive nature of the group presented different perspectives and clarifications that illuminated the understanding of the schools' health situations.

Kreuger and Casey (2000) maintained that a focus group presents a more natural environment than that of the individual interview because participants are influencing, and influenced by, each other, just as they are in real life. Lewis (2003) agreed that group discussions are helpful if there is some commonality between the people in their relationship. The group should not have significant difference in status between participants. This explains why principals were individually interviewed and the other subgroups interviewed separately, to avoid the effects of status power among the participants.

The discussion began with the general question: *How health-promoting and inclusive is your school?* Then, the discussion went on as the participants interacted freely to provide details about their school's health situation and inclusive practices, values, attitudes, beliefs, events, processes and decisions that underpinned health promotion. I kept the participants in a relaxed mood as I listened carefully, observed and encouraged them to talk, using pauses to allow participants to think, in order to provide full coverage and express the deep meanings of their experiences of their school's health situation. During the discussion, minimal notes were taken to capture non-verbal communication such as gestures, glances, posture and facial expressions that would add meaning to what participants said. The discussions were loosely structured to allow the participants to interact within and among the group, which allowed deeper understanding of the schools' health practices and their implications for teaching and learning and the wellbeing of the school community. At the end of the discussion, the tape recording was played back to allow participants to verify whether the recorded statements reflected their intended meaning and interpretation of the situation.

3.6.8 Transect Walk as a Method of Data Collection

The transect walk exercise was employed to maximise participation of all school community members and to serve as an icebreaker, since it allowed interaction among the participants. This kind of interaction helped to build relationships and trust within the group, to gain a sense of solidarity. The exercise helped me, the researcher, to familiarise myself with the participants and the school as an organisation. Hovering around and within the schools gave participants a positive impression that I was not only interested in the life of the school but also in the life of those in the school. The overall aim of the exercise was to provide preliminary findings that gave insight into schools' health situations from an insider's perspective, which guided the entire data collection process.

Rule and John (2011) supported the notion that the transect walk is one of the common participatory methods that can be employed in case-study research to maximise participation. The exercise helps the participants to gain ownership of the data gathering process and to minimise the control that researchers often exert. The authors concluded that because of its participatory nature, the transect walk increases the research participants' involvement and control of the data generation process through their active participation.

Participants were instructed to tour their schools both inside and outside, observing school surroundings, boundaries, buildings, activities and interactions and happenings around and in the school. They were also instructed to take notes of whatever they saw in the process. I asked questions of participants for clarification on the observations that I did not understand, to gain in-depth understanding. We then moved on until the whole school had been observed, and the whole team returned to the point where the walk had started. Participants were assembled in a classroom that had been arranged to serve as a venue. I asked participants to split into their subgroups, based on their distinctive groups (parents, pupils, teachers, the principal). The task assigned to them was to write down their observations on flipcharts, guided by three headings in a table matrix of three columns:

1. What we saw our school has.
2. What is missing?
3. What is needed for the school to become a health-promoting school?

The exercise took an hour to finish and a presentation for each group to the rest of the team followed. After each group's presentation, the entire team commented on, supplemented and clarified some findings. I, the researcher, took notes of the presentation and integrated them into the findings after participants clarified disagreements through reflections. There were no substantial contradictions and each group's findings were comprehensive; thus, by consensus, they were approved as valid and authenticated for use. At the closure of the presentation, I thanked participants for their time and effort to make the exercise a success. The same procedures were followed at the other schools.

3.6.9 Field Notes as a Method of Data Collection

Observations were made and recorded in the form of field notes during data collection, along with interviews and focus group discussions, to remind me about what I had heard or observed when participants used non-verbal body language. For instance, during the discussion with teachers, they used gestures of stress and powerlessness, nodding of head and shrugging of shoulders, with hidden meanings that added significance to the interpretation of participants' views. I also took notes of my own reaction to particular views from the participants that would have escaped my mind had I not taken notes. These observational field notes were taken as soon as possible to avoid the risk of losing coherence and flow of information in the chronological order of the interviews. Ritchie (2003) asserted that observational notes offer the opportunity to record and analyse behaviours and interactions as they occur. This is a particularly useful approach when a study is concerned with investigating a process involving several players, where understanding of non-verbal communications is likely to be important.

3.7 Data Analysis

The contents of the audiotaped, semi-structured, face-to-face interviews and focus group discussions were transcribed verbatim, using a word processor. I listened to the tapes as I typed the data, read the field notes simultaneously, and incorporated the field notes and the transect walk data. This process happened soon after every interview session, while I still had a fresh memory of how the interviews went and of the observations. Because data were collected in the participants' primary language (Kinyarwanda) and the findings were to be reported in English, translation of the transcripts was deemed important. The data were

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translated by two bilingual professional translators with long-standing experience in translation of qualitative transcriptions. The translators were well versed in the culture, language and context of the participants as well as the aims and purpose of the study. The translation of the transcriptions followed the framework proposed by Brislin (1970, 1980) and Lopez et al. (2008), as shown in Figure 8, the translation flowchart.
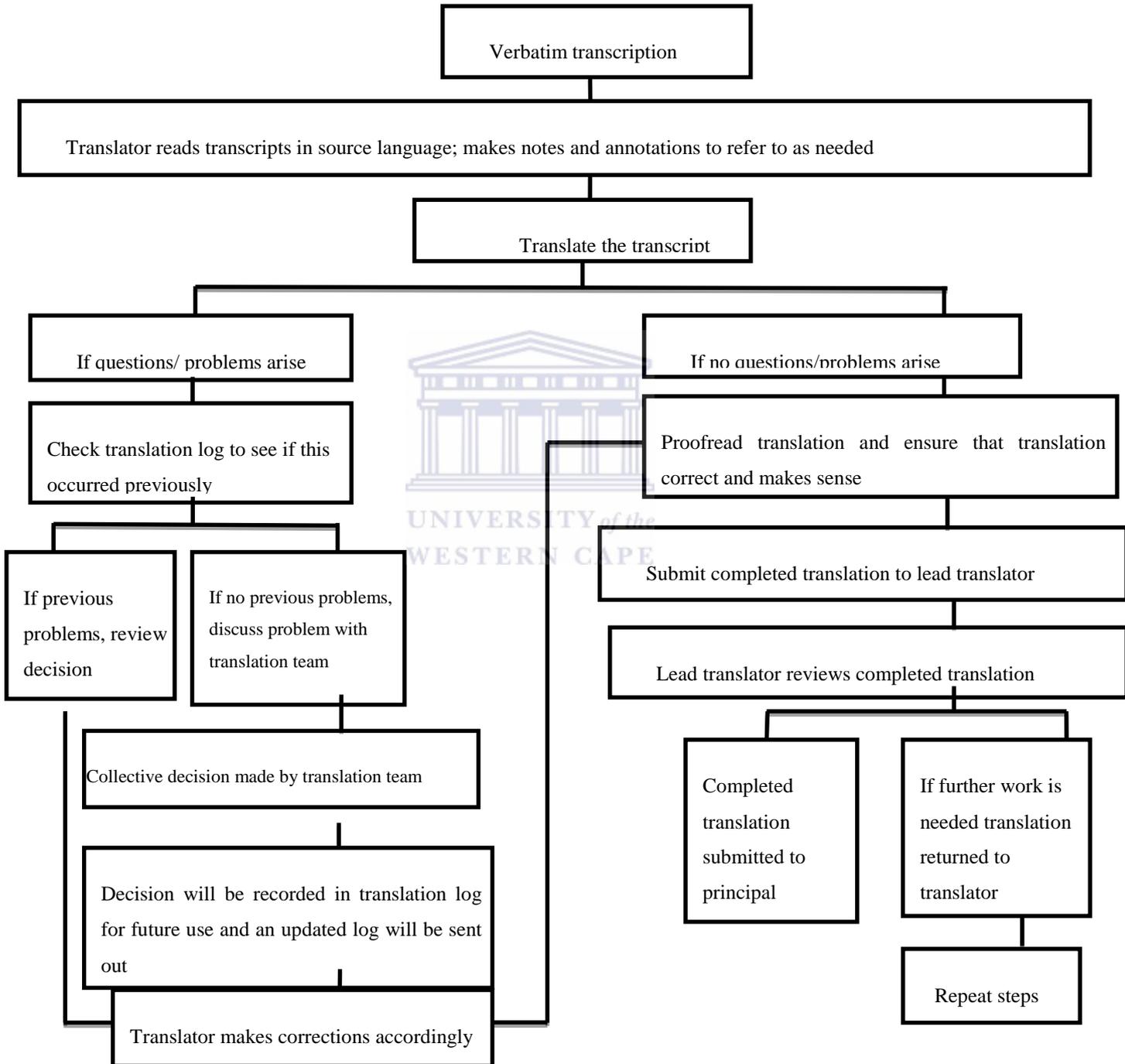
Figure 8. **Translation procedure flowchart.**

3.7.1 Translation of Data for the Analysis Flowchart

The two translators and I agreed on the instructions to guide the translation process. The translators were instructed to read each set of data, line by line, treating participants' phrases and statements thoughtfully to gain a sense of what participants meant. Lopez et al. (2008) recommended that translators treat each phrase independently and translate the interviews and participants' statements accordingly. I advised the translators to use a logbook in which they should note particular discrepancies in words, phrases, expressions and statements, which were later addressed in the consensus meeting between the translators and me, the researcher. During the meeting, the noted discrepancies were examined and appropriate meanings were decided on by the team, with reference to the culture, language and context of both languages. To achieve accurate translations, translators re-read the translations to check for translation quality and accuracy. Each data set completed was sent to me to check for accuracy in translation, and in cases where the translation was not well done, the translators were instructed to repeat the translation until the best translation was achieved. Once all the data had been translated, data analysis began, using the grounded theory content analysis spiral described by Creswell (1998), as illustrated by Leedy and Ormrod (2010). Creswell suggested that the spiral is applicable to a wide variety of qualitative studies. The data analysis spiral is illustrated in Figure 9.

THE FINAL REPORT

Synthesis
- Offering hypotheses or propositions
- Constructing tables, diagrams, hierarchies

Selective coding

Classification
- Grouping the data into categories or themes
- Finding meaning in the data

Axial coding

Perusal
- Getting overall sense of the data
- Jotting down preliminary interpretations

Open coding

Organization
Filing, creating a computer database, breaking larger units of data into small ones

THE RAW DATA

Constant comparative method

Figure 9. **The grounded theory content analysis spiral.**

(Source: Leedy & Ormrod, 2010, p.153).

3.7.2 Open Coding

Data were manually analysed, as I needed to be close to the data to grasp fully the meaning of what participants said and what the data was all about (Creswell, 2005). Open coding of the data began at the onset of data collection, as soon as I started making sense of the data that

came out of the observations and interviews. The collected interviews and observation material were prepared and organised into manageable data sets by creating data file folders. Data were analysed inductively.

Each transcript was read and re-read several times, word-by-word, phrase-by-phrase, sentence-by-sentence and line-by-line, one at a time, highlighting phrases, passages and words, and behaviour patterns relevant to the study. The purpose of this inductive analysis was to examine the data for the similarities and relationships that existed between codes, categories and themes as well as the other ideas expressed by the participants. The relevant data units or codes, subcategories and themes that emerged were marked within the text, using page and line numbers (see Appendix H).

3.7.3 Axial Coding

When all the transcripts had been coded, I moved on to the axial coding, in which all the similar marked codes and subcategories, phrases and themes or concepts were grouped under their respective core categories to bring data back together again into a coherent whole (Strauss & Corbin, 1998). Charmaz (2006) contended that the purpose of axial coding is to sort, synthesise, and organise large amounts of data and reassemble them in new ways after open coding. Taking the above into consideration, I continuously re-examined and compared the codes, categories, subcategories and themes by moving back and forth between codes and categories. The intention was to compare the codes across the participants to find explanations for the patterns that emerged within the codes, a process called "the constant comparative method to eliminate redundancy and create evidence for the emerged categories" (Creswell, 2005, pp. 406-407). This helped in identifying similar codes, categories and subcategories as well as themes that emerged across the interviews and data as a whole. At this stage, data were segmented, sorted and synthesised into a coherent whole, and I proceeded to relate the categories, using the identified patterns, a stage termed as *selective coding* by Strauss and Corbin (1998).

3.7.4 Selective Coding

Selective coding helped in managing some codes that fitted into more than one category and pattern of explanation. I returned to the data to validate each category and pattern by carefully considering what was important and meaningful in the data (McMillan & Schumacher, 2006). In the selective coding, I developed patterns of explanations around categories and themes until saturation of information was reached. During selective coding, the categories and sub-categories, as well as the themes and patterns of explanation between the themes, became distinct, and they were thus used for the development of the theoretical model.

3.8 Trustworthiness of the Study

Certain steps need to be taken to ensure the rigorousness and trustworthiness of a study. Lincoln and Guba (1985) suggested that trustworthiness of a qualitative study is achieved through the study's credibility, transferability, dependability and confirmability. These criteria were applied throughout the entire research process to ensure that the study findings were scientifically sound. The next section provides a description of how trustworthiness of the study was addressed.
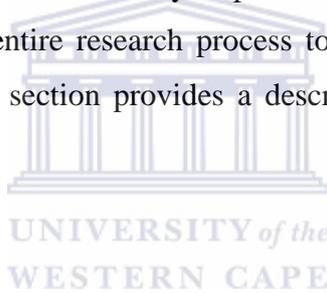
3.8.1 Credibility

Lincoln and Guba (1985) contended that credibility establishes how confident the researcher is with the truth of the findings, based on the research design, informants and context. Credibility of the study was ensured through the strategies of a) prolonged engagement and persistent observation of the participants during fieldwork; b) reflexivity; and c) clarity about the researcher's background, qualifications and experience as an investigator. In addition, triangulation, member check, thick description of the research process, peer examination and constant comparison were among other strategies employed in an effort to ensure the credibility of the study findings. Each strategy will be described in the next section.

3.8.1.1 Prolonged engagement and persistent observation during fieldwork

I conducted interviews and observed participants and how they interacted with each other and engaged in their daily school practices for a considerable time in their natural school setting. I spent a week at each school observing, conducting interviews, becoming familiar and building

good rapport and trust with the participants. As trust increased, I was able to discover the underlying realities of the schools' health situations from participants because they freely expressed their lived experiences regarding their schools' health. The participants' behaviours, manners and values were observed to gain a deeper understanding of different perspectives on how the school's health situation manifested in the school environment. Although the researcher-participant relationship should be considered important, Krefting (1991) warned that a researcher should not become overinvolved with participants, as it might be difficult to separate his or her own experience from that of the informants. Taking note of the above, I kept a reflexive journal to ensure that the credibility of the study was not threatened.

3.8.1.2 Researcher reflexivity

Lincoln and Guba (2000) claimed that the credibility of the study is related to the integrity of the qualitative researcher or the researcher's reflexivity, which is the process of reflecting critically on the self as researcher, the human as instrument. McMillan and Schumacher (2006) described reflexivity as a rigorous self-scrutiny by the researcher throughout the entire process of the study. I admitted my human subjectivity and therefore committed myself to self-scrutiny to examine my decisions, reactions, roles and biases throughout the entire study, in order to ensure honest interpretation of the participants' views. McMillan and Schumacher (2006) suggested peer debriefing, keeping a field log and a reflective journal, abiding by ethical considerations, and ensuring audibility as the strategies to enhance reflexivity. I applied the above strategies in order to enhance the reflexivity:

1. *Peer debriefing and supervision*: I presented and discussed the preliminary findings and analysis with the supervisor. The supervisor's follow-up, questioning, and inquiring about the process of the study helped me to understand my role throughout the entire study and maintain fidelity in the interpretation of the participants' views.
2. *Field log*: I kept a field log in which I consistently documented the details of access to the schools and participants, field activities and data collection plan.
3. *Reflective journal*: I kept a diary in which I recorded field decisions, reactions and ideas and experiences to justify why such decisions were taken.
4. *Ethical considerations record*: I kept a record of all the ethical steps taken concerning data collection and analysis done during the fieldwork.

5. *Audit trail*: I documented the chain of evidence by explicitly showing the entire process of data management, analytical procedures of code generation, and categories, sub-categories and themes and patterns of explanation for the reader to be able to trace the process of the study.

As the researcher, I strived to understand the schools' health-promoting and inclusivity practices, manners and behaviours through the responses and interpretations of the participants, without altering their intended meanings and interpretations throughout the whole study process.

3.8.1.3 Triangulation

Informants and schools were employed to achieve triangulation. Olsen (2004) described triangulation as the mixing of data or methods so that diverse viewpoints or standpoints cast light upon a topic. Table 4 shows the triangulation plan for this study.

Table 4. *The Triangulation Approaches Used.*

Activity	Institutions	Data Source	Method used
Interview with Education officials	Ministry of Educatio	Education officials	Individual interview and observation
Interview with Health Officials	Ministry of Health	Health officials	Individual interview and observation
Interview with Social welfa official	Ministry of Social Welfare	Social welfare official	Individual interview and observation
Interview with UNICEF official	UNICEF	UNICEF official	Individual interview and observation in form of field notes

Multiple methods for triangulation were used to collect data, and these included in-depth individual interviews, focus group discussions, the transect walk and observations to provide the chain of evidence and complete coverage of information. The participants' views that were not captured by one method were compensated by another. Shenton (2004) stated that triangulation can involve the use of different methods, especially observations, focus groups and individual interviews, which form the major data collection strategies for qualitative

research. For instance, data collected by interviews were compared to observations and focus group discussions in order to gain in-depth understanding of the attributes for the development of the model. McMillan and Schumacher (2006) claimed that multiple methods or strategies will yield different insights about the topic of interest and increase the credibility of findings.

Triangulation was also provided by informants or sources of information: A wide range of stakeholders, including principals, teachers, pupils and parents and policymakers from different ministries and agencies working with schools were interviewed in order to obtain varied descriptions, perspectives, and perceptions about the school-health situation. This was done to crosscheck and compare for convergences or contradictions, replication and possible patterns of explanation in the emergent ideas and opinions of all participants, to verify their views and to gain a rich understanding of the health situation in schools. Shenton (2004) maintained that individual viewpoints and experiences can be verified against others and, ultimately, a rich picture of the attitudes, needs or behaviours of those under scrutiny may be constructed, based on the contributions of a range of people.

3.8.1.4 Thick description

A comprehensive account of how the study was conducted has been given to enable the reader to trace the course of the study. The study context, setting, selection of the sample, participants and the methods used for the data collection, and the process of interviews have all been articulated, presented and described in detail, documented and made available for verification. White et al. (2003) asserted that the researcher should provide a thick description of the sample design, sampling methods and analytical approaches as well as appending relevant documents such as a topic guide and analytical framework on how codes and themes have been generated from the data. According to Denzin (1989), thick description does more than record what a person is doing; it goes beyond mere fact and surface appearances. It presents detail, context, emotion and the webs of social relationships that join persons to one another. Thick description evokes emotions and self-feelings. It establishes the significance of an experience, or a sequence of events, for the person or persons in question; voices, feelings, actions and meanings of interacting individuals are revealed.

3.8.1.5 Peer Examination

The process of research, data analysis and findings were discussed with peer researchers and supervisors, who offered insights during the data coding and the entire analysis process and constructive ideas, advice and critiques that kept me focused on and grounded in the study and able to maintain deeper self-analysis throughout the study.

3.8.1.6 Purposive sampling

The selection of participants was purposively done in order to select individuals who were familiar with the research question, as discussed in section 3.2.2 in greater detail. Babbie and Mouton (2004) stressed that researchers need to use strategies such as careful purposive sampling to enhance the study's credibility.

3.8.1.7 Memos and memo writing

During the coding process, I wrote down any idea and reflections on the data that came up immediately during analysis to ensure that an idea was not lost but kept for reference at the conceptualisation level. Some of the memos noted relationships between codes, categories and themes and their explanations, to keep track of evolving ideas throughout the analysis. Glaser (1998) claimed that memos are the vehicle by which concepts and ideas "pour out", are saved and grown, and later form the basis of the final writing, when they are rewritten into an acceptable form for public viewing.

3.8.1.8 Constant comparative method

During analysis, data were checked for accuracy (Lewis & Ritchie, 2003) as I constantly moved back and forth within the data, comparing and checking codes, categories and subcategories and themes across schools and among participants to corroborate the findings and for deeper clarification, to refine categories. The use of the comparative method indicates that data analysis did not follow a linear procedure but the research moved forth and back through codes, categories and subcategories, and themes, comparing data and refining codes, to gain a sense of the significance whole data set.

3.8.2 Transferability

Transferability was achieved through detailed description of the participants, the research context and setting and the sampling approaches used. Merriam (2009, p. 227) stated that "the term *transferability* has come to be used to refer to a highly descriptive and detailed presentation of the setting and, in particular, of the findings of the study". Lincoln and Guba (1985, p. 125) advised that the best way to ensure transferability is to create a "thick description of the sending context so that someone in a potential receiving context may assess the similarity between them and the study".

3.8.3 Dependability

The idea of dependability emphasises the need for the researcher to account for the ever-changing context within which research occurs. Dependability of the study was achieved through the following approaches:

1. Personal reflective journal:

   A personal reflective journal, to record and document the research process, decisions made during data collection and a thick description of the process that the study followed, was kept to authenticate study findings. Merriam (2009) maintained that good qualitative research gets much of its claim to validity from the researcher's ability to show convincingly how they arrived there and why they are confident that this is the best account possible.

2. Triangulation:

   The triangulation process of the study has been explicitly described and documented. Various methods were used to collect data from multiple sources and the many schools in the case study and in multiple settings to establish a chain of evidence to show that the results of the study are dependable, as described earlier.

3. Peer examination:

The study findings were discussed with colleagues, peer researchers and supervisors, whose impartial constructive critiques and insights on the study design; methodology and objectives and data analysis kept the study progress under check.

3.8.4 Confirmability

The research process, including limitations, researcher position and ethical requirements, is clearly described to ensure the dependability and confirmability of the study. Lincoln and Guba (1985) emphasised that the researcher should document the procedures for checking and rechecking the data throughout the study. To achieve confirmability, the following strategies were applied:

1. Personal reflective journal and reflexive analysis:

   A personal journal was kept to give an account of the study process to authenticate study findings. The procedures for checking and rechecking the data throughout the study were documented. Constructive insights, critiques and advice from peer researchers were documented and the limitations of the study acknowledged.

2. Triangulation:

   Different methods of data collection were employed. Different data sources and different schools from different settings have been explicitly described and documented for the reader to be able to trace the process of the study.

3.9 Ethical Considerations

The study obtained ethical approval from the Senate Higher Degrees Committee and Ethical Clearance Committee of the University of the Western Cape (see Appendix J) and the Kigali Health Institute Institutional Review Board (IRB) (see Appendix K). Permission to conduct the study was sought from the Rwandan Ministry of Education (see Appendix A). Permission to conduct the study was obtained from the Ministry of Education (see Appendix A). The ethical procedures were followed through the application of various strategies:

- Protection of participants' reputation and integrity: Participation in the study was non-discriminative. None of the participants was discriminated against based on his or her

religion, gender, ethnic group, socio-economic status, educational background or any other factor.

- Confidentiality and privacy of the participants: Participants' anonymity and confidentiality of their information was assured. Although it was difficult to ensure confidentiality within the group interviews, the issue of confidentiality was negotiated and discussed with the group. It was agreed, before the commencement of the interviews, that their identities were to be kept confidential and that a group's findings would be reported as a group rather than for any individual participant in the group.

- Voluntary participation and the right to withdraw: Participants voluntarily agreed to participate in the study by signing the consent form (see Appendices C & D, E & F). Both direct and substitute consents were requested from the participants and parents/guardians of the minors. Minors were requested to sign the assent forms even if their parents/guardian had allowed them to participate and signed consent forms on their behalf. This was done to preserve and protect the rights and dignity of the children. Participants were free to refuse to participate or withdraw from the study at any time during the course of the study, although none of the participants dropped out or withdrew from the study.

- Benefits and risks: Participants were informed that there were no direct personal benefits or known risks or harm associated with their participation in this study. On the contrary, their participation would yield valuable information that could inform and influence school health policies and would benefit schools as a whole.

- Tape recording of the interviews: Permission to record the interviews was requested from the participants and granted. It was made clear to the participants that the tape recorder would be stopped at any time during the interview if anything caused any discomfort to any participant.

- Safe storage and security of the data: All the data were kept in safe lockers to ensure security and to avoid loss or unauthorised access or disclosure of the participants' identities.

- Report on findings: The findings will be reported in a written form. Participants will be informed about the study's finding through a written summary that will be given to each participating school and the ministries and agencies of districts to fulfil the accountability agreement between the researcher and the participants.

3.10 Summary and Conclusion

In this section, the research design, methodological approach and process of how the study was conducted were clarified and elaborated on. The study context and recruitment of the participants involved were described for Phase 1 of the study, while Phase 2 of the study will be described in Chapter 4. The researcher's interpretive role as an instrument of data collection has been explained and acknowledged. Data processing and the management process that involved editing, reduction of data, transcription of data, translation of the transcriptions and analysis procedures that lead to the final report have been described. Trustworthiness and ethical approaches to enhance the integrity of the findings and the study in general were documented.

3.11 Section 2: Findings

Phase 1, the qualitative case-study findings, which are intended to inform the development of a health-promoting schools model for Rwanda, is presented in this section. The findings are organised under the eight themes that emerged from the data during analysis, and these include
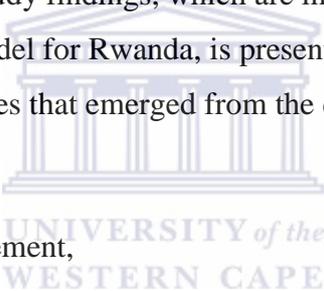
1) leadership and management,

2) schools' health policies,

3) pupil wellbeing,

4) school partnership with parents, families and the wider school community,

5) schools' health services,

6) factors affecting teaching and learning for all children,

7) the wellbeing of teachers, and

8) the physical environment of the school.

The section closes with an account of the model development, informed by the eight themes. Transcripts of quotations from participants are followed by particular identifiers (for instance,

principal, teachers, parents, pupils and key informants are followed by the school setting, R1, R2, U1 and U2, followed by a number between 1-92) to make it easy for the reader to understand where the information comes from. However, before presenting themes, identification of similar characteristics (Table 5) and of differences (Table 6) between the schools in the case study is shown.

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Table 5. Summary of Similar Characteristics Case-Study Schools.

School	Rural school 1 (R1)	Rural school 2 (R 2)	U1 (Urban 1)	U2 (Urban 2)
Established	1989	1978	1962	1954
Leadership	Male Principal	Male Principal	Female Principal	Female Principal
Setting	Rural	Rural	Urban	Urban
Grades	P1-6	P1-6	P1-6	P1-6
Teachers	30 (14 males, 16 females)	17 (7 males,10 females)	23(4males,19 females)	20 (6 males,14 females)
Other staff	3 cooks (1male,2females)	None	A watchman	A female cleaner
Pupils	1620 (834males, 786 females)	935 (458males, 477 females)	1329 (658males, 671females)	1313 (651males,665 females)
Classrooms	21 classrooms	12 classrooms	21 classrooms	20 classrooms
Class-pupil ratio	1:66	1:79	1:56	1:66
Water	No water supply	No water supply	Tap water supply	No water supply

Pit-Latrines	4 latrines	2 latrine	2 latrines	1 latrine
Fence	None	None	Hedge fence	Hedge fence
Gate	None	None	2 iron-sheet gates	None
Offices and staffrooms	Classroom partitioned into staffroom and offices.	None	Principal's office is part of storeroom	Principal's office is also a storeroom.
Sports facilities	Playgrounds not prepared	No playgrounds	No playgrounds	Basket and volley ball facilities
School feeding	Serves lunch to pupils	None	None	None
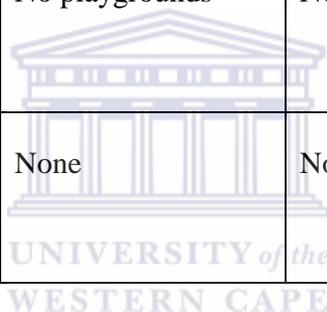
Table 6. *Differences Between the Schools in the Case Study*

School	School leadership/ management	School health policies	Pupil wellbeing	Partnerships	School's health services	Barriers to learning	Teacher wellbeing	School's physical environment
Differences between schools across themes								
R1	-Controlling, instructing, imposing and autocratic, widespread tensions to classroom level and beyond to parents	-Unwritten policies, rules and regulation. -Clubs in schools on: HIV/Aids, Environment, Speak Out, Unity and reconciliation, Sports and recreation, culture (but dysfunctional)	-Severe bullying; -Fighting among pupils -Pupils threaten teachers; -Alcohol and drug abuse; sexual harassment; -Older boys abuse and sexually harass girls; -High number of HIV/Aids cases, --Teenage pregnancies; orphans/ vulnerable children and age diversity	Parents/ Teachers' Committees (PTC) characterised by tensions, intolerance.	School feeding	-Heavy domestic chores; long distance -overcrowded classes	-Unsupportive relationships; -Social and health morbidities. -Long distances ; overcrowding; classrooms; work, double shifts -Stress/Burnout.	-Inadequacy of classrooms, five classes held under trees on school grounds. -Lack of water supply -Land shortage
	Collaborative with teachers but pupils and parents remained isolated.	Similar to R1 but has no clubs.	Less, compared to R1	No PTCs	None	Similar to R1	Collaboration between teachers, shared responsibilities	Critically poor state of buildings. Unrepaired, unhygienic toilets littered with excrement on floors, walls.

								Total lack of water. Roofs of asbestos. -Severe land shortage. No playgrounds and sports activities and lack offices
U1	Similar to R2	Similar to R1	Less, compared to rural schools	Isolated PTC	None	less	Collaborated, shared responsibilities	-Tap water intermittently runs. - No playgrounds.
U2	Similar to R1/ fewer spread tensions	Similar to R	Less in relation to rural schools	Isolated PTC.	None	Less	Similar to R1	-Total lack of water -Has basket, volley ball, small soccer field; no offices
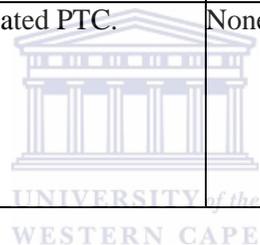
The following section presents the findings, organised under the eight themes. Each theme is presented with data excerpts from participants' responses, which are used to interpret the findings.

3.11.1 School Leadership and Management

The theme of school leadership and management emerged as a significant factor in this study, and it was reported to take different forms. Some schools reported collaborative leadership and management practices, while other schools experienced leadership and management challenges. For example, Schools R2 and U1 were said to be effiiciently led and managed, compared to their R1 and U2 counterparts:

> *Jyewe n'abarimu dushyirahamwe na komite y'ababyeyi ikadushyigikira*
> (*Umuyobozi w'ishuri, U1*). [My teachers and I collaborate and we are backed
> up by the parents' committee. (Principal, U1)]

The principal and teachers collaborated and were supported by parents at U1, while at R2, although the principal and teachers collaborated, teachers gave contradictory views on whether such collaborative relationships filtered down to influence relationships between pupils and their teachers and claimed each party often remained distanced:

> *Dufatanya n'ubuyobozi bw'ishuri ariko ubu bufatanye nti bugaragara hagati*
> *y'abanyeshuri n'abarimu. Ibi bikagira ingaruka ku banyeshuri cyane cyane*
> *batagira icyo bafashwaho n'abarimu cyangwa ababyeyi. (Abarimu, R2).* [We
> collaborate with school administration but teachers and pupils do not
> collaborate and this affects pupils, as they get no support from parents either.
> (Teachers, R2)]

This response revealed that the collaboration in R2 was not the general school practice as it was limited to being between teachers and school administration. R1 and U2 gave differing perspectives on school leadership and management. Teachers and parents at U2 said that they were not consulted for their opinions, even in decisions that affected them directly. Parents at the same schools raised the concern that their school principal resisted them and never considered what they proposed, and as a result, teachers and parents felt discouraged from taking part in the school's programmes:

> *Amashuri akora ari yonyine imyanzuro igafatwa n'uhagarariye ikigo ntabandi*
> *agishije inama. Ibyo dutanze nk'ibitekerezo ntibishyirwa mu bikorwa. Ibi*
> *bikaduca intege ntitugire icyo tumara mu buzima rusange bw'ikigo. Ikindi*

nuko ntagihinduka mu mikorere y'ikigo bitewe n'abayobozi badashoboye. (Ababyeyi, U2). [Schools operate in isolation, led by single-handed principals who hardly involve members of the school in making decisions. What we propose as a committee is not done, which discourages us from taking part in the school life. There is no change in the way the school functions, owing to incompetent school leaders. (Parents, U2)]

Parents were concerned that they could not openly dialogue with school authorities; hence, they had limited participation in school activities and programmes and decision-making processes. I observed that teachers and parents and pupils felt controlled, instructed, dictated to, uninvolved and not consulted for their points of view but instead had new goals and decisions imposed upon them, which they had had no part in developing. At R1 and U2, participants (principals, teachers, parents) do not seem to understand each other:

Tugira kutumvikana, kutizerana, kutoroherana no kutihanganirana haba hagati y'umuyobozi, abarimu n'ababyeyi; buri wese arinyamwigendaho ntawuvugana nundi bakibera iyo bakumva ntawe bagomba ibisobanuro ku mikorere yabo haba ku ubuyobozi cyangwa abaturage (*Abarimu*, R1). [We experience tensions and mistrust, poor tolerance and lack of patience between school administrator, teachers and parents, who always feel reserved and find it difficult to communicate with each other, work in isolation, and do not feel accountable either to the school leadership or to the community. (Teachers, R1)]

All the stakeholders agreed that relationships among them were not good. It was obvious that teachers did not work as a team because there was no sense of oneness. However, the principals' experiences of what it is to lead schools were of particular interest:

Kuyobora ikigo ntibyoroshye. Harimo ibibazo bisaba byinshi; harimo n'inshingano zijyana n'ibyo bibazo by'urusobe. Ukoresha abarimu batabishaka kubera agashahara gake, n'uburyo bakoreramo nubwo babamo babutari bwiza, abanyeshuri ntibakunze kwiga n'ababyeyi bagaterera iyo. Ngibyo ibibazo duhura nabyo, kandi tugomba no kugera ku ireme ry'uburezi dusabwa (*Umuyobozi w'shuri*, R1). [Leading a school is a difficult, challenging, demanding and complex responsibility, associated with many problems. You are under pressure to raise standards with demoralised teachers because of poor salary, poor working and living conditions, pupils who are not ready to learn and parents who are distanced. (Principal, R1)]

The principal maintained that it was difficult to lead the school alone when teachers show no will or motivation to fulfil their duties and responsibilities, as the school principal cannot fulfil his leadership and management roles without co-operation of all the stakeholders, be it

teachers, pupils or parents. Teachers were reported to rebel against the school leadership:
seems they are disgruntled and do not feel accountable to the school leadership:

> *Umwarimu agira ikibazo agasiga abanyeshuri bonyine. Yagaruka akanga ko ikibazo mukiganiraho, ahubwo agashyira ikosa ku muyobozi w'ishuri akaba ariwe ashyira mu majwi* (*Umuyobozi w'sihuri*, R1). [A teacher faces a problem and leaves for days, leaving pupils unattended. When he/she comes back, they do not want to be approached to talk issues through to settle the situation but starts pointing fingers and blaming it on the school principal. (Principal, R1)]

When the teachers rebel, pupils miss classes and consider dropping out of school. Teachers, in the first place, do not seem to be concerned about fulfilling their duties, yet they are compelled to ensure that school children are attending school. Teachers claimed that they felt this was not part of their responsibilities and considered the school leadership to be demanding and unrealistic when it compels them to follow up on pupils, even outside school:

> *Abanyeshuri barasiba cyagwa bakava mu ishuri wabibaza abarimu, bikazamura umwuka mubi kuko bumva ko kuba umwana yaje cyangwa ataje atari inshingano zabo; yewe habe no kubakurikirana mu ngo iwabo ngo bamenye impavu basibye cyagwa bavuye mu ishuri* (*Umuyobozi w'ishuri*, R1). [Pupils miss and skip classes and drop out of school. This therefore requires you to ask teachers about children's school attendance, which causes tensions because teachers feel that it is not their responsibility to follow up pupils at home to know why they missed or dropped out of school. (Principal, R1)]

At R1, the principal said he had confronted teachers who did not comply with his demands, which teachers were unhappy about:

> *Ntushobora kureka abantu ngo bakore uko bishakiye. Hari amategeko n'amabwiriza ngenderwaho atuma babibazwa, ariko bo bakabifata nkaho ari ukubatoteza bikaba intandaro y'amakimbirane na raporo mbi ku kigo n'ubuyobozi.* (*Umuyobozi w'ishuri,* R1). [You cannot let people do things as they please; there are procedures and rules and regulations to be respected by holding teachers accountable, which they take as a form of harassment and the genesis of all the conflicts and negative reports. (Principal, R1)]

Confronted by such problems, the principal decided to collaborate with those who were willing and demanded that others comply and fulfil their responsibilities, which made some teachers feel discriminated against:

Ubuyobozi bw'ishuri ntibufata abantu mu kigo kimwe kandi bwirengagiza imbaraga abarimu baba bakoresheje mu kazi. Twumva batatwitayeho, badufashe nabi bigatuma tutiyumvamo akazi n'ibyo dushinzwe; ntitwubahane, ntitwizerane, ntitubwizanye ukuri kandi ntidukorane twebwe hagati yacu mu kigo. (*Abarimu*, R1). [The school leadership fails to treat the school community as equals, and does not recognise teachers' efforts. We feel neglected and ill-treated, and with this, we feel less of a sense of belonging and responsibility, lack of mutual respect and trust, lack of openness and lack of interaction among and within the school community members. (Teachers, R1)]

School principals find it difficult to handle school leadership and management responsibilities without the collaboration of the district's education management officials. The principals, too, felt neglected and unsupported in leading and managing the school:

Igitangaje, ubuyobozi bw'akarere ntibubyitaho. Numva mfite ipfunwe igihe abarimu batuzuza inshingano zabo. Ikigo numva kimbereye nk'umuzigo. Hagati aho rero mpitamo gukorana n'abumva kandi bashaka gukora akazi ariko nkagerageza gutera akanyabugabo nabo basa nabacitse integer (*Umuyobozi w'ishuri*, R1). [Ironically, the district officials never pay attention. I feel frustrated when teachers do not fulfil their responsibilities; a school becomes a personal burden. I decided to collaborate with those who understand and are committed but also encourage those who are too discouraged to work. (Principal, R1)]

There was lack of common understanding of the schools' vision, direction or sense of purpose among and within the school community that might partly be the cause of all the scapegoating, tensions and mistrust among the teachers and community members. Teachers concurred with pupils that schools were characterised by poor collaboration and unsupportive relationships:

Imikoranire hagati y'abayobozi b'ishuri, abarimu n'ababyeyi ni ikibazo. Mu byukuri ntibashyize hamwe. (Abarimu, R1). [The relationships between school leaders, teachers and parents are a problem. Frankly speaking, these people are distanced from each other. (Teachers, R1)]

Although the principal reported finding his responsibilities taxing and a personal burden, with no support from colleagues and other stakeholders, the education officials at the national level blamed principals, accusing them of poor leadership skills and of being lazy:

Abayobozi b'ibigo ni abanebwe aho ubona ntagikorwa. Turi gutekereza uburyo twabongera ubushobozi, cyangwa tukabasezerera tugashyiraho abandi bashaka gukora (*Uhagarariye Minisiteri y'Uburezi*). [There is a

habit of laziness among the school directors, where nothing is done. We are considering how to empower them further or otherwise to dismiss them and recruit others who want to work. (Rwanda Ministry of Education official)]

Unexpected succession of principals also occurred. Teachers had to adapt to the newly appointed principal's ways of doing things. Unstable leadership made teachers' work difficult, as they had to adapt to every individual personality, one after the other:

> *Maze imyaka 8 nigisha aha. Muri iyi myaka abayobozi batanu banshiye imbere bayobora iki kigo. Uku guhindagurika k'ubuyobozi n'impinduka za buri gihe zizanywe n'abayobozi bahindagurika batahahagarara bituma mwarimu ariwe uharenganira bitewe n'ingaruka ziyo mihindagurikire* (*Abarimu*, U2). [In the 8 years I have been teaching here, five directors have ruled over this school. A teacher suffers all the consequences of school administration changes and instabilities caused by unreliable directors. (Teachers, U2)]

Teachers in all the schools expressed their grievances about how they were not involved in decision-making, particularly on policies they were compelled to implement with no idea about their purpose. In the course of the research, I observed that teachers at all the schools in the study did not want responsibilities to be blindly imposed on them and this was the reason they rebelled against their principals' demands:

> *Ntibadutumira mu gushyiraho ababwiriza n'uburyo ikigo cyayoborwa, habe no kudusaba ibitekerezo. Kuvanaho igihano cyo gukubita, kwimura abanyeshuri bose ari abatsinze ari abatatsinze ntumenya iyo biva. Wumva ubwiwe gusa ngo nta munyeshuri ukwiye guhanwa akubitwa kandi ntawugomba gusibira* (*Abarimu*, U2). [We are not involved in policy processes and formulation, not even consulted for our opinions. The ban of corporal punishments and automatic promotion came from nowhere; you are only told that pupils should not be beaten, should not repeat grades. (Teachers, U2)]

3.11.2 School Policies

Several education and health policies exist in mandate on paper, but in practice, none is applied in schools. These include the National School Health Policy in draft form (Rwanda Ministry of Education, 2010), the Special Educational Needs Policy (Rwanda Ministry of Education, 2007), the Reproductive Health Policy (Rwanda Ministry of Education, 2003) and the Girls' Education Policy (Rwanda Ministry of Education, 2008b) as well as the Teacher Development and Management Policy (Rwanda Ministry of Education, 2007). These policies

are important and need to be operational in schools; however, they need to be well communicated to schools, and the necessary resources for their implementation are required. School personnel and parents reported that they approve of the policies but do not like policies that are not well communicated and are not supported with resources to implement them. It must, however, be admitted that school health policies in the case-study schools were non-existent. There were no written health policies; even the simple rules and regulations that guided daily school activities were not recorded because they are prescribed by the Rwanda Ministry of Education. As a result, schools find it difficult to translate such policies into action because they do not know how to implement them and prefer to continue to do things in their traditional way:

> *Imirongo ngenderwaho, n'amabwiriza bihabwa ibigo biturutse muri Minisiteri y'uburezi. Gusa uko ibigo bibishyira mu bikorwa biracyari ikibazo kuko ibigo bigumya kwikorera uko byari bisanzwe bikora (Uhagarariye ikigo k'integanyanyigisho).* [School policies, guidelines and instructions are given to schools by the Ministry of Education but their implementation at the school level is questionable because schools continue to do things in their own traditional way. (National Curriculum Development official)]

In the absence of policies, the Rwanda Ministry of Education has mandated schools to establish clubs, such as groups concerned with environmental affairs, anti-Aids, Unity and reconciliation, Speak Out (for girl child empowerment), and anti-drug and substance abuse. These clubs are in line with the national policy implementation directives. Policies were observed to exist on paper at the national level but to be dysfunctional at school level because schools do not know what to do. Theoretically, clubs are present in the schools, but in practice, they are not functional because they are led by individual teachers with heavy workloads and no spare time for extramural clubs.

Because of the absence of clear policies in schools to address specific health issues that affect schools, participants expressed the need for specific policies to address particular health challenges in schools:

> *Buri kigo gikeneye kugira amabwiriza y'imirongo ngenderwaho asobanutse. Ntabwo ubuyobozi bw'ishuri bwakuzuza inshingano zabwo ukobikwiye ntamabwiriza ahari ayobora ibikorwa bisanzwe by'shuri. (Ababyeyi, U1).* [Every school needs to have clear policies; the school

leadership can never be efficient without clear policies to guide school activities and interventions. (Parents, U1)]

Participants identified particular policy gaps that reflected the schools pressing needs, such as the lack of a school feeding policy:

Abanyeshuri benshi baturuka mu miryango ikennye idashoboye kubagaburira. Dukeneye ko ikigo kigira amabwiriza ku kugaburira abana igihe bari ku ishuri kugirango umubare w'abasiba ugabanuke (*Ababyeyi*, U2). [Most of the pupils come from poor families that are unable to provide them food. We need a school feeding policy to provide food to pupils while at school, to encourage school attendance. (Parents, U2)]

At U1, parents cited the need for the policy on school feeding and on corporal punishment for their school. Teachers at U2 said they needed policies on hygiene and sanitation and disease prevention, while at R2, the principal suggested a policy on drug and substance control

Dukeneye ibwiriza rkumira ikoreshwa ry'ibiyobyabwenge mu bigo ndetse ari ababyeyi, abarimu, abanyeshuri n'ubuyobozi bw'ibanze bagafasha kurwanya ikoreshwa ry'ibiyobyabwenge kugira ngo hitabwe ku buzima n'imibereho myiza y'abari mu mashuri (*Umuyobozi w'Ishuri*, R2). [We need a policy on drug and substance abuse in schools and beyond, to engage parents, teachers and pupils, and the local administration in the fight against drugs and other substance abuse, to promote health and wellbeing of those in schools. (Principal, R2)]

3.11.3 Pupil Wellbeing

Pupil wellbeing encompasses pupil-pupil relationships, pupil-teacher relationships, pupil-parent relationships and pupils' attitude towards learning and academic achievement, disciplinary procedures and pupils' knowledge of rights.

3.11.3.1 Peer relationships

At all the schools, participants said that pupils' relationships deserved criticisism because some pupils fought, harassed each other, scorned and abused each other and displayed hatred for others.

Abanyeshuri bararwana, bagatotezanya, bagatukana, bagakimbirana hagati yabo kuko nta buryo cyangwa amabwiriza bihamye bifatwa ku myitwarire mibi runaka. Kuba nta bantu bakuze babitaho ngo babakurikirane babaha uburere bwiza babagira inama mu ngo bituma bagira imyitwarire idahwitse (*Abarimu*, R1). [Pupils fight, harass, scorn and

abuse each other partly because there are no disciplinary procedures in schools. Lack of adult supervision and guidance for the appropriate upbringing at home perpetrates such antisocial behaviours and manners. (Teachers, R1)]

Pupils from child-headed households, without adult guidance in the appropriate upbringing, were said to lack manners and respect for others. The genocide in 1994 left many children orphaned. Those whose parents were in prisons on genocide charges and those whose parents died of HIV/Aids were reported to lack manners and to be at high risk of adopting risky behaviours. At one rural school, pupils raised the concern that the worst affected were female pupils who were harassed and beaten by boys. Age and gender or socio-demographic factors were cited among the causes of indiscipline and other anti-social behaviours. The R1 principal emphasised that pupils' age was a problem as girls were always bullied, sexually harassed and victimised by mature boys. Mature pupils are often in classrooms with young children. The age and gender of pupils across the schools influenced pupils' relationships because pupils were not necessarily peers; they varied in age and gender and life experiences, and the younger girls were frequently victimised by older boys:

> *Abana b'abahungu bigize ba rutare bindakoreka bahohotera abandi babuza amahoro kubera ibisindisha n'ibiyobya bwenge baba bafashe. Cyane cyane abana b'abakobwa akaba aribo bahohoterwa cyane kurusha abahungu* (*Abanyeshuri*, R1). [Female pupils are bullied more than are boys by unruly and violent male pupils that bully others under the influence of alcohol, drugs and other substances. (Pupils, Rl)]

Furthermore, it was reported that the older pupils fought each other in the halls and passages, and because of their age diversity, the more mature amongst them were exposed them to the danger of teenage pregnancies. Although teachers were criticised for not keeping order, they had no power or influence, and pupils' bad behaviour was hard for teachers to cope with.

3.11.3.2 Pupil-teacher relationship

Pupils and teachers at all schools said that they did not interact with each other for various reasons. Pupils said they were not "*free*" with their teachers because teachers were not welcoming and were unsupportive to their needs:

> *Abarimu bacu ntitubisanzuraho. Ntibatwiyegereza kandi ntibadufasha. Turabatinya, ntitubasaba kudusobanurira mu ishuri igihe tutagize icyo tutumva kuko batubwira nabi* (*Abanyeshuri*, R2). [We are not free with our

teachers. Our teachers are not welcoming and supportive. We fear teachers; we don't ask for explanations in class when we don't understand because they are rude to us. (Pupils, R2)]

Pupils felt helpless, neglected, ignored and left to struggle on their own as no one cared about their worries and anxieties at school. They regretted being in families where there was no adult person to guide them:

> *Benshi muri twe ni imfubyi. Nta numwe witaye kubibazo n'amarira yacu. Ntibatwikoza, ntibatwiyegereza baturekera iyo tukirwariza mu kwibonera ibisubizo by'ibibazo byacu. Mbwira nawe imibereho y'abanyshuri birwariza muri byose ntabufasha* (*Abanyeshuri*, U2). [Most of us are orphans but no one cares about our worries and anxieties. We are neglected, ignored and left to struggle on our own to find ways of living with our own problems. Imagine the life of such pupils, taking all responsibility upon themselves without any support. (Pupils, U2)]

Teachers at all schools admitted that they were not aware of pupils' individual needs for particular help since they never interacted, talked, counselled or advised pupils intentionally because pupils were disrespectful to them, with behaviour that was hard for teachers to cope with:

> *Abarimu n'abanyeshuri ntahobahuriye. Nta mwarimu wegera abanyeshuri ngo yumve ibibazo n' ibyiyumviro byabo ngo babayobore. Ibi bituma abanyeshuri bumva ko bagomba kwikorera icyo bashatse, ariho hava imyitwarire mibi mu kigo* (*Umuyobozi w'Ishuri*). [Teachers are distanced from the pupils. No teacher is close to pupils to understand their situations, concerns, feelings and guidance, which makes pupils feel free to do whatever they want, hence the bad behaviour in schools. (Principal, U2)]

Teachers said that pupils avoided them because they did not trust teachers as they lack respect for them. However, pupils had an explanation for such relationships. As teachers showed no interest in pupils' lives or their family background, pupils in turn did not feel motivated to be close to their teachers.

> *Abarimu ntibazi ninde ufite umubyeyi ninde utamufite. Ibi bikababaza imfubyi igihe boherejwe mu rugo kuzana ababyeyi badafite. Nigute abarimu bagufasha batazi ibibazo byawe?* (*Abanyeshuri*, U2). [Our teachers do not know who has parents and who does not, Orphans are shocked when sent home to fetch parents they don't have. How can teachers help you if they don't know your problems? (Pupils, U2)]

Owing to lack of mutual respect and trust between teachers and pupils, the two parties fail to collaborate and show respect for one another. As a result, pupils loiter around and make a noise and do not listen to or accept teachers' reprimands; hence, the decision to let pupils manage on their own:

> *No kureba umwana byonyine birahagije guhamagara polisi ayibwira ko wamututoje. Tumaze kubibona dutyo, twahisemo kuzibukira turabihorera, cyane ko abarimu aribo bagerwaho n'ingaruka* (*Abarimu*, R1). [Even looking at a pupil is enough to cause them to call the police and report that you have harassed them. Having been confronted with such an attitude, we decided to leave it for them to decide; after all teachers are the ones affected most. (Teachers, R1)]

Pupils at R1 were critical of teachers' interaction with them on a daily basis as they said that teachers never greeted them, even when they crossed paths with each other.

> *Abarimu ntibadusuhuza; natwe rero twafashe umwanzuro wo kutabasuhuza. Si itegeko ko umunyeshuri asuhuza mwarimu bwa mbere. Niba mwarimu anyuzeho incuro imwe, ebyiri cyangwa zirenga atansuhuje, nanjye nzaceceka simusuhuze* (*Abanyeshuri*, R1). Our teachers never greet us and so we decide not to greet them too. It is not a rule that pupils greet teachers first! If my teacher passes once, twice and more without greeting, I will also keep quiet and won't greet them either. (Pupils, R1)]

3.11.3.3 Pupils' attitude towards learning and academic achievement

Pupils' attitude towards their learning was, in the first place, shaped and influenced by their family situation at home. All the participants' agreed that parents were reluctant to attend to their children's education and their wellbeing. Children thus grow up in a health-compromising environment, where they are exposed to child abuse, even rape, which affects their wellbeing and healthy development and makes their future uncertain:

> *Ababyeyi ntacyo bitayeho mu gukurikirana abana imuhira no ku ishuri. Wumva abana bafashwe ku ngufu, abandi bavuye mu ishuri bazerera ku mihanda. Niba nta ngamba zo gushishikariza ababyeyi kwita ku bana zishyizweho, ahazaza h'abana ntaho mbona* (*Uhagarariye Minisiteri y'ubuzima*). [Parents are reluctant to follow up their children at home and school, you hear of children raped, who drop out of school to become street children, and if strategies to involve parents are not put in place, our children's future is uncertain. (Ministry of Health official)]

Parental involvement forms different aspects of the child's developmental needs and is not limited to assistance with schoolwork but goes beyond to develop the child as a whole human

being. It involves talking, guidance and care, instilling good manners and cultural values, as well as grooming and protection of the child. Judging from the responses received, it appears that neither parents nor children talk to each other; each one is separate:

> *Ababyeyi n'abana ntahobahuriye, ntibaganira. Umwana ashobora kwiga imibare ku ishuri ariko isuku, umuco, imyitwarire myiza n'uburezi bw'ibanze bihera mu rugo* (*Uhagarariye Minisiteri y'ubuzima*). [Parents and children are distanced; they don't talk to each other. A child may go to school to acquire math but cleanliness, culture, good behaviours and basic education should be learned at home. (Ministry of Health official)]

Children miss parental guidance and care and grow up without the appropriate upbringing. In all the schools in the study, parents were reported to discourage and demoralise children by making negative comments, which the children believe, causing them to abandon school:

> *Ababyeyi baca abana intege bigatuma batagera kucyo bifuza mu buzima bagira bati, 'urigira iki? Urashaka kuba iki? Ntitwize kandi turiho.' Abanyeshuri bakabona ko ari ukuri bakava mu ishuri (Abarimu, R2).* [Parents discourage their children from realising their dreams, with negative messages like "What are you studying for? What are you going to be? We never had education and we manage to live", which pupils take for real and then abandon school. (Teachers, R2)]

At U2, parents said that pupils were abandoned by both sides and blamed consistently by parents and teachers instead of being guided in the right direction. Neither parents nor teachers gave pupils proper guidance.

Teachers and principals across all the schools reported that, in effect, pupils do not show the will and commitment to learn. It was said that pupils do not concentrate in class and do not take learning seriously and that other things besides studying hold their attention, such as watching films during schools hours. Pupils come to school late, with homework not done and subsequently perform poorly or fail in school and national tests and examinations:

> *Abanyeshuri ntibafata kwiga nk'ibyabo kandi ntibanabishyiramo ubushake. Bamwe baza bakerewe, batakoze imikoro bahawe yo murugo ahubwo bahugiye mu kureba amafilimi* (*Abarimu*, R1). [Pupils feel less concerned about their education and do not take studying seriously. Many students come to school very late with undone homework but are busy watching films. (Teachers, R1)]

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However, the responses of pupils differed from that of teachers. Pupils at R2 felt being at school without achieving academically was a waste of time as they found it difficult to pass the national examinations and tests:

> *Ducibwa intege no kuba ku ishuri twiga tugatsindwa. Ntibyoroshye gutsinda ibizamini bya Leta*. (*Abanyeshuri*, R2). [We feel discouraged by beiing at school only to fail; it is difficult to pass the national tests and exams. (Pupils, R2)]

The pupils' perspective was corroborated by the principal of U2, whose opinion was that their performance deteriorated as time passed. This was a general concern to all the schools in the study:

> *Gutsinda bigendabisubira inyuma uko igihe gishira birushaho kuba bibi. Twatsindiraga kuri 70%, tuza gusubira inyuma kugera kuri 30% nyuma tugera kuri 22% none ubu turi kuri 13% ku ijana* (*Umuyobozi w'ishuri*, U2). [Performance is deteriorating, getting worse as time passes. We used to pass 70% of the pupils, which later fell to 30%, then 22% and now 13%, at present. (Principal, U2)]

Other reasons why pupils had no interest in school were raised by participants, who claimed that most pupils did not get sufficient support and encouragement from home to back up what they have been taught at school, which discouraged them. They, however, attributed their failure to other factors, rather than their personal characteristics, that played out to become barriers to their academic success:

> *Ni gute watsinda igihe ugera ku ishuri unaniwe, wishwe n'inzara ntanibyiringiro byo kubona icyo uri burye I muhira. Ntushobora kugira imbaraga zo kwiga* (*Abanyeshuri*, U2). [How would you succeed if you arrive at school tired, late and fainting of hunger with no hope that you will find food at home? You cannot concentrate. (Pupils, U2)]

Teachers at all the schools highlighted multiple factors that contributed to pupils' failure:

> *Guhindagurika kw'abarimu n'ubuke bwabo, kuba ababyeyi badafasha abana mu rugo, kuba abanyeshuri batita kubyo biga, imyigishirize nkene n'ibura ry'ibikoresho mfashanyigisho mu mashuri nibyo byingenzi bituma abanyeshuri badatsinda neza* (*Abarimu,* U2). [Change of teachers and their shortage, lack of parental support for learning at home, pupils' lack of interest in learning, poor teaching methods and lack of teaching materials in schools are the main factors contributing to poor performance. (Teachers, U2)]

The Inspectorate General of Education official emphasised that children's failure could be overcome by teachers and parents taking responsibility and encouraging children to learn by explaining to them the importance of education:

> *Abana ntibumva akamaro ko kwiga. Ni uruhare rw'abarimu n'ababyeyi kubakundisha kwiga* (*Uhagarariye urwego ry'Ubugenzuzi rusange rw'uburezi*). [Children don't understand the importance of education. It is the responsibility of teachers and parents to stimulate pupils to learn. (Inspectorate General of Education official)]

Parents in all the schools in the study were said to be unsupportive of children's schoolwork and to have failed to provide the necessary school materials and learning needs to children. Pupils handed in incomplete homework as they lacked light at home:

> *Imiryango duturukamo ntidufasha mu myigire yacu. Ababyeyi ntibatwemerera gukoresha peterori mu rugo dukora imikoro; nyuma tukayisubiza ku ishuri idakoze abarimu bakadutuk* (*Abanyeshuri,* R2). [The families that we come from do not facilitate our learning. Parents refuse to allow us to use paraffin to do our homework, which we return to school undone, and teachers quarrel with us over it, blaming it on us. (Pupils, R2)]

3.11.3.4 Discipline management procedures and pupil's knowledge of rights

Teachers expressed their frustrations with regard to behaviour and discipline in schools. Teachers and parents said as long as they are not allowed to punish children and physical punishment is banned, pupils will remain unmanageable.

> *Kuvanaho igihano cyo gukubitwa byatumye abanyeshuri baba indakoreka, ibyigenge, batubaha, basuzugura, birata ku barimu rimwe na rimwe no ku babyeyi babo. (Abarimu, R2).* [The ban on corporal punishments results in pupils being unruly, disrespectful, scornful and arrogant to teachers and sometimes to their parents. (Teachers, R2)]

The key informants offered a similar view to teachers—that lack of punishment and pupils' refusal to do alternative punishments disempowered teachers because their freedom to punish had been taken away and pupils have become undisciplined and do whatever they want, despite the impact this has on their lives and on members of the school as a whole:

> *Tubwira abanyeshuri uko bakwiye kwitwara, nta cyindi twakora. Abanze turarekera. Batubwira ko polisi yadushorera kandi nibyo koko si ukubeshya, polisi ifata abakubise abana. Nta mpamvu yo gufungwa kubera ko wingingiye umwana kwiga. Bakwiga batakwiga, ibyo ni ibyabo* (*Abarimu,*

R1). [We only tell pupils to behave and there is nothing else we can do; those who refuse, we leave them. What they tell us about police arrests is not a lie: they arrest you. It is no use being jailed because you begged a child to study. They study or not; it is their business. (Teachers, R1)]

Teachers and parents at all schools in the study were concerned about being imprisoned for disciplining pupils. Teachers felt threatened by children's tendencies to take revenge on them and decided to leave children to their own devices:

Uhana umwana akarakara agashaka kwihorera bitewe nuko bishyizemo ko bagukorera icyo bashatse cyose Ubu twarashobewe (*Abarimu*, R1). [When a teacher punishes a child, he or she may take revenge, knowing that, by law, they can do whatever they want. Thus, we are puzzled. (Teachers, R1).]

Teachers regretted the fact that pupils never took them seriously when they used words to reprimand them. At R2, pupils concurred with teachers' complaints that pupils ignored punishments given by teachers:

Abanyeshuri banga ibihano bahawe n'abarimu nta mususu bakakubwira ko bazanywe no kwiga atari ugukubura cyangwa gukoropa; bati bikore ariwowe. Ibi bibangamira abarimu bikabatera kwiheba bagahora batanezezwa na rimwe nabyo (*Abanyeshuri*, R2). [Pupils confidently refuse punishment given by teachers and tell them they never came to school to mop but to study, saying, "You rather do it yourself". This is depressing for our teachers because they are never happy. (Pupils, R2)]

However, some teachers at the same school gave possible reasons why pupils behave in such a way. They maintained that the children grow up on their own, with difficult life experiences:

Imyitwarire mibi y'abanyeshuri ni ikibazo kiduhangayikishije kuko benshi muri bo baba baranyuze mu buzima bugoye. Bamwe babaye abashumba, abandi barireze ntibazi kurerwa n'ababyeyi uko bisa (*Abarimu*, U2). [Pupils' indiscipline is a serious concern for us because many of them have lived through harsh conditions. Some looked after cows; others were raised in the absence of their parents, living by their own devices. (Teachers, U2)]

Teachers at R1 mentioned incidents of fighting between teachers and pupils. Teachers in some schools feel unsafe because pupils make them feel vulnerable.

3.11.4 School Partnerships with Parents, Families and the Local Community

The reality of partnerships in schools in the study was that parents have not been involved in the schools' life for quite a long time. The reasons for this could be lack of education and a schooling system that traditionally excluded parents:

> *Ababyeyi bashishikarizwa kugera ku ishuri; ariko imyumvire yabo nuko umwana n' ishuri biri mu maboko ya mwarimu. Bo bumva ntacyo bibarebaho (Uhagarariye ikigo k'integanyanyigisho)*. [Parents are encouraged to come into schools, but of course, they traditionally have the idea that children and the school are the business of teachers, exercising acquired skills. (National Curriculum Development official)]

A similar observation, made by the school principal, was that parents do not show an interest in school life

> *Twasabye ababyeyi kuzajya badufasha no ku ishuri ariko ubona ntacyo bitayeho (Umuyobozi w'ishuri*, R2). [We have always asked parents to come and help us, but they don't show interest at all. (Principal, R2)]

Most parents send children to school and believe their part is finished so never become involved in school activities, while the few that come were reported to be unsupportive:

> *Muri rusange ababyeyi ntibashishikajwe n'uburere bw'abana babo. Iyo babagejeje ku ishuri bumva bihagije. Uburere babusigiye ishuri; ubona ntawitaye kugufatanya n'ishuri mu bikorwa byo kurera. (Abarimu, R2)*. [Generally, parents are not involved in educational matters of their children; when they bring a child to school, that is all. Parents have left the responsibility of education to schools; no one wants to be involved in school activities. (Teachers, R2)]

In this study, it became relevant to investigate the reasons why parents were not involved in schools and the education of their children. Parental involvement seems a far goal to realise unless the barriers at the forefront are understood and addressed. These include lack of role definition and boundaries, parents' life contexts, parents' educational background, academic achievement of children, parent-teacher relationships, school communication with parents, parents' invitation to school meetings and, last but not the least, the commitment of both schools and local administrators to involve parents.

3.11.4.1 Role definition and boundaries

In all the schools in the study, parental involvement was reported to have been traditionally overlooked by the education and schooling system, which resulted in parents being unconcerned about their parenting and partnership roles. Even when encouraged, they stayed uninterested:

> *Ababyeyi ubona bahatirwa kuza ku mashuri. Ntibazi n'uruhare rwabo kuko batabitojwe cyangwa ngo babihugurirw* (*Uhagarariye ikigo k'integanyanyigisho*). [Parents have to be dragged into schools and are unaware of their roles because they are not trained. (National Curriculum Development official)]

The schools in the study were said to have remained closed and inward-looking systems to parents, who considered that education of children and schooling is the business of teachers with professional training. Roles of parents in the education of their children were not clearly defined, specified and communicated, which partly explains why parents have to be "*dragged*" into schools. Encouraging parents to come into schools is a good gesture but not good enough without prior sensitising training.

All the participants cited lack of clear roles and boundaries to be a potential barrier to parents' participation in education of their children.

> *Ababyeyi basa naho bahejwe basigara inyuma kuko batazi uruhare rwabo mu myigire y'abana babo. Icyabo ni ukohereza abana gusa* (*Uhagarariye urwego rw'ubugenzuzi rusange rw'uburezi).* [Parents are excluded because they are not aware of their roles in the education of their children; they just send children to school. (Inspectorate General of Education official)]

Participants in all the schools raised similar concerns—that parents are not aware of their roles:

> *Iyo ababyeyi bagejeje abana ku shuri bagiye gutangira, bumva inshingano zabo bazigezweho kuko batumva urundi ruhare bagira mu burere bwabo (Umuyobozi w'Ishuri, U1).* [When a child starts school, parents feel their responsibility is fulfilled because parents do not understand their role in their children's education. (Principal, U1)]

The parents' lack of understanding of their roles left them with the idea that teachers would do the job (after all they are paid for it) and the misconception of free education arose:

Ababyeyi baharira abarimu uburere bw'abana babo bitwaje ko batanze agahimbaza musyi kandi ubusanzwe kwiga ari ubuntu (*Uhagarariye Minisiteri y'Ubizima*). [Parents leave the responsibility of education to teachers, saying they have paid school fees and bonuses, and after all, education is free. (Ministry of Health official)]

However, I noted that all the participants had little understanding of what partnership and parental involvement entailed. Schools were unclear about what they expected from parents, and it is crucial to understand the issue of unclear boundaries for parental involvement, to avoid a conflict of roles:

Ishuri rifite PTA igizwe n'ababyeyi n'abarimu. Icyo ababyeyi bakora ni kureba, guhuza no kwiga ibibazo bihari bagatanga n'umuti (*Uhagarariye Minisiteri y'uburezi agashami k'uburezi bw'ibanze*). [School have PTAs composed of parents and teachers. Parents are there to oversee, co-ordinate and assess what the problems are and suggest solutions to such problems. (Directorate of Basic Education official)]

Parents did not know how far to oversee, co-ordinate, inquire and suggest solutions to the challenges in schools because boundaries and roles were not clearly marked, with the consequent likelihood that their involvement would cause harm rather than good to their relationships with schools:

Nubwo amashuri afite PTA, ubufatanye ntibumeze neza kuko ahanini ababyeyi babaho nk'abamaneko b'ibibera mu mashuri aho kugira icyo bakora. Ababyeyi biha kugenzura abarimu bigatuma gushyira hamwe bidakunda. Tumaze igihe dukurikirana ntakujenjeka abarimu bakererwa ku kazi nta mpamvu ifatika yabiteye. (*Ababyeyi, U2*). [Although schools have PTAs, partnership is weak and parents act as spies on what schools do rather than contributing. Parents control teachers and the two parties fail to collaborate. We have been dealing harshly with teachers because they have no genuine reason for their reluctance to work. (Parents, U2)]

Parents do not have a clear sense of collaboration and understanding of their roles and boundaries and this is the reason why they control, confront and blame teachers on many grounds rather than supporting them:

Ababyeyi bagenzura abarimu. Iyo dukerewe ku kazi twisobanura imbere y'ababyeyi impamvu tutari ku ishuri, nubwo waba wajyanye umwana kwa muganga (*Abarimu, U2*). [Parents control teachers; when late for work, we must tell parents the reason why we are not at school, even if we are taking a child to the clinic. (Teachers, U2)]

The Rwandan Ministry of Education has developed a national school health policy (still in draft form) which states that

> *Minisiteri y'uburezi izatanga imirongo ngenderwaho ku uburyo PTA n'abaturage muri rusange bakwinjira mu buzima bw'amashuri. Iyo mirongo ngenderwaho ikazagena uruhare n'icyo PTA, abaturage muri rusange n'abakozi b'ikigo bakora.* (*Ibwiriza ry'ubuzima mu mashuri ku rwego rw'igihugu, 2010, p.21*). [The Ministry of Education shall provide the guidelines for the involvement of the PTAs and communities in the schools. The guidelines shall describe the roles and functions of the PTAs, community and school staff. (National School Health Policy, 2010, p. 21)]

The policy however fails to define who these school managers are and at what level they operate, and this creates problems for those involved, as the chances are that no one will take responsibility for such roles.

3.11.4.2 Parents' life context

Parents' contexts of living impose barriers to their participation in school activities and the education of their children. Parents find it difficult to make ends meet; they struggle to feed and provide for their families to the extent that they cannot meet all the basic needs of their children:

> *Abanyeshuri benshi baturuka mu miryango itifashije aho kurya no kubona ibikoresho by'ishuri biba bitoroheye ababyeyi. Benshi muri bo baza ku ishuri n'imyenda itameshe bakaza n'ibirenge nta nkweto. Ikibazo gikomerera ku miryango ifite abana benshi barenze ubushobozi bw'ababyeyi badashobora gukemura ibibazo byabo* (*Uhagarariye Ubugenzuzi rusange rw'uburezi*). [Most pupils come from socio-economically disadvantaged and deprived families and communities where most families are unable to feed children and provide scholastic materials to children. Most pupils come to school unkempt, with unwashed clothes and barefooted. The situation is aggravated by many children being in families in which parents do not havethe socio-economic capacity to provide for their needs. (Inspectorate General of Education official)]

Because of life difficulties experienced by parents, they leave their homes every morning to search for jobs and food to sustain their families and have no time to follow up on children's schoolwork:

> *Ababyeyi bazinduka kare banjya gushaka akazi n'icyatunga abana. Ntibazi niba abana babo bagiye ku ishuri cyangwa batagiyeyo. Icyangombwa kuri bo ni ukubona icyo barya si uburere.* (*Abarimu, R2*). [Parents leave home early morning to search for jobs and food for their children. They won't

know if their children have gone to school or not because for parents, the priority is what to feed their children, not education. (Teachers' R2)]

3.11.4.3 Parents' educational background

Most parents in Rwanda lack education and thus undervalue the importance of attending school:

> *Ababyeyi benshi ntibize ibyo bigatuma ntagaciro baha uburezi bw'abana babo. Abana rero bata ishuri bakaba babafasha imirimo mu rugo (Uhagarariye Ubugenzuzi rusange rw'uburezi).* [Rwandese parents do not value education because most of them have never gone to school and believe a child should leave school and help with household chores. (Inspectorate General of Education official)]

The majority of the parents of participants in the case study were illiterate, which undermined their willingness to participate in school programmes:

> *Hari PTA mu mashuri ariko se ni babyeyi ki dufite? Benshi ntibazi gusoma no kwandika. Ni iki kindi wabasaba ntacyowabizeraho guhindura mu ishuri? Si ukubura ubushake ahubwo nta bushobozi bafite* (*Uhagarariye ikigo k'integanyanyigisho*). [There are PTAs in schools, but what kind of parents do we have? Most of them are illiterate; how do you expect them to make a difference? It's not their willingness that is lacking but their capacity. (National Curriculum Development official)]

Parents at all schools admitted being ignorant about schoolwork and wondered how they could be of assistance to their children with homework. Parents also challenged the schools to train them on the necessary tools to use in order to help their children.

> *Benshi ntibize, nigute bafasha mu bijyanye no ku ishuri nabo ubwabo ntabyo bazi? Kumbwira guteza imbere uburezi numva ntacyo bivuze cyane, keretse ababyeyi bahawe amahugurwa k' uruhare rwabo mu mashuri no mu burezi bw'abana babo* (*Ababyeyi*, R1). [Most parents are not educated, so how can you support with schoolwork you don't understand? Telling me to promote education doesn't make sense unless parents are trained on how to be involved in schools and the education of their children. (Parents, R1)]

It would be unfair to conclude that parents are not interested in the education of their children. Parents are held back by literacy and numeracy deficiencies to the extent that even sending their children to school remains a challenge because they do not understand the essence of education:

Iyo bitaba ibwiriza rya leta rishyira igitsure ku babyeyi ngo bajyane abana ku ishuri, ntibyari kudushobokera kujyayo (*Abanyeshuri*, R2). [If it wasn't for the government policy that forces parents to take us to school, we would not have made it to school. (Pupils R2)]

Most parents take their children to school not because they want to but to comply with the government policy, and this partly explains why parents are not motivated to support and assist their children with schoolwork. The encouraging factor, however, was that the key informants were aware of the illiteracy challenge among parents and the Ministry of Education was seeking viable strategies to address the situation:

Tuzi ko ababyeyi benshi batazi gusoma no kwandika kandi ko uburere bw'abana babo ntacyo bubabwiye. Turi kugerageza kubakangurira binyuze muri PTA kugerageza gufasha abana babo mu mikoro abana bahabwa ikorerwa mu ngo (Uhagarariye Ubugenzuzi rusange rw'uburezi). [We know that parents are illiterate and they don't pay attention to the education of their children, but we are sensitising parents through PTAs to get involved by helping their kids with homework. (Inspectorate General of Education official)]

However, this strategy does not address the issue of the training that parents need, perhaps through adult education, because *sensitisation* is not what parents need or want.

3.11.4.4 Academic achievement of children

The children's performance was reported to affect parents' interest in schools. Poor performance and low pass rates among pupils seemed to parents to be a waste of time. On the other hand, teachers maintained that parents had so much that kept them busy that they did not even know their children's classrooms:

Ababyeyi bacibwa intege no gutsindwa kw'abana babo bigatuma badafatanya n'ikigo. Ababyeyi nibo bafite uruhare runini mu gutsindwa kw'abana kuko batita ku ruhare rwabo mu myigire yabo. Ababyeyi nibo bazi abana babo n'ibyo bakeneye mu myigire yabo kurenza abarimu. Bafasha abana gutsinda bafatanyije n'abarimu. Ariko ubwo bufatanye ntibabukozwa. Twakora iki? Ababyeyi ntibanazi amashuri abana bigamo. (*Abarimu*, U2). [Parents are discouraged from participating in school by their children's failure. Parents are a major factor in their children's failure because they don't play their role. Parents know their children and their learning needs better than teachers do and they can help their children to succeed in collaboration with teachers. However, if parents don't want to collaborate, what can we do? Parents don't even know their children's classes. (Teachers, U2)]

3.11.4.5 Teacher-parent relationships

The recurrent challenge cited across all the schools was lack of collaboration between teachers and parents, as reported by the Inspectorate General of Education official:

> *Ikibazo ni ubufatanye budahari hagati y'ababyeyi n'abarimu. Iyo budahari rero, nta no gukurikirana uburezi bw'abana bityo ntibatsinde neza no ku ishuri* (*Uhagarariye Ubugenzuzi rusange rw'uburezi*). [The problem is lack of collaboration between parents and teachers. Without collaboration, there is no follow-up on children's education and children cannot do well at school. (Inspectorate General of Education official)]

Lack of collaboration seriously affected pupils' learning. Some parents blamed their fellow parents who went to school and quarrelled with teachers in an unseemly way that eroded collaboration between parents and schools:

> *Nta bufatanye hagati y'ababyeyi n'ikigo. Iyo batumijweho, baza batongana bagimpaka n'abarimu bababwira n' uburakari nagasuzuguro.* (*Ababyeyi*, U1). [There is no collaboration between parents and the school. In cases where parents respond to invitations, they go there to quarrel and argue with teachers, talking to them angrily and scornfully. (Parents, U1)]

In some schools, teachers and parents have no close collaboration. Parents are blamed for lack of interest in getting to know teachers and learning about school activities in general:

> *Ababyeyi n'abarimu ntibaziranye. Ababyeyi bagombye kugira amatsiko yo kumenya umwarimu boherereza abana babo buri munsi.* (Abarimu, T2). [Parents and teachers do not know each other. Parents should be curious about the teacher to whom they send their children every day. (Teacher, R2)]

Among other reasons, the lack of curiosity from parents about knowing teachers and teachers knowing parents stems from lack of mutual respect and trust:

> *Ababyeyi baza ku kigo gutongana birengagije imyitwarire mibi yagaragaye ku bana babo. Ababyeyi bagombye kwizera abarimu kuko aritwe tubarerera aho batari.* (*Abarimu*, U1). [Parents come to school and argue strongly in defence of their children, overlooking their misbehaviours. Parents must trust their teachers because we look after their children when they are not there. (Teacher, U1)]

The perceived sacrifice by teachers in looking after children at school is good but not enough to win them the necessary trust and respect from parents. The trust needs to be reciprocal as it benefits all the stakeholders and is preferable to assigning blame. Although teachers blamed

parents for taking confrontational attitudes, parents blamed teachers for their unwelcoming attitude whenever they came to school, for whatever reason:

> *Iyo uje ugira icyo ubaza ku ishuri, abarimu ntibakwakira. Rimwe na rimwe bakagusubiza nabi bigatuma ababyeyi babaharira uburere bw'abana babo.* (*Ababyeyi*, R1). [When you come to school asking for something, teachers don't welcome you and have a tendency to respond badly, which causes parents to leave education to teachers. (Parents, R1)]

Parents blamed teachers for lack of openness whenever they attempted to inquire about something. Parents claimed that teachers ridiculed them and accused them of being counterproductive:

> *Ntakugawa bibaho n'igihe ibintu bitagenze neza. Iyo ubikoze abantu babifata nabi bakababara bakagufata nkushaka kwigaragaza.* (Ababyeyi, R1). [Positive criticism does not exist; when things go wrong and you criticise, people feel offended and upset, and you are considered a destroyer, an attention seeker. (Parents, R1)]

3.11.4.6 School communication with parents

Poor communication between schools and parents hampered partnerships. Many schools adopted a "communication exercise book" as a viable means to reach all parents and guardians. However, stakeholders did not make the appropriate use of the books as pupils returned them with no parents' or guardians' remarks on what had been communicated:

> *Iyo umwarimu agize icyo ashaka kugeza ku mubyeyi kubyerekeye umwana, twandika mu gitabo umwana acyura ariko ni umubyeyi umwe ku ijana bagikoresha* (*Abarimu, R2*). [If a teacher wants to inform a parent about a matter concerning his/her child, we write in the book that children take home with them, but only one in hundreds of parents make use of this exercise book. (Teachers, R2)]

3.11.4.7 Invitation to school meeting

Contradictions emerged from different schools and participant subgroups. The view of one school principal was that parents do not want to co-operate in the education of their children:

> *Ababyeyi ntibashakira kimwe kugira uruhare mu burere bw'abana babo. Dutumiza inama yo kuganira ku bibazo bibangamiye ikigo bakanga kuyitabira. Bake cyane nibo bayitabira aho nko mu babyeyi 2000, 10 cyangwa 5 aribo baza* (*Umuyobozi w'ishuri*, R1). [Parents do not want to participate at all in the education of their children. I call for a meeting to

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discuss problems affecting the school and they refuse to come or very few come. In a school of 2000 parents, only 10 or 5 turn up for the meeting. (Principal, R1)]

On the contrary, however, teachers from R2 attributed parents' lack of involvement in school activities to the reluctance of the school leaders, who do not make an effort to invite parents into school. School administrators and teachers do not make an effort to invite and inform parents about what is expected of them in school:

> *Ubuyobozi bw'ikigo n'abarimu ntibatumira ababyeyi mu bikorwa by'ikigo ari nayo mpamvu ababyeyi batiyumva mu burere bw'abana babo ku ishuri.* (*Ababyeyi*, R2). [School authorities and teachers do not invite parents to participate in school activities and this is the reason why they are not involved in the education of their children. (Parents, R2)]

Although parents blamed school administrators and teachers for not inviting them into schools, teachers said that even the few parents they invited did not respond to their invitations. However, teachers were aware of the reasons why parents did not respond to invitations:

> *Ababyeyi ntibitabira ubutumire kubera kubura umwanya no kumva ko ikigo kibatumira ku kwiga ku bibazo gusa atari ikindi kintu kiza.* (*Abarimu*, R2). [Parents do not respond to the school invitations because of lack of time and the perception that schools invite parents only to discuss problems, but not for any positive agenda. (Teachers, R2)]

Teachers at R1 said that schools invited parents to discuss children's misbehaviour, which did not impress parents, who later ignored school invitations and meetings:

> *Abarimu batumira ababyeyi kubabaza ibyerekeye n'imyitwarire mibi y'abana ariko ntibaze baka rekera uburere bw'abana abarimu (Abarimu, R1).* [Teachers invite parents to discuss pupils' misbehaviour, but parents don't come and leave it to the teachers to deal with the children. (Teachers, R1)]

3.11.4.8 *School administrators' and local authority's commitments to involve parents.*

Schools and local authorities were criticised for their lack of effort to involve parents in the education of their children. The school principal at R2 admitted that they had never made an effort to involve parents and that this was perhaps the reason why parents were not involved:

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Sindashishikariza ababyeyi ku kamaro k'uruhare rwabo mu burere
bw'abana babo ari nabyo bishobora kuba bitera kubura kwabo mu nama
(*Umuyobozi w' shuri*, R2). [I have not been able to sensitise parents on the
importance of their role in the education of their children and this is perhaps
the reason why very few come for meetings. (Principal, R2)].

The Inspectorate General of Education official emphasised the point that if school leaders and local authorities make no effort to involve parents and communities in school life, then schools become isolated from communities:

Kuba abayobozi b'ibanze n'abayobozi b'ibigo badashishikariza ababyeyi
kugira uruhare bituma ababyeyi ntacyo bitaho mu mirerwe y'abana ku
ishuri (Uhagarariye Ubugenzuzi rusange rw'uburezi). [The lack of local
leaders' and school leaders' commitment to involve parents is the reason
why parents are not involved in schools. (Inspectorate General of Education
official)]

The recurrent view proffered was that school leaders do not work with local authorities in order to sensitise parents and communities to the importance of coming into schools:

Abayobozi b'ibigo ntacyo bakora kigaragara ngo batumire abaturage
kugira uruhare mu buzima bw'ishuri, yewe n'abarirereramo.(Uhagarariye
Minisiteri y'Uburezi). [These school principals don't make an effort to
involve the wider community in the school life, even those whose kids
attend the same school. (Ministry of Education official)]

The above view is substantiated by the view of the key informant from the Ministry of Health:

Ababyeyi ntibagira uruhare rugaragara mu bibera ku ishuri kuko abayobozi
b'ibigo nabo batabibashishikariza (*Uhagarariye Minisiteri y'Uburezi*).
[Parents do not participate in schools to any considerable degree because
school leaders do not motivate them to take active roles in schools.
(Ministry of Health Official)]

Although the key informants blamed school leaders for not doing their part, they also attributed lack of parental involvement to the local administrators' lack of effort to sensitise parents:

Ubuyobozi bwibanze ntibudufasha kurera abana. Abana bamwe baba
bibereye aho berekana amafilimi mu gihe cy'amasomo. (*Umuyobozi*
w'ishuri, R1). [Local leaders do not help us look after these children. Many
children are caught watching movies in the cine-hall during school time.
(Principal, R1)]

3.11.5 Schools' Health Services

Participants raised the concern that health services have long been a large gap in public primary schools, as reported by the UNICEF key informant:

> *Amashuri ntatanga akazi ku bakozi bashinzwe ubuzima mu bigo nk'abaforomo, abaganga n'abajyanama mu bumenya muntu n'abandi bafasha mu bikorwa by'ubufatanye. Serivisi z'ubuzima ntiziba mu mashuri yacu nubwo ari ngombwa (Uhagarariye Ubugenzuzi rusange rw'uburezi).* [Schools do not employ school health personnel like school nurses, school doctors, school psychologists or social workers. School health services do not exist in our schools, though necessary. (Inspectorate General of Education official)]

Owing to lack of health services in school, pupils and school staff do not obtain the necessary healthcare and support they need:

> *Abanyeshuri barwaye boherezwa i muhira bakitabwaho n'ababyeyi babo. Ku kibazo gikomeye kandi cyihutirwa, abanyeshuri bajyanwa ku kigo nderabuzima (Abarimu, U1).* [Pupils who are sick return home for parents to look after them and only serious cases are taken to the local health centre. (Teachers, U1)]

All schools in the study shared similar challenges regarding health services in schools. Pupils and staff who fell sick walked to the nearest health centres and sometimes were not attended to:

> *Abanyeshuri n'abakozi barwaye bijyana kwivuza ku kigo nderabuzima rimwe na rimwe ntibanavurwe (Abarimu, R2).* [Pupils and staff who are sick go to the health centre for medication on their own and sometimes they are not even attended to. (Teachers, R2)]

All the participants expressed the need for health services in schools. At U1, parents observed that health services are needed badly, especially in schools, as children of schoolgoing age are likely to suffer injuries and need immunisation programmes:

> *Abanyeshuri bakomeretse babura ubufasha bw'ibanze. Gahunda z'ikingira umwana akenera akiri kuntebe y'ishuri nazo zikabura (Ababyeyi, U1).* [Children sustain injuries and do not get immediate first aid, and there are no immunisation programmes, which most school-age children need while still at school. (Parents, U1)]

Teachers across all schools in the study found that teaching Nutrition without having the necessary facilities and food items in place to be a challenge, and some of the schools had not tackled nutrition lessons for lack of appropriate facilities. Schools did not have gardens or a budget allocated for food items to use in nutrition lessons. The other important finding was that children in schools in the study did not play because of a lack of sports facilities and materials:

> *Mu mashuri yacu nta buzima. Amashuri ntameze neza mu by'ubuzima bw'abana, abana ntibakina n'ibigo ubwabyo ntibikorana.* (*Uhagarariye Minisiteri y'Uburezi*). There is no life in our schools; children don't play at school and schools do not interact with each other. (Ministry of Education official)]

The R2 principal pointed out that pupils do not play any sport because they have no sports facilities. At U1, pupils did not play because of lack of space in the school. The school rents a football field from the parish in the school vicinity, once a week, for children to play.

3.11.6 Teachers' Wellbeing

The theme of teachers' wellbeing encompasses teachers' workloads, teachers' salary, working conditions, teacher-pupil relationships, teacher-parent relationships, teachers' professional competencies, in-service training and professional development, teachers' status and the status of the teaching profession.

3.11.6.1 Teachers' workload

Teachers and other participants in the study mentioned that work overload seriously affects teachers' wellbeing. Teachers reported being overwhelmed and exhausted by too much work as they taught many subjects for long hours to many pupils in different classrooms:

> *Abarimu basabwa kwigisha umunsi wose igitondo n'ikigoroba. Mwarimu abari mu ishuri kuva ku wa Mbere kugeza ku wa Gatanu akora kuva mu gitondo kugeza nimugoroba* (*Uhagarariye Urwego rw'ubugenzuzi*). [Teachers are obliged to teach the whole day in a double-shift programme. A teacher stays in classroom from Monday until Friday, morning till evening. (Inspectorate General of Education official)]

The heavy workloads exhausted teachers physically, psychologically, emotionally and socially:

Tuba twataye umutwe buri munsi; ntakanya ko kuganira hagati yacu kandi buri gihe tuba tutishimye (*Abarimu, R2*). [We are stressed the whole day and we have no time to socialise amongst ourselves and are always unhappy. (Teachers, R2)]

Teachers worked for long hours and taught many different subjects in multiple large classrooms, with limited resources. The situation was aggravated by lesson preparations, marking and other administrative paperwork affecting teachers' overall job commitment and wellbeing:

Ntabwo dushishikaye muri aka kazi. Imitima yacu irababaye; tugira akazi kenshi cyane (*Abarimu, U2*). [We are not motivated at all to do this job; our spirit is broken. We are overwhelmed by too much work. (Teachers, U2)]

Interestingly, the pupils claimed they understood that a heavy workload not only affects teachers' wellbeing but also affects the quality of teaching, to the point where it does not benefit pupils:

Abarimu bigisha amasaha menshi ukabona bananiwe. Ntibigisha neza, baba bananiwe cyane cyane abigisha amasomo atandukanye bakayigisha mu mashuri atandukanye (*Abanyeshuri*, R1). [Teachers are exhausted by a too-heavy workload. Teachers do not teach well when they are tired, especially those who offer different subjects to different classes. (Pupils, R1)]

Teachers across schools corroborated the pupils' view that teachers' work overloads affected teaching and learning, as indicated by the teachers at R2:

Dukorera kugitutu kandi kwigisha bigakorwa by'umuhango. Tujyana n'abana babahanga tubizi neza ko bamwe bari kubihomberamo. Bamwe mu banyeshuri bakenera kwitabwaho byumwihariko ariko ntitwabivamo bitewe n'ibiba bigomba gukorwa mu gihe gito (*Abarimu*, R2). [We work on stress, and often teaching becomes a ritual. We go with fast learners, knowing that this does not benefit all pupils. Some pupils need individualised attention that we don't really give in trying to cover much work in a short time. (Teachers, R2)]

3.11.6.2 Teachers' salary

Parents, teachers, principals and key informants all expressed concern about teachers' low salaries, which exposed them to poor living conditions. The poor living conditions of teachers subject them to feelings of inadequacy, low self-esteem and uncertainty about their future and that of their children:

*Imibereho iratugoye; turera abana b'abandi twe tukabura umwanya wo
kwita ku bacu. Duhembwa umushahara muto udashobora gutuma hari icyo
twizigama bityo tukaba ntacyo tumara ku hazaza h'abana bacu. (Abarimu,
R2).* Life is unfair to us; we are raising other people's children yet we
cannot be of assistance to our own children. We are paid small salaries that
make saving impossible and we cannot give our own children a better
future. (Teachers, R2)]

Teachers' poor salaries caused them to look out for alternative sources of income to
supplement their small income, in order to sustain their families. They often decide to miss
work to take on other jobs:

*Abarimu batanga inzitwazo zuko barwaye bakigira gukorera amafaranga
ahandi abanyeshuri ntibige* (*Uhagarariye Minisiteri y'Uburezi agashami
k'uburezi bw'ibanze*). [Teachers make excuses that they are sick and go
elsewhere to work for money, and pupils miss their lessons. (Directorate of
Basic Education official)]

Some teachers said that they stayed in teaching because they had no choice and were on the
lookout for alternative job opportunities, as parents at U1 had indicated:

*Iyo ngira ahandi njya, nari kureka aka kazi. Ubona dukorera Imana
tudakorera guhembwa* (*Abarimu*, U1). [If I had somewhere to go, I would
quit this job! We do not educate to earn anything but to serve God.
(Teachers, U1)]

Parents' perspective was that teachers showed up at work physically but were psychologically
absent. Teachers are demoralised by the low salaries and pressed by harsh living conditions:

*Abarimu n'imiryango yabo babayeho nabi mu buryo miserable kubera
agashahara gake. Bagaragara ku kazi ariko ntibakore. Ntibita ku bana,
ntibanabagira inama* (*Ababyeyi*, R1). [Teachers and their families live
miserably due to poor salaries. They only show up at work but they are not
working; they neither care for our children nor advise them. (Parents, R1)]

3.11.6.3 Working conditions

In the case-study schools, teachers worked in poor conditions, ranging from a poor physical
environment at school, with classrooms that were not fitted with necessary teaching and
learning resources and materials, to classrooms that lacked safekeeping and storage space for
both teachers and pupils. Only U1 had tap water; other schools survived on rainwater. The
state of toilets at the two rural schools was dirty and no consideration was given to gender
differences in their use for both teachers and pupils. Teachers received no support from the

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school administration, parents or district education departments. All the above factors affected teachers directly or indirectly, but the collective effect had a seriously negative impact on teachers' overall health and wellbeing.

3.11.6.4 Teacher-teacher relationships

According to pupils, there is no feeling of a school as a family that cares and treats all members equally, which has affected teachers' collegiality, how they address one another and how they perform classroom duties:

> *Abarimu ntibumvikana, baba barushanwa, ntibashyira hamwe. Umwarimu arinjira ugasanga anenga ibyakozwe na mugenzi we. Ugasanga buri wese ashaka kwerekana ubuswa bwa mugenzi we bigatera amakimbirane hagati yabo ubwabo ndetse n'abanyeshuri* (*Abanyeshuri*, R1). [Teachers do not get along well with each other and they are so competitive. A teacher comes to a classroom to criticise his/her colleagues' work. The whole idea is to expose each other's weaknesses to pupils, which causes conflicts between teachers and with pupils. (Pupils, R1)]

The relationships between and among teachers were unsupportive and characterised by a lack of collegiality and of mutual respect among teachers:

> *Ntibumvikana. Basa nabarushanwa buri wese ashaka kuba ariwe ujya imbere. Ugasanga umwarimu arakora ukwe adafatanya n'abandi cyangwa ngo bahane amakuru* (*Abanyeshuri*, R1). [Teachers don't understand each other; they are competitive, and each one wants to be the best. A teacher works in isolation, without co-operating with others, and hardly shares information. (Pupils, R1)]

Pupils at the same school further expressed how the divisionism between teachers affected pupils as well:

> *Nta bwumvikane buri hagati y'abarimu ubwabo, no hagati y'abarimu n'abanyeshuri. Niba rero abarimu batumvikana, ntibazazana ubwumvikane no kubahana mubo barera. Tubirenganiramo iyo havutse amakimbirane muri bo* (*Abanyeshuri*, R1). [There is no harmony between teachers themselves and between teachers and pupils. If teachers do not understand each other, they will not establish understanding and respect among pupils. We become victims of our teachers' conflicts. (Pupils, R1)]

At U1, teachers had positive working relationships amongst themselves. The principal said they have initiated a project in which they contribute money to support themselves:

Tugira agasanduku dushyiramo amafaranga buri kwezi kugira ngo agoboke uwagira ikibazo gikenera amafaranga (*Umuyobozi w'ishuri*, U1). [We have a teachers' social support fund. Every teacher contributes a certain amount of money every month to help them when they have a financial need. (Principal, U1)]

3.11.6.5 Teacher-pupil relationships

Across all the schools in the study, teachers stated that they feel threatened, powerless and mocked by pupils, who tell them there is nothing they can do to them:

Imikoranire hagati y'abarimu n'abanyeshuri ntimeze neza uko tubyifuza. Ubwira umwana kugira icyo akora akanga ati ndanze maze ndebe icyo ukora. "Ibeshye unkoreho". Twumva dukanzwe tugatangira no kubatinya kuko banakwihisha ku nzira bakadutera amabuye (*Abarimu*, R1). [Interaction between pupils and teachers is not the best and not what we would wish. You tell a child to do something and he or she says, "I refuse to do it and I will see what you do. Dare touch me!" We feel threatened and we are developing a fear of these children because they may hide somewhere and stone us. (Teachers, R1)]

Teachers in the case-study schools were never happy because their self-esteem and confidence as teachers has been eroded because they have no say about pupils' behaviour, which makes them feel helpless:

Abarimu ntacyo bavuze imbere y'abanyeshuri. Badufata uko bashatse tukabura icyo dukora. Umwana akubaganira ishuri ryose wamubwira gusohoka ati "nsohoke mu ishuri ritari iryawe?sohoka ariwowe" ukabona ko yari yagambiriye kugusesereza. Wakora iki kandi, uricecekera. (Abarimu, R2). [Teachers today don't count in the eyes of pupils; they treat us anyhow and we can do nothing. A pupil distracts the whole class and if you ask him to get out, he answers that you should leave the class, that it does not belong to you. Then you realise that the child has been waiting for an occasion to mock you; what can you do? You keep quiet. (Teachers, R2)]

Teachers at U1 and U2 reported similar experiences of feeling powerless in the face of ill-treatment by pupils, especially those in upper classes. However, some pupils disapproved of the way their peers behaved towards teachers:

Abanyeshuri ntibubaha abarimu, abarimu ntacyo bavuze imbere y'abanyeshuri. Abanyeshuri ntibita ku nama n'impanuro bahabwa na mwarimu. Abanyeshuri ntagaciro baha abarimu. (*Abanyeshuri*, R2). [Pupils do not respect teachers; teachers do not mean anything to pupils and pupils do not value or take teachers' remarks and guidance seriously. Pupils here look down on their teachers. (Pupils, R2)]

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3.11.6.6 Teachers' education level

In all the schools, the teachers' level of education was low. For instance, the principal of R1 indicated that

> *Ubumenyi bw'abarimu buracyari hasi. Abigisha benshi ni abarangije amashuri y'isumbuye kenshi nta by'uburezi baciyemo* (*Umuyobozi w'ishuri*, R1). [Our teachers' level of education is very low; they are all high school leavers and have no specialised educational training background. (Principal, R1)]

A UNICEF key informant corroborated the above finding that one of the major problems in public primary schools is the quality of teachers:

> *Abarimu ntababifitiye impamyabumenyi ihanitse* (*Uhagarariye* UNICEF). [Teachers are not qualified to teach at a higher level. (UNICEF official)]

A similar observation was made by the key informants from the Ministry of Education Directorate of Basic Education:

> *Mu gihe benshi mu barimu batabihugukiwemo hari n'abandi badafite impamyabumenyi ikenewe mu burezi ngo babe bakwigisha.* (*Uhagarariye Minisiteri y'uburezi agashami k'uburezi bw'ibanze*). [Most teachers are under qualified or unqualified, while others have not managed to acquire the desired level of education to teach (Directorate of Basic Education official)]

At U2, parents indicated that they were concerned that their children were not benefiting from the education they received from unqualified teachers:

> *Abana basubira inyuma bagatakara mu myigire yabo bakiri hasi mu gihe bigishwa n'abarimu batabifitiye ubushobozi* (*Ababyeyi*, U2). [Our children are alienated and lost at a young age in lower levels of their learning, where they are taught by unqualified teachers. (Parents, U2)]

3.11.6.7 Teacher professional development and in-service training

A recurrent finding from all the participants, across all schools, was that teachers were not trained and opportunities for their professional development were limited.

> *Abarimu ntibahugurwa bihagije urebye ibyo bakeneye nibyo bategerejweho.* (*Uhagarariye Ubugenzuzi rusange rw'uburezi*). [Teachers are not trained effectively compared to what they need and what is expected of them. (Inspectorate General of Education official)]

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At all schools, teachers noted they felt neglected, as they were not given any training opportunities to broaden their knowledge on the curriculum contents They claimed their right to receive training as relevant to their work responsibilities and needs:

> *Abarimu ntibahugurwa mu kazi no mubyo kwiteza imbere. Ntawitaye ku barimu n'akazi bakora. Baratereranwa bakirwariza. Utanga icyo ufite. Niba abarimu badahuguwe ngo bongere ubumenyi, bazagira ibibazo mu myigishirize yabo bityo ntibashobore guha abana ubumenyi nyabwo.* (*Umuyobozi w'ishuri*, R2). [Teachers don't get in-service training and career development opportunities. No one cares about teachers and their work; they are left to find their own way. You give what you have, but if teachers are not trained to broaden their knowledge and skills, they will always be weak in some teaching aspects and unable to deliver knowledge in these areas to pupils. (Principal, R2)]

Teachers at U2 also indicated that in-service training and professional development opportunities were unavailable to them:

> *Abarimu ntibahugurwa. Maze imyaka 5 muri iki kigo ariko sinigeze ngira amahirwe yo guhugurwa aribyo bituma abarimu baterimbere* (*Abarimu,* U2). [Teachers are not trained in this school. I have been in this school for 5 years but I have not had any opportunity for training which paves the way for teachers' development. (Teachers, U2)]

3.11.6.8 Teachers' status and teaching profession status

Teachers at R1 said that they felt neglected and ill-treated by their principal and expressed their concerns about how they felt their rights have not been respected by their school leadership:

> *Umuyobozi w'ikigo ntiyita ku burenganzira bw'abarimu. Mbana n'ubwandu bw'agakoko gatera Sida nkaba mfata imiti. Iyo umuganga ampaye ikiruhuko, umuyobozi w'ikigo ampoza kurutoto angayira kudasohoza akazi neza mfite n'uruhushya rwa muganga.* (*Abarimu*, R1). [Our school director does not respect teachers' rights. I live with HIV/Aids and always take medicine. When the doctor grants sick leave, the director puts pressure on me, blaming me for not having done my job well because of my (justified) absence. (Teachers, R1)

Teachers with health challenges feel psychologically, emotionally and socially isolated, which, in turn, makes them feel unsupported and not cared for.

Failure to recognise teachers' efforts in their work was highlighted as a de-motivating factor that discourages teachers from doing their work with commitment because their hard work is never recognised but rather despised:

> *Ntagashimwe ku barimu bakora akazi kabo neza. Icyo abarimu bakoze cyose ntabwo umuyobozi ashima. Mu bikorwa bashoboye kurangiza byose, ntabwo bimushimisha. Ibyo bigatuma ducika intege ntitwishimire akazi kacu.* (*Abarimu*, R1). [No reward is given to teachers who do their job well. Everything teachers do is always reviled, and the director is ungrateful for almost all we accomplish, which discourages and stops us from taking an interest in our job. (Teachers, R1)]

The status of teachers and their profession seems to be low, based on how teachers are being treated:

> *Nta kwisanzura mukazi kuko duhora kurutoto. Ari umuyobozi w'ikigo, ari ababyeyi ari n'abandi baturage muri rusange nukwirirwa batugenzura banatunenga umunsi ku wundi.* (*Abarimu*, R1). [We have no freedom in the job because teachers work under pressure. School leaders, parents, and other community members control and criticise us day by day. (Teachers, R1)]

Teachers and principals in all schools in the study indicated that the society nowadays does not value teachers and the teaching profession. At U2, the school principal described how teachers and the teaching profession have no value in the society:

> *Umuturage yigamba ko hemba abarimu 10 naho abanyeshuri bo barangiza ntawifuza kuba mwarimu bagira bati, "ntitwakwiga iby'ubwarimu." Bigaragara ko mwarimu asuzuguwe mu muryango nyarwanda* (*Umuyobozi w'shuri*, U2). [A peasant says he can pay 10 teachers from what his produce brings in. Students complete their studies without expecting to be teachers, saying they cannot attend teachers' training schools. It is clear that a teacher is undervalued by Rwandan society. (Principal, U2)]

At U1, other aspects in which the society devalued teachers included situations where parents did not respond to teachers' invitation to school because parents did not take teachers seriously or think meeting them to be important.

> *Umwarimu atumaho umubyeyi ku ishuri umubyeyi akanga kuza agira ati "sinata igihe ku barimu; nzi nicyo bashaka kumbwira"* (*Abarimu*, U1). [A teacher invites a parent to school and the parent refuses to come, saying, "I cannot waste my time on a teacher; after all, I know what he/she wants to tell me". (Teachers, U1)]

Not only community members looked down upon teachers but institutions also discriminated against teachers. Teachers at U1 revealed how some banking institutions denied them loans, with the argument that they would have no money to repay the loans:

> *Umwarimu ni umuntu ugaragara nkaho ahorana ibibazo ibihumbi kandi utizerwa. Amabanki nayo yanga guha umwenda abarimu yibaza uko yawishyura ku mushahara w'intica ntikize abona buri kwezi.* (*Abarimu*, U1). [A teacher is thought to be a person with thousands of problems, who can't be trusted. Banking institutions refuse to offer loans to teachers, asking how they are going to repay the loan with their monthly "drip". (Teachers, U1)]

The other ways that teachers were devalued was by calling teachers rude names, based on what they bought, drank, ate or their overall lifestyle. In all the case-study schools, teachers and principals regretted the fact that they were labelled with various epithets that carried negative messages:

> *Abarimu bafatwa nk'abanyamiruho aho batuye. Abaturage babahimbye amazina agendeye kubyo bakora nka ba 'kavuzivuzi' kuko baba bavuga kenshi mu mwuga wabo n'andi mazina abapfobya* (*Umuyobozi w'ishuri,* R2). [Teachers are regarded as pitiful members of the society. Community members named teachers after their life circumstances, for instance, "gossipers" because their practice involves a great deal of talking. Many other names are used to demean teachers. (Principal, R2)]

3.11.7 Physical environment of school

This theme includes school infrastructure, such as classrooms, offices and staffroom, the library, sports and recreational facilities, toilets, water, school safety and boundaries and school land, which were the categories generated under this theme. The following section presents each category.

3.11.7.1 Classrooms and their condition

All the participants expressed concern about insufficient classrooms:

> *Abanyeshuri bigira munsi y'ibiti, no mu bibuga by'amashuri.* Iyo imvura iguye, kwigisha birahagarara kugeza hongeye kumuka bakabona aho bicara. (*Umuyobozi w'ishuri,* R1). [Pupils follow lessons under trees on school grounds. When it rains, classes have to stop until the ground is dry enough for them to find a seat. (Principal, R1)]

All schools in the study were in a state of disrepair, but some schools were more badly affected than were others:

> *Amashuri arashaje, amwe agenda asenyuka kuburyo adashobora guhangana n'imvura y'umuhindo. (Abarimu, R2).* [School buildings are dilapidated; some are falling apart and cannot withstand heavy rains. (Teachers, R2)]

At R2, teachers complained that they do not like their school because of the poor condition of school buildings:

> *Sinkikunda iri shuri. Mbonye aho najya heza nagenda . Ndambiwe ibi bisenge biva, inkuta z'ishuri zirahirima, iyo imvura iguye itosa aho abanyeshuri bicara n'ibitabo byabo. Ishuri nta mazi, nta muriro; inzugi ntizikingwa, ntaho kubika ibintu, n'ubwiherero budasukuye ntakigenda. (Abarimu, R2).* [I don't like this school any more. If I can find a better place, I will go! I am fed up with these leaking roofs, school buildings that are falling apart, and roofs that leak whenever it rains and wet pupils' seats and books. The school has no water and electricity, doors do not lock, there is no safekeeping space and toilets are messy. (Teachers, R2)]

Similar worries were expressed by pupils—that they did not feel comfortable studying in classrooms that can collapse at any time:

> *Duterwa ubwoba no kwigira muri aya mashuri. Dusaba ko twakwigira hanze nubwo naho atari heza (Abanyeshuri, R2).* [We are scared of learning in such classrooms; we keep on requesting to have our classes held outside, but even outside, it is not safe. (Pupils, R2)]

Teachers in all schools in the study were concerned about poor maintenance of school infrastructure. Classroom walls and floors had crevices that harboured dust and fleas, which caused "jiggers" (the Chigoe flea or *tundra penetrans)* among pupils. Some classrooms at all the schools did not have doors and windows, while in others, windows and doors were broken and did not lock. All schools in the study experienced lack of electricity, as observed by all the participants from both rural and urban schools.

Principals, teachers and pupils at all schools were concerned about the poor ventilation that characterised the schools in the study:

> *Ntibyoroshye gukurikiranira amasomo mu mashuri afite ubushyuhe cyane cyane bitewe n'umubare ukabije w'abanyeshuri mu cyumba n'amabati abukurura (Abarimu, R2).* [It is difficult to follow lessons in classrooms that

are hot and humid because of iron roof sheets that absorb heat and because of overcrowding of pupils, which make it hard for pupils to concentrate in such an environment. (Teachers, U2)]

Key informants were also aware of poor ventilation and compared the classroom environment to a prison for pupils.

> *Nta byumba bikwiye byo kwigirwamo. Wagira ngo abana bari muri gereza. Niba dufite ibi bibazo mu migi, wakwibaza ese mu cyaro bimeze bite? Ni agahoma munwa. Iki ni n'ikibazo ku buzima bw'abana. (Uhagarariye Ubugenzuzi rusange rw'uburezi).* [There are no comfortable classrooms in schools; you might think children are in prison. When we have such a problem in the town, you can imagine what is happening in rural schools; it's shameful and threatening to children's health. (Inspectorate General of Education official)]

Participants raised concerns about the lack of safekeeping space in schools, especially classrooms that are not fitted with lockers and cupboards in which to keep teachers' materials and pupils' belongings:

> *Abarimu ntibafite aho babika ibikoresho byabo. Babitwara i muhira mu bikarito kuko batabibika mu mashuri adakingwa. Ntamutekano byaba bifite. (Umuyobozi w'ishuri,* U1). [Our teachers do not have anywhere to keep their teaching materials; they carry their materials home in boxes because they are unsafe in classrooms that cannot be locked. (Principal, U1)]

3.11.7.2 Toilets

All schools reported insufficient toilets for both teachers and pupils; there were generally fewer than the number of users. Gender and privacy aspects were not a priority in the use of toilets, as described by participants:

> *Abana b'abakobwa ntibashimishwa no gukoresha ubwiherero bumwe n'abahungu kuko budakinze (Abanyeshuri,* R2). [Girls find it uncomfortable using the same toilet as boys, because there is sadly no privacy. (Pupils, R2)]

> *Biteye isoni kandi birarenze kureba uko ubwiherero bw'ishuri bumeze. Ni ahantu umuntu atakwifuza gukoresha (Abanyeshuri,* U1). It is embarrassing and absurd to see the state of school toilets; they are not places one would wish to use. (Pupil, U1)]

The key informants concurred with school participants that schools' toilets were in a poor state and unpleasant or impossible to use:

Amashuri abanza ntafite ubwiherero buhagije. Abana b'abahungu n'abakobwa bahurira mu bwiherero bumwe nabwo butameze neza. Hari amwe mu mashuri adakwiye kwakira abana (Uhagarariye Minisiteri y'Uburezi). [Our primary schools do not have enough toilets; boys and girls share the same unsuitable latrine. Some schools do not really accommodate pupils adequately. (Ministry of Education official)]

Toilets in all schools in the study were said to be in a poor state of repair; toilets were old and overused and released a bad smell, were always dirty, and were difficult to clean as they were littered with faeces:

Abakobwa ntibakoresha ubwiherero kuko buba bwuzuyeho umwanda unuka. Bumwe bufite inzugi zuzuye imyenge, ubundi ntibukingwa, hari nubudafite inzugi kuburyo nta banga ku babukoresha. Ni hanze. (Abanyeshuri, R2). [Girls do not use toilets at school because they smell and are usually messy with faeces. Some latrine doors are broken, with peepholes, and sometimes they don't lock or latrines have no doors and provide no privacy to the users. (Pupils, R2)]

The challenge of privacy was raised by teachers at U1, where girls did not have total privacy in toilets in their school:

Abakobwa bageze mu gihe cy'ukwezi kwabo ntibabona aho bahinduranya imyambaro y'imbere hiherereye. Bahitamo guhama hamwe batinya ko abandi bamenya ibyababayeho (Umuyobozi w' ishuri, U1). [Menstruating pupils cannot change in privacy, and often stay still in one place for fear that others will know what has happened to them. (Principal, U1)]

Not all the schools have cleaning staff to keep toilets clean and toilet cleaning was said to be a form of punishment. Yet, this is an important area of pupils' learning—to know how to maintain their personal hygiene and that of their environment.

3.11.7.3 Water

Schools lacked clean water for drinking and washing, making the sanitation and hygienic practices in schools a serious concern. R1 and U2 collected rainwater from the corrugated iron roofs during the rainy season. At U1, they had tap water, though the taps did not always run, while R2 suffered a serious and chronic lack of water throughout:

Ntidukaraba intoki igihe tuvuye mu bwiherero kuko ntamazi mu kigo tugira (Abanyeshuri, R2) [We don't wash hands after using the toilet because there is no water in the school. (Pupil R2)]

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Teachers at U1 raised a similar concern at their school—how children's health was at risk because they could contract various diseases because of poor hygienic practices:

> *Dufite ikibazo gikomeye cy'amazi mu kigo. Ntamazi, ubuzima ntibwamera neza. Abana nta mazi babona yo gukaraba bavuye mu bwiherero. Amazi banywa iyo bafite inyota naturuka ahantu hatizewe akabatera inzoka n'impiswi* (*Abarimu*, U1). [We have a serious problem with water in this school. Without water, life is not very secure. Children do not wash their hands when they come from the toilets, and when children are thirsty, they draw dirty water from different unsuitable sources that affects their health by causing them to suffer from worms, dysentery and cholera, or even malaria from mosquitos attracted to the dirty water. (Teacher, U1)]

Some schools experienced hygiene-related disease outbreak due to poor hygienic practices in schools:

> *Abanyeshuri nta mazi bafite yo gukaraba bavuye mu bwiherero. Twari dufite ikibazo cy' impiswi yagendaga ikwirakwira nubwo bitari cyan* (*Umuyobozi w'ishuri*, U1). [Pupils have no water to wash thier hands after visiting the toilet; we had a cholera outbreak, though it was not acute. (Principal, U1)]

3.11.7.4 Sports and recreational facilities

Schools in the study were characterised by lack of facilities for recreational and physical activities. Schools lacked adequate grounds and recreational facilities. Where schools did have space, grounds were unprepared and unequipped for play activities, while others did not have grounds due to land shortage. Sports and recreational activities are not encouraged and developed in the case-study schools. Pupils raised similar concerns—that they do not engage in sport though it appears in their curriculum:

> *Dufite umwanya wagenewe siporo nkisomo ariko ntituwukoresha kuko utubahirizwa. Imyitonzo ngorora ngingo ifasha abanyeshuri kuruhuka no gutekereza neza ubusanzwe, ariko ntituyikora.* (*Abanyeshuri, U1*). [We have time reserved for sports as a lesson but we are not given time to play. Normally, sports are necessary to help pupils relax and think, but we do not do it. (Pupils, U1)]

3.11.7.5 Offices and staffrooms and library

Lack of offices and staffrooms was a common problem at all the schools. Teachers and principals lacked working space and places in which to socialise during their free time.

Nta biro ngira. Nkorera mu bubiko bw'ishuri nk'ibiro tukahakorera n'
inama kandi naho huzuye ibintu byinshi (Umuyobozi w'ishuri, U2). [I don't
have an office; I work from a school storeroom, which serves as my office
and a meeting room. and is congested. (Principal U2)]

None of the schools has a library to access the information that teachers need or reading
spaces for teaching and self-learning.

3.11.7.6 School safety, boundaries and vandalism

On school boundaries, participants expressed concern that there were no clear school land
demarcations from the rest of the community lands:

Amashuri ntabwo azitiye cyangwa ngo agire aho binjirira hamwe. Buri
wese yiyinjirira uko ashatse, akinjirira aho ashatse iyo ashaka kuza mu kigo
kuko harangaye (Uhagarariye Minisiteri y'uburezi). [Schools have no
fences and gates; there is a way out and a way in, open to everyone that
wants to come into the school. (Ministry of Education official)]

All schools in the study lacked secure fences. The urban schools; U1 and U2, had hedges
without gates, while R1 and R2, the rural schools, were not fenced:

Nta hantu hinjirirwa muri rusange. Ishuri ntirizitiye; ibi bituma ushatse
wese yinjira ari ukenenewe ari udakenewe (Umuyobozi w'ishuri, R1). [We
have no gate; the entire school is not fenced and this gives unnecessary
access to undesirable people into the school (Principal, R1)].

The Ministry of Education officials expressed concern about school safety and about how
risky it is for children to mix with animals on the school grounds:

Ibaze ishuri ritazitiye aho inzira nyinshi zinjiramo zikanasohokamo. Abantu
bagiye mu mirimo itandukanye banyura mu kigo: ari abajya ku isoko, ari
abajya kuvoma, abana, inka n'ihene byose binyuranamo (Uhagarariye
Minisiteri y'uburezi). [Imagine a school without a fence, where there is a
way out and a way in. People going to perform different activities pass
through the schools: some going to the market, others going to draw water,
children mixed with cows and goats. (Ministry of Education official)]

Road safety is an area of concern in relation to children's safety, though given no attention. In
all schools, pupils crossed roads, and therefore, road safety should be a priority, but
unfortunately, it is taken for granted.

Abana biyambutsa umuhanda ntawe ubayoboye. Abatwaye ibinyabiziga nabo ntibita ko hari abana bambukiranya umuhanda. Iki ni ikibazo kidukomereye (Abarimu, U2). [Pupils cross the road on their own without adult supervision and vehicle drivers do not consider that children are crossing the roads. This to us is a serious concern. (Teachers, U2)]

In the case-study schools, pupils were said to vandalise school facilities and school materials.

Abana bangiza by'amaherere ibikoresho by'ishuri. Bangiza amashuri, bamena amadirishya, bica ingufuri z'inzugi, bakavuna intebe, bakanaseseka amabuye mu matiyo y'amazi ntagende (Abarimu, R2). [Pupils intentionally damage school materials and facilities. These include damaging school property like breaking the glass of classroom windows, doors, classroom locks and handles and chairs and blocking water pipes with stones. (Teachers, R2)]

3.11.7.7 School land

The physical environment of schools was a concern to all the participants, as it was to all schools. Schools did not have the necessary basic facilities in place, according to the participants:

Amashuri menshi yugarijwe ni ikibazo cy'ubutaka ntafite ahantu hahagije akorera kuko usanga n'abana badafite aho bakinira cyangwa banakorera siporo (Uhagarariye Minisiteri y'uburezi). [Many schools lack enough land and children do not have enough space for sport facilities and playgrounds. (Ministry of Education official)]

Land shortage hindered schools' expansion and development, as indicated by the principal of R2:

Kongera ibyumba by'amashuri n'ibindi bikorwa byangombwa ntibishoboka kuko tudafite ubutaka buhagije bw'aho byakorerwa (Umuyobozi w'ishuri, R2). [Increasing the number of classrooms and other important facilities in schools is impossible because we do not have enough land. (Principal, R2)]

3.11.8 Factors Affecting Teaching and Learning for all Children

This theme encompasses various factors that affect teaching and learning for all children, such as health problems, risky behaviours and disability. Inadequate scholastic materials, domestic chores, orphans and vulnerable children and issues of hunger were mentioned. Curriculum, pedagogy of teaching, language of instruction, teacher shortage and attrition, class size, double shifting, automatic promotion, inadequate instructional resources and materials, and

school dropout, as well as long distances to and from school, were also named. The following section presents each factor, which is interpreted on the basis of the participants' views

3.11.8.1 Health problems

At all the schools, participants voiced concern that pupils and teachers grapple with various health problems. Such health problems affect teaching and learning and many pupils stopped attending school or irregularly attended school because they felt weak and unable to concentrate on schoolwork. Teachers at all the schools said that HIV/Aids and tuberculosis affected both pupils and teachers:

> *Indwara rusange abarimu n'abanyeshuri barwara usanga ari agakoko gatera ubwandu bwa SIDA, igituntu n'ibindi bibazo by'ubuhumekero. Abanyeshuri n'abarimu ntibishimira kuba bari ku kigo. Abarimu basiba amasomo bafata imiti. Abarimu nabanyeshuri babana n'ubwandu bafatwa kimwe n'abandi ntagisebo* (*Umuyobozi w'shuri,* R1). [The current diseases common among pupils and teachers are HIV/Aids and tuberculosis as well as respiratory infections. Pupils and teachers are not comfortable at school, and teachers miss work when on medications. There is no stigma placed on these pupils and teachers. (Principal, R1)]

However, pupils and teachers infected and affected by the above health problems still did not feel comfortable in school, even when they were not stigmatised, because they felt weak and unable to concentrate on schoolwork, which affects pupils' school attendance and teachers' capacity to teach. The other health problems that most commonly affected pupils were intestinal worms, gastro-intestinal disorders, malaria, and skin infections, as well as sight disorders.

3.11.8.2 Risky behaviours

These included sexual harassment and gender violence, as well as teenage pregnancies. These were raised as serious impediments to teaching and learning in schools in the study. Such risky behaviours often occurred under the influence of alcohol and drug use, smoking, or substance abuse. Some schools were more affected than were others. Schools R1, R2 and U2 experienced more critical behavioural challenges among pupils than did U1.

> *Abana b'abakobwa ntibibanezeza iyo abana b'abahungu babirukaho babakururira mu ngeso z'ubusambanyi, babasoma, babakorakora ku mabere ku ngufu. Ibi bigira ingaruka ku myigire yabo* (*Abanyeshuri*, R1).

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[Girls are unhappy because boys run after them, trying to seduce them and luring them into sexual acts of kissing and fondling by force, and this seriously affects their studies. (Pupils, R1)]

Similar challenges were experienced by girls at R2, where boys who were under the influence of alcohol harassed them:

> *Kuko baba basinze, abahungu basoma abakobwa ku ngufu banabirohaho.* (*Abanyeshuri*, R2). [Because they are drunk, boys kiss girls by force and assault them. (Pupils, R2)]

Sex and teenage pregnancy were mentioned as common problems at all the schools, affecting pupils' learning, wellbeing and healthy development. Causes that were raised were lack of follow-up at home, especially in homes where parents did not warn them continually about such behaviour or were absent or reluctant to check up on their children. Pupils watch films from sites from which they meet people who give them money and gifts in exchange for sex. Teachers at all schools said that pupils from poor families were manipulated with offers for sex, often resulting in pregnancy. Pupils' age was raised as another important factor behind teenage pregnancies among older boys and girls who were sexually active.

3.11.8.3 Disability

Children with disabilities were observed to be theoretically included but, in practice, excluded. Participants at all schools and key informants acknowledged the fact that children with disabilities were still excluded despite inclusive policies being in place. Schools indicated willingness to include all children, but the assistance they got from schools was limited, as indicated by the principal of U1:

> *Twakira abana bose kuko nabo bagomba kurerwa nk'abandi. Ariko dufite ikibazo cy'abarimu batabihugukiyemo bo kubafasha. Gusa duhitamo kubarekera ku ishuri aho kubareka bakaguma mu rugo* (*Umuyobozi w'ishuri*, U1). [We welcome all children because they are entitled to education like others. However, we have the problem of teachers who are not skilled in educating such children, but we prefer keeping them at school rather than letting them stay at home. (Principal, U1)]

Most school participants recognised the environmental impediments that acted against the inclusion of all children.

Uko amashuri ateye urugero nk'ibyumba byo kwigiramo, ubwiherero, n'imbuga zo gikinirano haracyari inkumirizi zijyanye ninyubako kuri bene aba bana kuko ntaho wanacisha amagare y'abafite ubumuga (Umuyobozi w'ishuri, R2). [School infrastructure, for example, classrooms, toilets and grounds, are not barrier free yet; they have no ramps for the wheelchair users. (Principals, R2)]

3.11.8.4 Inadequate scholastic materials and poverty at home

Participants raised the issue that problems at home are similar to those in schools. Families are socio-economically disadvantaged; hence, it is difficult for parents to be able to provide their children with the basic needs of clothing, feeding and education. At all the case-study schools, issues of school uniforms were substantial and evident among pupils; some pupils come to school without school uniforms and others put on torn uniforms or clothes.

> *Ababyeyi ntibashoboye kugaburira abana no kubabonera ibyo bakeneye kubera ubukene. Abana barasinzira mu ishuri bambaye n'imyenda yacitse. Uko bari bigaragaza ubukene bukomeye mu baturage (Ababyeyi*, U1). [Parents are unable to feed and provide for their children because of poverty. Pupils start slumbering in class due to hunger and wear torn clothes, which reveals extreme poverty in our communities. (Parents, U1)].

Some pupils went to school without school uniforms or books because parents could not afford these essential items due to poverty. This has a bearing on pupils' learning outcomes.

> *Hari ikibazo cy'ababyeyi bohereza abana ku ishuri nta bikoresho nkenerwa babahaye. Abana baturutse mu miryanga nkiyi ntibiborohere gukurikirana amasomo; umunsi ukira ntacyo batahanye, batangira gusubira inyuma mu masomo aribyo bibaviramo gutsindwa. Ababyeyi nabo bakitotomba bavuga ko nta mafaranga bafite yo kugura ibyo bikoresho kubera ubukene (Umuyobozi w'ishuri*, R2). [We have problems of parents sending children to school without the necessary basic school materials. Children from such families find it difficult to follow attentively what they are taught and start deteriorating and fail at the end of the day. Parents complain of not having money to buy school materials for their children because they are poor. (Principal, R2)]

The challenge is even worse for the girls, who are manipulated because of their socio-economic status and family income status. It was mentioned that community members exploited girls from poor families by seducing them with offers of gifts or money and luring them into sexually risky behaviours.

Hari ubukene mu miryango aho baturuka bukabije. Ababirenganiramo ni abana b'abakobwa kuko abantu babafatirana bakabashukisha ibintu ababyeyi batababonera bakabakururira mu busambanyi bwabaviramo ingarukambi k'ubuzima bwabo. (*Abarimu,* R2). [There is extreme poverty in the families where pupils come from, and the most affected are girls because people take advantage of their poor background and persuade teenage girls with money and other materials that many children do not get from their parents to attract them into sexually risky behaviours. (Teachers, R2)]

The quote revealed how female pupils become victims of poverty and its effects. Since their parents or guardians are unable to provide for them, they start looking for alternatives, to survive. Obviously, the effect of such conditions affects teaching and learning. Sending children to school without the necessary basic materials to enable them to fulfil their learning responsibilities undermines their learning and academic success.

Abanyeshuri baza ku ishuri nta mwambaro w'ishuri (iniforume). Nabazifite ntibazifura kuko nta sabune. Abanyeshuri benshi baza n'imisatsi ku mitwe basanabi, bakaza n'ibirenge ku ishuri (*Uhagarariye urwego rw'ubugenzuzi rusange rw'uburezi*). [Children go to school without uniforms. Those who have them are often unable to wash them because they cannot afford to buy soap. Most of pupils are unkempt and walk to school barefooted. (Inspector General of Education)]

3.11.8.5 Domestic chores

Pupils in all the schools in the study were bothered by the chores they did at home every morning before leaving for school and in the evening after school, which left them exhausted. At U1, pupils complained that they were held up by domestic chores at the expense of their schoolwork. They claimed they arrived at school late, with no strength to concentrate:

Imirimo dukora mu rugo ituma tutiga neza. Dukora imirimo myinshi tukagera ku ishuri tunaniwe bigatuma tutagira imbaraga zo gukurikira mu ishuri, tugatsindwa (*Abanyeshuri*, U1). [Many activities that we do at home hinder us from learning. We get very tired and go to school exhausted. In such a situation, we cannot concentrate on studies. At school, it becomes impossible to follow and we fail. (Pupils, U1)]

Principals and teachers said they regretted irregularities in school attendance and poor punctuality of pupils due to domestic chores:

Abanyeshuri bakerezwa nuko ababyeyi babaha imirimo myinshi ya mu gitondo nko kugemura amata muyindi miryango, guhinga, kurera abana, kwita ku matungo, gutashya inkwi, kuvoma n'ibindi (*Umuyobozi w'sihuri,*

R1). [Pupils are late because parents give them numerous morning tasks, such as to bring milk from other families, dig, look after their younger siblings and animals and fetch firewood and water. (Principal, R1)]

At R2, pupils expressed the concern that parents did not value their schoolwork but concentrated on household chores:

Ku babyeyi uburere sicyo cy'ngenzi. Baba bashaka kutubona mu kazi ko mu rugo ibyo kwiga bikaza nyuma (*Abanyeshuri*, R2). [For parents, education is not a priority. All they want is to see us busy in different household tasks, and education comes last. (Pupils, R2)]

3.11.8.6 Orphans and vulnerable children

School participants and the key informants indicated that having a high proportion of orphaned and vulnerable children in schools affected learning and school operations:

Mu Rwanda dufite imfubyi nyinshi n'abana batishoboye kandi ibigo byabo ntibishoboye kubitaho (*Uhagarariye* UNICEF). [In Rwanda, we have a high proportion of orphans and vulnerable children, and many schools are unable to cater for them. (UNICEF official)]

The Ministry of Social Welfare official revealed that many children looked after themselves, without any adult support and guidance, and had lost hope for the future. Such children easily dropped out of school and became street children, where they learned bad manners and developed anti-social behaviour:

Benshi mu bana bo mu mashuri ni imfubyi zitagira uzirera wundi atari Leta. Aba bana babura ibyiringiro by'ahazaza, bakava mu ishuri bakaba inzererezi; bagatangira kwiga ingeso mbi, imyitwarire idahwitse mu bandi, imwe yakwangiza n'ubuzima bwabo kuko nta burere buturuka ku babyeyi babona. (*Uhagarariye Minisiteri y'imiberehomyiza n'ubutegetsi bw'ibanze n'imibereho myiza*). [Many school children are orphans, without anyone to look after them other than the government. These children lose hope for the future, give up on education and drop out to become street children, become ill-mannered and develop anti-social and risky behaviour because of lack of parental guidance. (Key informant, Ministry of Social Welfare)]

The school principals said it was difficult for the orphans to succeed academically because other responsibilities impede their progress and hinder them from learning:

Abana b'imfubyi basiba ishuri bahinga kugirango babone icyibatunga. Umwana akajya mu isoko kugurisha utwo yejeje ngo abe yagura umwambaro w'ishuri. (*Umuyobozi w'ishuri*, R1). [Orphans are often absent

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from class, digging to find something to live on. A child has to attend the market to sell his/her harvest to buy a uniform. (Principal, R1)]

The orphans who lived with their grandparents did not receive any support from them, as they themselves need attention and care from the grandchildren. Children abandoned school to work for money to support themselves and their grandparents, which exposed them to risky behaviour:

> *Hari abana b'imfubyi babana na banyirakuru/sekuru nabo bakeneye kwitabwaho bakava mu ishuri bakajya gukorera amafaranga. Benshi bakaba bakwishora mu byashyira ubuzima bwabo mu bibazo bashukishijwe amafaranga* (*Abanyeshuri*, R2). [There are orphans living with their grandparents who, themselves, need attention and care. If you are one, you abandon school and work for money. Such pupils are tempted to engage in unhealthy and risky behaviour, like being exploited by being given money in return for other favours. (Pupils, R2)]

3.11.8.7 Hunger

Pupils at R2, U1 and U2 did not have a school feeding programme, unlike their R1 counterparts. Pupils from the three schools were seriously affected by hunger. Teachers at U1 said that hunger affected pupils' learning badly because they could not fully concentrate or follow well in the classroom:

> *Ababyeyi ntabushobozi bafite bwo kubonera abana indyo ikwiye. Abana birirwa ku ishuri inzara ibica ntacyo bafashe saa sita bigatuma badakurikira neza mu ishuri. Baba bafite intege nke, banasinzira* (*Abarimu*, U1). [Parents are unable to provide their children with adequate food. Children stay hungry at school the whole day, without lunch. They cannot concentrate and follow well in class while starving; they are always weak and sleepy. (Teachers, U1)]

At U2, teachers said hunger weakened pupils physically and prevented them from achieving their full potential because they dropped out of school:

> *Abana bigaragara ko bashonje cyane. No guhagarara birabagora, bamwe bagataha kare bakigira imuhira, abagumye ku ishuri nabo bakisinzirira kubera inzara.* (*Abarimu*, U2). [Pupils literally starve. Some can hardly stand, so they leave school and go home, while those who stay at school sleep in class due to hunger. (Teachers, U2)]

Pupils at U2 explained why they went to school without food:

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*Ntidupfunyika ibyo kurya kuko ntabyo dufite mu rugo. Ababyeyi bagurisha
buri kantu kose amafaranga bakayamarira mu nzoga.* (*Abanyeshuri*, U2).
[We do not pack lunch because there is no food at home. Parents sell
whatever comes into their hands and spend all the money on alcohol.
(Pupils, U2)]

Teachers also suffered hunger. For instance, R1 served lunch to both pupils and teachers. All
the participants noted that teachers also suffered from hunger:

Abarimu ntibafite ubuzima bwiza kuko batarya (*Uhagarariye Minisiteri
y'uburezi, agashami k'uburezi bw'ibanze*). [Teachers are not healthy
because they don't eat. (Director of Basic Education official)]

Teachers at all the schools also mentioned that they were affected by hunger:

Turakora ariko ntitugira icyo ducyura imuhira (*Abarimu,* U2). [We work
but we do not take home enough money to afford to eat. (Teachers, U2)]

A similar point was raised by R1 and R2 teachers, who maintained that teachers do not eat
and are always hungry.

3.11.8.8 The curriculum

The curriculum encompasses pedagogy of teaching, pupil participation, language of
instruction, life skills (both generic and specific skills, integrated into health education), life
skills education, sex education and many other subjects.

3.11.8.9 Pedagogy of teaching

All the participants pointed out that teaching methodology did not engage in and facilitate
critical thinking in pupils but encouraged them to memorise and learn by heart:

*Abanyeshuri bigishwa gufata mu mutwe nta gutekereza ku bintu mu buryo
bwimbitse. Uburyo bw'imyigishirize ntibushingiye ku mwana. Mwarimu
ajya hariya akivugira natwe tukamutega amatwi* (*Abanyeshuri*, R1). [Pupils
are taught to memorise, not to understand and use critical thinking.
Teaching methodology is not learner-centred but teacher-centred. (Pupils,
R1)]

Pupils at U2 said they were not involved in their learning and often misunderstood
explanations by teachers:

Abarimu baraza bakigisha amasomo yabo; wakumva utakumva,
ntibibareba. (*Abanyeshuri*, U2). [Teachers come into class and deliver their
lessons without caring whether you understand or not. (Pupils, U2)]

Teachers concurred with pupils that because of overladen workloads, their teaching was not
intended to make pupils understand but only to complete the required teaching content:

Twigishiriza kurangiza "porogaramu" yibyigwa. Abanyeshuri babyumva
cyangwa batabyumva, icyangombwa nuko tubona ko ibyo tugombye
kwigisha byarangiye (*Abarimu,* R2). [We teach to finish the planned
teaching load, whether pupils understand or not, so long as the content is
covered. (Teachers, R2)]

However, other participants gave reasons for the poor pedagogy, as explained by the UNICEF
key informant:

Abarimu mu Rwanda ntibahugukiwe n'uburyo bwo kwigisha bwibanda ku
banyeshuri no kumva ibikenewe by'umwihariko mu burezi bwabo; ibyo
imfubyi n'abandi bana babayeho nabi bakenera, ibyerekeranye nibyo abana
b'abahungu n'aba bakobwa bakenera mu burere bwabo byose nibindi
bynshi ntabwo babihugukiwemo (*Uhagarariye* UNICEF). [Teachers in
Rwandan primary schools are not skilled in child-centred methodology and
understanding about special education needs, the needs of orphans or
vulnerable children or particularities of gender. There are many issues in
which teachers are not trained. (Key informant, UNICEF)]

3.11.8.10 Language

Teachers in all the schools and key informants pointed out that language deficiency is a major
barrier to teaching and learning. Teachers who only spoke French were compelled to teach in
English, without prior training.

Abarimu benshi nabize mu gifaransa kandi ururimi rukoreshwa mu
kwigisha ari icyongereza (*Umuyobozi w'ishuri*, R1). [Most of these teachers
are from a French background, yet the medium of instruction is English.
(Principal, R1)]

Teachers at U2 said that they were not good at both languages and wasted much of their time
trying to create meaning in the lesson, with the likelihood that they might convey what they
never intended to teach:

Imfashanygisho ntizijyanye na gahunda yo kwiga "porogaramu". Ibitabo
dufite biri mu gifaransa kandi bagomba kwigisha mu cyongereza. Abarimu
usanga batazumva zombi bagata umwanya bagerageza kumva neza ibyo

bari bwigishe. Ubundi Tukegera bamwe muri bagenzi bacu bakadufasha guhindura amasomo mu cyongereza avuye mu gifaransa rimwe na rimwe ugasanga icyigisho cyataye ubusobanuro nyabwo ibyo wagombye kwigisha ntabe aribyo wigisha (Abarimu U2). [Teaching materials do not go with the curriculum. The books that we have are in French, yet the language of instruction is English. Teachers who are not good at both languages waste much of our time trying to create the meaning of the lesson. We consult our fellow teachers; however, transferring meaning from French to English sometimes results in the subject losing meaning, and you may teach what you never intended to teach. (Teachers, U2)]

3.11.8.11 Lack of health education and life skills in curriculum

All the participants said pupils were not equipped with particular skills, attitudes, knowledge and competencies that they needed to effectively deal with the challenges of everyday life:

Integanyanyigisho iriho ntifasha abana kunguka ubumenyi mu kubaho mu buzima busanzwe, kumenya abo aribo, kwigirira ikizere, kubana n'abandi no kwikemurira ibibazo no guhitamo gukora ibibafitiye akamaro basobanukiwe (Uhagarariye Minisiteri y'ubuzima). [The curriculum does not teach pupils particular life skills of self-awareness, assertiveness, interpersonal relationships, and problem-solving skills to enable them make informed choices. (Ministry of Health official)]

The participants said that the curriculum did not provide for life skills because of the lack of policy guidelines:

Ntiturigisha ibijyanye n'uburere ku by'ubuzima nk'isomo kuko ntagahunda yabyo irashyirwaho. integanyanyigisho iriho ntiyerekana n'ikigomba kwigwa. Nta mwanya uhagije ihabwa, abarimu ntibayihugukiwe, kubw'ibyo ntibakwigisha ibyo nabo bataz. (Uhagarariye Minisiteri y'uburezi agashami k'ibijyanye n'ubuzima mu mashuri). [We have not started teaching health education as a subject because there is no policy and the current curriculum does not show the content, there is no is time allocated for it, and teachers are not trained so they cannot teach something they don't understand themselves. (Directorate of Health Education official)]

Pupils at all schools said that neither teachers nor parents spoke to them about their physical, emotional and sexual development. With an inflexible and rigid curriculum that does not address pupils' health literacies and social competencies, pupils continue to grapple with peer pressure in relationships and developmental challenges for which they have no answers:

Ari ababyeyi, ari abarimu ntawutwigisha kubyerekere ubuzima bw'imyororokere n' imihindagurikire y'imibiri yacu. Nta bujyanama cyangwa impanuro kumihindagurikire y'imibiri yacu n'uburyo

twabyitwaramo, nuko twakwifata mu buryo bw'ubucuti na bagenzi bacu mubyerekeye guhuza ibitsina (*Abanyeshuri*, R2). [Neither teachers nor parents tell us about our sexual development and reproductive health. We don't receive any counselling or guidance on our developmental changes and how to handle peer relationships and sexuality. (Pupils, R2)]

Participants acknowledged the drawbacks emanating from an inefficient curriculum that did not respond to social issues in schools and in the communities from which pupils came:

Integanyanyigisho ntiyigisha abana kwiyubaha, gukunda no kubaha abandi. Uburezi budafasha abana kwiyumvamo ubushobozi bwo kubaho ubwabo nta reme bufite. Dufite ibibazo byinshi mu mashuri bijyanye n'uburezi budafite ireme kubyerekeye gufasha abana kubaho mu buzima busanzwe bikemurira ibibazo byabo, bahitamo bakanifatira ibyemezo bibanogeye bo ubwabo (*Uhagarariye Minisiteri y'ubuzima*). [The curriculum does not teach the children to love and respect themselves and others. An education system that does not teach pupils to be assertive is a poor one. We have many social issues and challenges in our schools, caused by a poor education system that does not equip learners with the life-skills necessary to help them solve their own problems and make informed decisions and choices. (Ministry of Health official)]

3.11.8.12 Many subjects

The current curriculum was cited as a general concern for all the participants. Teachers at all schools reported that many subjects reduced "time on task" while increasing evaluation tasks that exhausted both teachers and pupils:

Baturundaho amasomo menshi bigatuma dutinya kwiga tukabyanga, bakatwigisha byinshi cyane bigatuma tutabona n'umwanya wa siporo (*Abanyeshuri*, U1). [When overcome by too much learning content, we hate studying and become uncaring about studying. We feel troubled by intensive lessons and many subjects that make us miss sports. (Pupils. U1)]

Teachers, parents and key informants all sympathised with pupils who they admit are overloaded with many subjects:

Ibyigwa ni byinshi kurenza ubushobozi bwo kwiga bw'abana. Ubwonko bwabo ntibwihanganira ubwinshi bw'ibyigwa rimwe narimwe bitabafasha gukemura ibyo bakeneye. Ntibishimira kwiga, dore ko binabaniza (*Abarimu*, U1). [The subjects are many and beyond children's capacity to assimilate; their brains cannot understand subjects that are not even relevant to their needs. Learning tires and bores pupils. (Teachers, U1)]

The challenge of too many subjects in the curriculum was not only a concern to schools but also to the education officials and agencies working with schools, such as UNICEF:

> *Hari ibibazo mu nteganyanyigisho. Minisiteri y'uburezi n'abafatanya nayo, amashami y'umuryango w'abibumbye mu by'uburezi twemeranya ko integanyanyigisho ari ndende cyane* (*Uhagarariye* UNICEF). [There are issues in the curriculum. The Ministry of Education and all other development partners, as well as different UN agencies, all agree that the curriculum is overloaded. (Key informant, UNICEF)]

3.11.8.13 Teacher shortage and attrition

All the schools in the study experienced teacher shortage and attrition that had a significant effect on the school performance and pupils' academic achievement. The reasons why teachers left schools were diverse, but some were common to all school contexts:

> *Abarimu bigira mu mashuri y'igenga bava mu mashuri ya Leta kubera agashahara gatubutse* (*Uhagarariye urwego rw'ubugenzuzi rusange rw'uburezi*). [Teachers leave us because of poor salaries, to practice in private schools where they earn better salaries. (Inspectorate General of Education official)]

Most teachers worked far from their homes, which involved unaffordable transport costs, and when opportunity to work close to their home arose, they left:

> *Hari abarimu batuye kure yaho bigisha. Uturere tubohereza gukora ahari akazi tutitaye kubyo bakeneye nk'amafaranga y'urugendo n'ibindi nkenerwa. Iyo babonye umwanya hafi yaho batuye bihitiramo kwigisha aho. Ibi bituma nibura dutakaza abarimu batatu buri gihembwe.* (*Abarimu*, U2) [There are teachers living far from schools. The district appoints them without taking into account their transport costs and living needs, and when the opportunity arises, they prefer to teach in a nearby school and this results in losing at least three teachers every term. (Teachers, U2)]

3.11.8.14 Class size

The issue of large class sizes was consistently reported across all the schools in the study.

> *Ibibazo bigaragara mu mashuri n'iby'umubare munini w'abana mu cyumba cy'ishuri; nta abarimu bahagije bo kubitaho. Imibare iri mu Rwanda nuko umwarimu umwe yita ku bana 74. Ikigaragara nuko ntakwitabwaho kw'abana bari muri iki kigero buri umwe ku giti cye* (*Uhagarariye* UNICEF). [Of the many problems that the schools have, the main one is the overcrowding of classrooms, with too many children per class and not enough teachers per classroom. Rwanda has a pupil-class ratio of 74:1.

Obviously, pupils will not get the individual attention they need at this age. (UNICEF official)]

According to the school records, the classroom-pupil ratios across schools in the study were R1, 1:66, R2, 1:79, U1, 1:56 and U2, 1:66, which substantiates the teachers' concerns about crowded classrooms:

> *Hari umubare munini w'abanyeshuri mu byumba. Kwigisha abanyeshuri 60 cyangwa 80 ntabwo ari ibintu byoroshye. Mwarimu ntashobora gukurikirana buri umwe uko bikwiye* (*Abarimu*, R1). [There are large numbers of pupils in classrooms. Teaching 80 or 60 pupils is not easy and a teacher cannot handle each of them according to their needs. (Teachers, R1)]

Teachers in all the case-study schools felt drained by large class sizes in which they could not offer pupils the individualised attention they needed. In addition, teachers said that the evaluation of pupils became difficult for them, as they could not asses all pupils, which left most pupils unattended to.

3.11.8.15 Inadequate instructional materials and poverty in school

The Inspectorate General of Education official remarked on insufficiency of materials and resources in schools and said it affected pupils' interest in learning:

> *Abana ntibasoma kuko ntabitabo bihari naho kubisomera. Nta bikoresho bya laboratwari bihari bifasha kwigisha amasiyansi aho biga banashyira mu bikorwa ibyo bize* (*Uhagarariye urwego rw'ubugenzuzi rusange rw'uburezi*). [Children don't read because there are no books or reading spaces like libraries. There is no laboratory equipment to teach science to children, to acquire know-how-to-do skills (Inspectorate General of Education official)].

Teachers are unable to fulfil their teaching mandate without the necessary resources and appropriate environment to do their work:

> *Nta bifasha abarimu gusobanura no gutanga ingero zikwiye. Basaba Leta kubaha ibikoresho n'ibindi nkenerwa mu kazi kabo ntibabibone* (*Abarimu*, U1). [Teachers lack instructional materials and teaching aids to help them provide appropriate examples. They require the government to provide the necessary resources, materials and facilities to allow teachers to fulfil their duties. (Teacher, U1)]

3.11.8.16 Double shifting and automatic promotion

As large classes had become a problem, a double-shift policy was adopted, whereby children are in school half a day and a teacher teaches one class in the morning and another class in the afternoon. In this programme, all children attend school and have access to limited facilities, such as classrooms for a shorter period, and reduced resources, for instance, fewer textbooks and teachers. To accommodate all the children, from primary one to the final year, schools practice automatic promotion, whereby no child repeats a class but progresses to the next grade, to allow space for others behind them:

> *Kugira ngo uburezi kuri bose bugerweho, ntamwana wemerewe gusibizwa kuko bituma bacika intege bakava mu ishuri* (*Uhagarariye urwego rw'ubugenzuzi rusange rw'uburezi*). [To achieve education for all, no child must be left behind, because this discourages them and they start considering dropping out. (Inspectorate General of Education official)]

Teachers were concerned that pupils did not learn with will and commitment but rather became more lazy, inattentive and careless about their studies, knowing that they would still be promoted. The Ministry of Education officials disagreed with the teachers on the advantages of the automatic promotion policy, maintaining that it was adopted to allow all pupils to progress through all grades, because when pupils repeated grades, they were discouraged from staying in school and considered dropping out. Besides, when pupils repeated, they took up the places of those behind them, thus hindering them from progressing. All the participants, however, acknowledged that pupils did not study hard because promotion to the next level was certain.

3.11.8.17 School dropouts

Participants at all the schools commented on the high dropout rates of girls and boys, which hindered their progression to secondary education, despite viable strategies to conduct them to the next grade:

> *URwanda rufite abana benshi biyandikisha mu kwiga ariko hakaba n'umubare munini w'abava mu mashuri. Si benshi batangira amashuri yisumbuye. Benshi muri bo bava mu ishuri bakiri mu myaka yohasi, igihe ibigo bitabitayeho n'ibindi biza mbere yo kwiga bituruka mu miryango nubwo bwose kwiga aba ari ubuntu. Haba hakiri ibindi* (*Uhagarariye* UNICEF). [Rwanda has a very high national enrolment rate but also a high

dropout rate, and not many pupils go on to secondary education. Many of these drop out at key grades, despite fee-free education, because schools do not cater for their needs and other priorities arise in their families. There are still other costs like textbooks and uniforms. (Key informant, UNICEF)]

Orphans and vulnerable children were reported to drop out more often due to the hardships of survival and because of poverty at home, which forced children out of school to look for other survival alternatives:

> *Abana bata ishuri bakibera inzererezi mu mujyi, bagasabiriza amafaranga abandi bakajya kuyakorera; ibigo ntibyite kubyo bakeneye uburere bukabura ireme mu bana* (*Uhagarariye* UNICEF) [Children drop out of school and become street kids in the city, where they beg for money; others go to work for money. Schools do not cater for their needs and education loses meaning for these pupils. (UNICEF official)]

Children whose parents were imprisoned on genocide charges dropped out of school due to frustration caused by their parents' absence from home. Education was not a priority as they assumed family responsibilities at this age:

> *Hari abava mu ishuri kuko ababyeyi babo bafungiwe ibyaha bya jenoside. Umwana agacika intege akarivamo* (*Abarimu*, U1) [There are children who abandon school because their parents are in prison for genocide charges; a child feels discouraged and leaves school. (Teachers, U1)]

Other school dropouts were female pupils who fell pregnant:

> *Abana b'abakobwa bava mu mashuri kubera gutwara inda kuko badashobora gukomeza n'igisebo cyo kumva ko batwite nta bagabo.* (*Abarimu*, U1). [Girls abandon school when they fall pregnant and cannot continue studying because of the stigma attached to pregnancy when one is not married (Teachers, U1)].

The condition of the latrines at some schools also forced girls out of school:

> *Abana b'abakobwa bava mu ishuri kubera ubwiherero budahwitse* (*Ubuyobozi bw'ishuri,* R2). [Female pupils drop out of school because of the poor condition of latrines. (Principal, R2)]

Other school children dropped out of school because of gender-insensitive parents who favoured and encouraged boys to attend school but denied a girl child the opportunity to go to school or stay in school:

Ababyeyi baracyafite imyumvire ko abana b'abahungu aribo bakwiye kwiga ab'abakobwa bagasigara mu rugo bakora imirimo. Bumva ko abana b'abahungu bakwiye kwiga kurenza aba bakobwa; ari nayo mpamvu aba bahungu bashishikarizwa gukomeza kabone niyo baba batsindwa kenshi ariko aba bakobwa bo ukabona byoroshye kuvanwa mu ishuri (*Abanyeshuri*, R2). [Our parents still believe that only boys have to attend school and girls should stay at home doing house chores. It is always said that it is worthwhile sending boys to study rather than girls, who are wasting time. For parents, for a girl child to leave schools is easy, while a boy is encouraged to stay at school, even if he fails several times. (Pupils, R2)]

3.11.8.18 Distance to and from school

The distance was claimed to exhaust children and leave them with no strength to concentrate, to which participants attributed pupils' failure, irrespective of school context:

Abana bakora urugendo rurerure bajya ku ishuri bikabananiza. Ku ishuri ntibashobora gukurikira neza, bituma imitsindire yabo itaba myiza n'imibereho yabo muri rusange (*Umuyobozi w'ishuri*, R1). [Pupils cover long distances to and from school, which tires them. They get to school exhausted and unable to concentrate on their studies, which has a bearing on their performance and on their physical and mental wellbeing. (Principal, R1)]

The key informants from the national departments also expressed similar concerns, saying that long distances affected pupils' academic achievement:

Abanyeshuri bagenda urugendo rurerure bava cyangwa bajya ku ishuri. Ku ishuri baba bananiwe badashobora gukurikirana neza amasomo yabo (*Uhagarariye Minisiteri y'uburezi agashami k'ibijyanye n'ubuzima mu mashuri).* [Pupils cover long distances to and from school. They arrive at school tired and unable to follow their lessons comfortably. (Directorate of Health Education official)]

The long distances pupils covered were a result of scarcity of schools in the communities and districts where pupils lived.

3.11.9 Summary and Conclusion to Section 2

The study findings from the interviews and focus group discussions were presented in this section. The eight themes that emerged from the data were presented and the data excerpts used for interpretation. The researcher's observations were also used to interpret the findings.

In the next section, the findings in relation to the theoretical framework and the relevant literature reviewed for the study are discussed.

3.10 Section 3: Discussion

In this section, the study findings are discussed in relation to the ecosystemic theory that underpins the study and incorporates relevant literature for this study. Figure 10 summarises the findings within the school's social context of microsystems, mesosystems, exosystems and macrosystems.
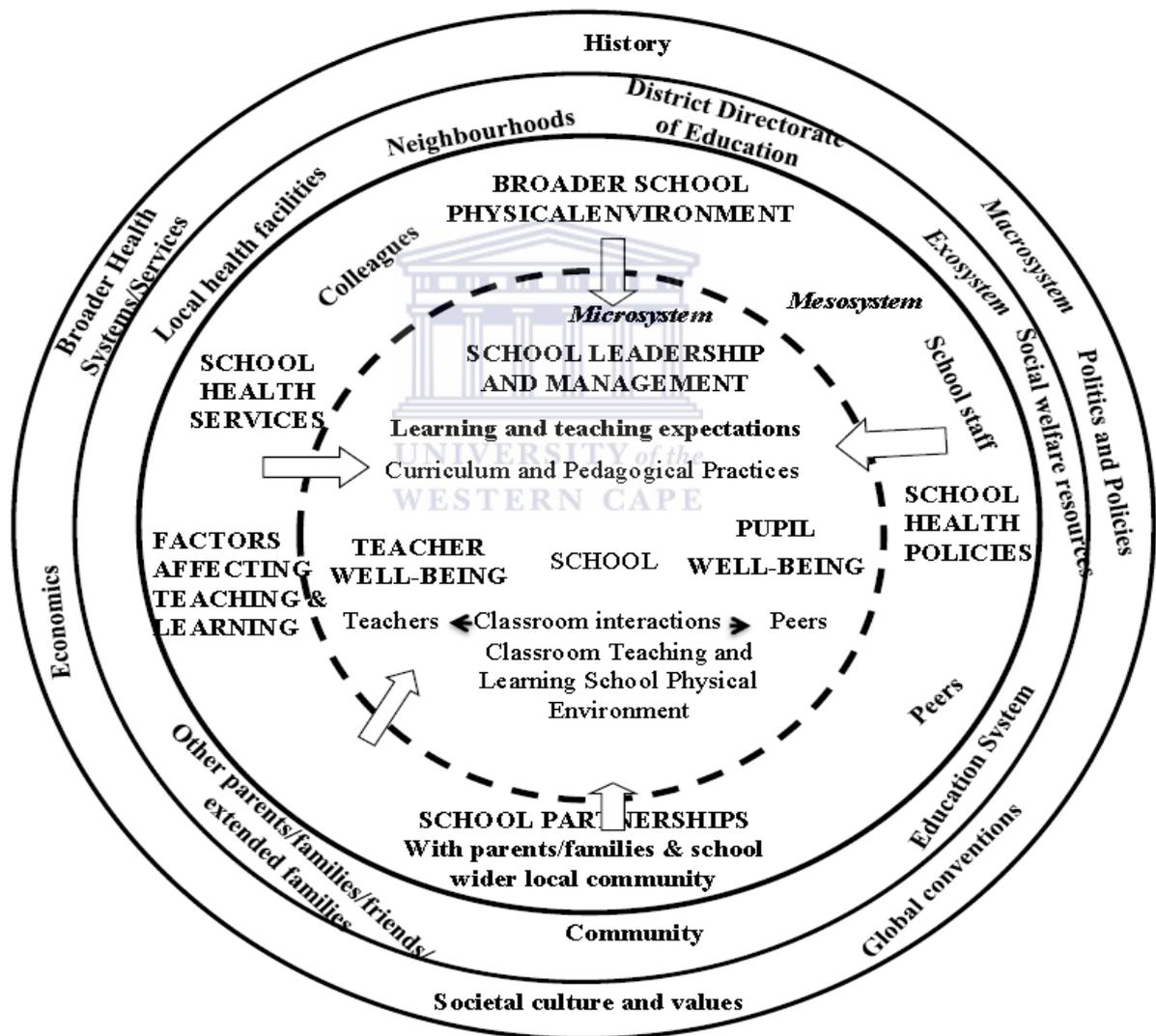
Figure 10 **Ecosystemic theory underpinning the study and the findings.**

The discussion is organised under the eight themes, mapped into Figure 10 in **BOLD CAPITAL** letters, as they emerged from data, and each theme is discussed in the following section.

3.10.1 School Leadership and Management

This theme encompassed leadership and management practices that include overall school climate, such as the interpersonal and intrapersonal relationships, attitudes, values and behaviours displayed by those in the case-study schools. It is not possible, however, to understand these attributes in isolation of the school's social context of microsystemic, mesosystemic, exosystemic and microsystemic levels of influence. This requires an ecosystemic lens through which to analyse different, interacting, but interrelated complex and dynamic factors that influenced leadership and management practices in the case-study schools.

The findings revealed that some schools were better led and managed than others. For instance, R2 and U1 participants cited positive working relationships with their school leadership, which they referred to as *collaborative* at R2 and *co-operative* at U1, although at R2, they acknowledged that their collaboration had not been translated into general school practice to include pupils and parents in general, other than those in the parents' committee. In contrast, R1 teachers referred to their leadership and management as *disrespectful*, *ungrateful* and *discriminative,* as teachers felt side-lined, ill-treated and neglected.

Teachers at R1 experienced confrontational relationships with their school administration because they were not fulfilling their duties. Some teachers missed work for days, leaving pupils unattended, without genuine reasons. Unfortunately, when they came back, they were not willing to justify their absence and the principal felt he could not allow them to do as they pleased as the school was becoming a personal burden to him and he was feeling isolated too. Because he had to keep the school in order and functioning, he could not allow teachers to do whatever they wanted and had to hold the non-performing teachers accountable. As part of his managerial responsibilities, the principal demanded that teachers comply with the rules and regulations, which they had ignored, at which teachers rebelled, became despondent, and started accusing him of being discriminative when he tried to work with the few who were understanding and willing to take on extra duties.

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At U2, parents referred to their leadership and management as *incompetent* and *single-minded* leadership that did not involve other members of the school in the decision-making process, but always resisted their ideas. While parents and teachers at U2 did not provide reasons why the principal did not involve them in decision-making and policy formulation, the Rwanda Ministry of Education (2008a) pointed out that the sole reason was resistance to change and adherence to the implementation of the written instructions, laws and regulations from the line Ministry, without making any effort to consult other stakeholders. This perhaps explains why school principals were blamed for laziness by the Ministry of Education officials, who were considering either extending their powers or dismissing them and recruiting others that were willing to work. This explanation revealed that principals were not empowered enough to lead and mange schools, despite their demanding and complex responsibilities. On the other hand, however, this finding is disempowering in itself because dismissal is not an effective approach to countering the allegations against principals of laziness, other than instilling in them a sense of vulnerability and insecurity about losing their jobs.

At this point in the research, it became imperative to understand the school principals' views on what it is to lead a school. At R1, the principal's perspective was that leading a school is a difficult, challenging, demanding and complex responsibility, associated with many problems. There is pressure to raise academic standards with demoralised teachers because of poor salaries, poor working and living conditions, pupils who are not prepared to learn and parents who are distanced.

The Rwanda Ministry of Education (2008a) has acknowledged that leading and managing schools in Rwanda is a complex and demanding responsibility, complicated by limited resources that are always in short supply. Principals are expected to deliver better quality education with minimum resources. This, therefore, frustrates and wears them down, which partly explains why there has been a serious, unplanned succession of school principals. The available evidence shows that school leadership acts as a catalyst for other beneficial things to be accomplished in schools (Leithwood et al., 2008), such as inspiring and stimulating others at school level and beyond (Lawlor & Sills, 1999). The school environments in which principals work do not allow them to be catalysts because of poor and weak policies and a lack of the necessary skills.

The schools included in the study are unlikely to achieve their goals because subsystems do not seem to have a shared common goal and shared vision for their schools, as teachers, parents, school administrators, the districts, and policymakers are working in isolation, with their positive energies diverted towards unproductive goals, causing tension and stress. All those concerned need to work together because if they continue to work in isolation, schools are unlikely to achieve their goals, no matter how hard working every individual or system is.

It is evident that pupils are not well served by the schools because none of the systems is working effectively. If people cannot work together, it is counterproductive for the school community, particularly for pupils, who need positive role models, relationships and pro-social behaviours and attitudes and to be protected from a disruptive school environment. During my research, I observed that school community members were not only aware of and concerned about the poor relationships but had also become sensitive to them, perhaps because of the legacy of the past, when schools had been characterised by mistrust, oppression, institutionalised discrimination and social injustice (Shyaka, n.d.). This, therefore, makes the Rwandan school even more sensitive to leadership and management challenges and might have adverse effects on learning and teaching, as people have not fully recovered from the trauma and psychological effects of the 1994 genocide.

Day et al. (2009) found that leadership is especially important in schools that need it most, while Leithwood et al. (2004) claimed that the effects of leadership are usually strongest where and when they are needed most: the greater the challenge, the greater the impact of leaders' actions on student learning. School principals leave schools and their profession unexpectedly as a result of too much pressure and unfriendly and unsupportive school environments. Leithwood et al. (2008) observed that unplanned succession of school leadership is one of the most common sources of schools' failure to progress, in spite of what teachers might do. The fact that the education system does not provide sufficient training in school leadership and management as well as governance of schools continues to disempower principals, causing them to leave their profession (Rwanda Ministry of Education, 2008b)

The positive side is that the government has put in place rigorous policies, including teacher development and management policies, which provide for the training of school principals in special skills in school leadership and management (Rwanda Ministry of Education, 2007a). In its more recent Education Sector Policy, the government of Rwanda acknowledges that the

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success of schools in providing quality education depends on the quality of its leadership. Thus training of school principals has been made a high priority (Rwanda Ministry of Education, 2010a).

3.10.2 School Policies

The findings revealed a large gap in health policy formulation in schools in the study, as reflected by the absence of specific polices to address particular health and social challenges facing schools. For instance, parents at U1, in response to the absence of policies, emphasised that schools cannot be effective without policies to guide their practice. Moreover, policies ensure that priority is given to the needs of the school, the necessary resources are allocated and clarification of responsibilities and roles are solicited, without which schools can hardly fulfil their goals. Across schools, participants expressed policy priorities based on their local school needs, priorities and prevailing circumstances. Among others, participants at U2 expressed the need for a school feeding scheme so that schools could provide food to pupils to encourage school attendance and curb nutrition and hunger challenges that affected pupils' capacity to learn and their healthy growth and development.

The other policy needs that were raised across all the schools included the need for policies on disease prevention (particularly targeting HIV/Aids, malaria, helminthic infections, respiratory infections and tuberculosis, which were rampant in schools); support services for both teachers and pupils; behaviour and discipline management (with emphasis on social and behavioural problems such as bullying, alcohol, smoking, drugs and other substance abuse); the physical environment of the school (promotion of hygienic and sanitation practices); and equity. In addition, I observed that schools lacked written policies, rules, regulations and guidelines on important aspects of school life, such school leadership and management structures and procedures, curriculum, materials' allocation and supplies, school structure and class size, teacher training and development, support services and wellbeing of both teachers and pupils, learning and behaviour expectation, teacher performance expectations, values and moral development of pupils as well as the involvement and participation of pupils in physical education and sports, and school partnerships with other stakeholders, amongst others. Figure 10 helps to identify the policy gaps at different systemic levels of influence, ranging from microsystemic to macrosytemic levels.

Importantly, good national policies were found at the ministerial level, which included the Double-Shifting Policy, Abolition of Corporal Punishment Policy, Language Policy (2008), Special Needs Education Policy (2007), Reproductive Health Policy (2003), and Girls' Education Policy (2008), as well as the Teacher Development and Management Policy (2007). These policies are important and it would be good to have them operating in schools; however, they need to be well communicated to schools and the necessary resources for their implementation are required. Participants in the study noted that they did not approve of policies that were not well communicated, especially when there were no resources to implement them.

After becoming aware of the policy gaps in schools, the Ministry of Education mandated schools to translate some of the national policy provisions through clubs, particularly to address the most pressing education, health and social challenges facing schools and their communities. These clubs included areas of concern such as the environment, anti-AIDS, unity and reconciliation, Speak Out (that empowers girls to be assertive and develop communication skills) and anti-drug and substance abuse. These clubs are in line with the national policy implementation directives. The reality is that these clubs were reported to be dysfunctional because of lack of resources and lack of time, on the part of teachers, to plan for the extramural activities. Besides, teachers leading these clubs are constrained by lack of skills and knowledge on the issues covered in these clubs.

This finding accords with other studies in the field. World Health Organisation (1996), Lee et al. (2005) and Samdal (2008) stressed that it is essential for schools to have specific policies to influence their actions and resource allocation in areas promoting health (Lee et al., 2005). One positive finding was that the Ministry of Education, with its development partners, acknowledges the challenge of policy gaps in the schools and has developed a national school health policy, still in its draft form in 2010, to initiate a comprehensive school health programme that will guide interventions and actions to foster pupils' physical, social, cognitive and emotional and educational development (Rwanda Ministry of Education, 2010b). This programme raises optimism that school health policy improvement will perhaps promote pupil wellbeing and enable them to achieve their full potential. Symons et al. (1997) posited that healthy children are in a better position to acquire knowledge and cautioned that

no curriculum is good enough to compensate for a hungry stomach or a distracted mind because children's health status and achievement are inextricably intertwined.

3.10.3 Pupil Wellbeing

The theme of pupil wellbeing covers peer relationships, pupil-teacher relationships, pupils' attitude towards learning, academic achievement, discipline and behavioural management procedures, pupils' knowledge of rights, and pupil-parent relationships.

To understand peer relationships demands understanding the proximal face-to-face interactive relationships pupils are involved in among themselves and with their teachers as well as the other individuals within the school. Figure 10 shows how pupils interacted with peers and teachers in classrooms and outside classroom within the schools observed. The findings indicate that face-to-face proximal interactions among pupils were characterised by bullying, fighting and harassment, with boys mostly perpetrating such antisocial behaviours. The most affected were girls, who became victims of their peers' bad behaviour, which instilled in them a sense of fear and vulnerability and being unsafe at school. The school environment thus becomes hostile and unfriendly. It is within these proximal interactions that their interpersonal and intrapersonal competencies have their greatest effect; they influence and are influenced by others in contact. Moreover, these interactions with peers are important for the pupils' social development and their formation of identity. Belonging and forming relationships contribute to their wellbeing, but they can also be dangerous if they are harmful for pupils. The findings in the case-study schools were that these antisocial behaviours not only distracted pupils from learning but also had a negative psychological, physical, emotional and social impact on pupils' health and wellbeing.

Studies such as that of Gutman and Feinstein (2008) on children's wellbeing in primary schools found that it is pupils' individual perceptions or experiences, such as bullying, victimisation, and friendship, and their beliefs about themselves and their school environment that mainly affect their wellbeing, rather than school-level factors such the type of school they attend. It should be noted that the causes for these antisocial behaviours emanated from other systems outside the school, despite the fact that their effects had serious impact at the microsystemic level, aggravated by prolonged face-to-face interaction within the classroom and in school.

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Observing the influence of the mesosystemic level in which the school interacts with the other systems, such as the family, home, parents, neighbourhoods and the communities where schools are located, provides a mechanism for understanding how such behaviours came about. These causes include, but are not limited to, socio-demographic factors, home and family situational factors and neighbourhoods and community environments that expose pupils to alcohol, drugs and other substance abuse.

In terms of the socio-demographic factors, findings indicated that age and gender were reported to influence antisocial behaviours among pupils. In reality, due to age diversity, pupils were not peers: pupils' ages in classrooms and in the schools varied significantly and pupils' life experiences varied and were not necessarily positive all the time. In addition, findings showed that girls were victimised by older boys, who always bullied and sexually harassed them. In the study by Gutman and Feinstein (2008), they did not find any relationship between socio-demographics and pro-social and antisocial behaviour, except in the area of gender, in which boys were more likely to engage in antisocial behaviour, compared to girls. The home and family situational factors were cited to play a crucial role in influencing pupils' behaviour. At R2, in the interview, the principal revealed that most children came from unstable families where parents were forever fighting, and the school found it difficult to handle such children because they needed much attention from teachers to help them focus on schoolwork. Similar findings were reported by Hong and Espelage (2012) and Bauer et al., (2006)—that youth who are exposed to inter-parental violence at home are likely to engage in bullying in school as well as become victims of bullying. Children may learn to accept bullying and aggression as legitimate ways to interact with peers by observing violence in the family. Furthermore, it should be noted that many school children in Rwanda live on their own, without adult guidance and supervision, in child-headed families, but even children from families with parents, but who were reluctant to give their children appropriate upbringing, were reported to engage into antisocial behaviours.

The ecosystemic approach helps to understand how the past history of genocide led to the changes in the family structures, making many children orphans and thus vulnerable and lacking in social support from friends, other parents, families, neighbourhoods or communities. Such lack of care and support could cause pupils to act out of their deep desperation, caused by life's hardships, and assume that no one cares about them and their

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needs, which could influence how they feel for others. Du Toit and Forlin (2009) found that in the absence of parents, children exhibit bad behaviour in school because they do not benefit from disciplinary measures that would normally be imposed in the home. Moletsane (2004) reported similar findings—that deprivation of positive emotional care is often associated with a subsequent lack of empathy for others. Other causes for the antisocial behaviour among pupils also had their roots in the neighbourhood and communities where pupils came from that exposed them to alcohol, drugs and other substance abuse and access to films that were harmful to children. Noble and McGrath (2008), Bond et al. (2001), and Doll and Hess, (2001) found that young people who have poor relationships with peers and or teachers are more likely to use drugs and engage in socially disruptive behaviour and to report anxiety and depressive symptoms.

Pupils' wellbeing cannot be understood without understanding the quality of the classroom interactions with their teachers. The pupil-teacher relationships were unfortunately unsupportive as many teachers did not get along well with pupils under their care:

> *Ntitubohotse ku barium bacu kuko ntibatwishimira, nta rugwiro batwereka, ntibatwiyegereza kandi ntibadufasha mu byo dukeneye, bityo natwe ntitubisanzureho kuko tubatinya. Ntitubasaba kudusobanurira iyo tutumvise mu ishuri kuko batubwira nabi. natwe tugahitamo kubirinda. Ntanubwo tubagisha inama kabe niyo turi mu ishuri.* (Abanyeshuri, R2). [We are not free with our teachers because they are not welcoming and are unsupportive to our needs. We are not open to them because we fear them, and when we don't understand in class, we don't ask because some teachers are rude to us and we decide to avoid them. We don't seek advice from them, not even explanation while in class. (Pupils focus group, R2)]

As a result of unsupportive and uncaring teachers, neglect of pupils' educational and emotional needs had a serious impact on classroom instructions as pupils had already psychologically 'dropped out' of school as they felt helpless, neglected, ignored and left isolated to struggle on their own to find ways of living with their problems. Such feelings left pupils with a lack of self-worth and a poor sense of self-concep, which in turn, affected their self-esteem, health and wellbeing. Various studies, such as those by Aldridge and Ala'l (2013), Loukas and Robinson (2004), and Wang and Holcombe (2010) showed that students who feel uncared for by their teachers are likely to experience higher levels of disorder, as opposed to students who perceive themselves to be noticed and valued by teachers, who are more likely to work hard and to care about themselves and others. Students who perceive their

teachers to be supportive have greater confidence in tackling new problems and are more likely to persevere in completing challenging tasks. Furthermore, when students find their teachers approachable, caring and supportive, they are more likely to seek help when the need arises and tend to achieve better and to present fewer behavioural problems.

Children's future cannot be left to chance; it therefore becomes a moral responsibility of teachers to attend to the needs, concerns and worries of pupils under their care in order to allow them to grow and develop into responsible and productive citizens by modelling for them the moral values that one needs to live in society and care for oneself and for others. For Rwandan children, of whom the majority are orphans and vulnerable children, exposed to multiple stressor and risk factors rather than protective factors, adequate care is even more vital. Teachers and schools in general should take children's emotional and social needs seriously if these young minds are to contribute to their society and break the chain of oppression and desperation that has taken root in the Rwandan society.

Teachers, however, attributed their lack of interest in helping pupils to ill-discipline and the behaviours pupils displayed towards their teachers that made it hard for them to cope. In all the schools, incidents of pupils who intimidated, threatened, quarrelled with and attempted to fight teachers were mentioned. For example, at U2, teachers said their school principal deployed male teachers to classes known to have unruly pupils because female teachers felt threatened and too weak to handle such classes. Although teachers were said to "never" help pupils, they showed a willingness to care for pupils. For instance, at R2, teachers expressed regret that they did not know pupils by name or anything about their home situations although they had been together for years. Teachers across schools admitted that they did not know pupils' home situations or their names. Repeatedly, pupils at U2 expressed the concern that teachers did not know pupils with various special needs as they often shocked orphans by "sending them to fetch their parents". This finding raises concerns about the future of these pupils if they are not nurtured by people with empathy and care for self and others. Teachers need to know their students very well if they are to respond to their needs, desires, and struggles and to be sensitive to students' feelings, academic development, and dignity (Gholami & Tirri, (2011).

Other researchers have warned that teacher-student relationships should not be left to chance or dictated by the personalities of those involved; instead, teachers should provide teacher-

student relationships that will support student learning and wellbeing (Marzano & Pickering, 2003). While pupil-teacher relationships in the case-study schools were reported to have been marred by unsupportive and uncaring relationships, other evidence shows that positive teacher-student relationships contribute significantly, not only to students' wellbeing and pro-social behaviour but also to their learning outcomes (Noble & McGrath, 2008).

The pupils' negative attitude towards learning and their poor academic achievement are significantly influenced by the pupils' home and school situations. Stewart (2007) maintained that the school's context can promote or reduce students' academic achievement because effort, academic achievement or attainment are all influenced by the level of school attachment, involvement, and commitment displayed by students. Loukas and Robinson, (2004) had earlier claimed that students' perceptions of school climate are particularly important because they shape student attitudes and cognitions about themselves and, in turn, contribute to their academic outcome.

Another relevant aspect of pupil wellbeing is disciplinary management and pupils' knowledge of their rights. This aspect involves teachers' ways of handling discipline and behaviours at the classroom and school levels. The findings show that the teachers interviewed had "given up" on discipline and behaviour management in classrooms as there were no known clear disciplinary procedures in the schools in the study. When the government banned corporal punishment, teachers felt disempowered because they could not apply pain-inflicting punitive measures to pupils and pupils became more undisciplined and never took alternative punishments seriously. The alternative punishments included reprimands, inviting parents to come to school, picking up dirt in school compounds and cleaning toilets and classrooms. It was stressed by teachers in all the schools that pupils did not take their reprimands seriously because they did not inflict pain, as beating did. When parents were invited to school, most parents did not come and the few that came tended to be on the offensive, defending their children's mistakes. Moreover, the tendency to only call parents for problems, especially for children's transgressions, discouraged parents from responding to school invitations.

At all the schools in the study, teachers felt powerless to handle some pupils' behaviour. Some of the teachers feared some of the pupils and felt threatened by their behaviour. Maphosa and Shumba (2010), in their study in South Africa, found that educators feel disempowered in their ability to maintain discipline in schools in the absence of corporal

punishment because pupils take advantage of educators when they know full well that whatever punishment is given will not equal the pain of corporal punishment. Learners were said to have neither fear nor respect for teachers and behaved as they pleased, which leads to chaos in schools. It is, however, clear that schools cannot meet all the social and health needs of children on their own without the concerted efforts of all the stakeholders, particularly parents, families and the community members, if children are to benefit from the opportunities that education offers.

3.10.4 School Partnerships with Parents, Families and the Wider Local Community

The findings showed that parents were generally not involved in the education of their children, their thinking being that their role was to get a child into school, not to concern themselves with follow-ups. This finding raised my interest in understanding why parents had no interest in the education of their children. Eight potential barriers to parental involvement were identified, which included, but were not limited to, lack of role definition and boundaries; life context of parents; parents' educational background; academic achievement of children; parent-teacher relationships; school communication with parents; parents' invitation to school meetings; and the school administrators' and local authorities commitment to involve parents. These barriers are discussed in greater detail in the following section.

At the microsystemic level, schools did not have clearly defined roles and responsibilities for parents in schools and the means to ensure that the scope of parental involvement is well understood. The recurrent finding was that parents did not have a clear understanding of their roles in schools. For instance, at R2, teachers said that parents only sent children to school and never followed up on them, and in other instances, some parents identified the school as a safer place for their children than either home or in the community. Although parents have a responsibility to follow up on their children's education, parental involvement should not just be left to choice, but the findings revealed that there is no government legislation that accords parents the right to participate in schools and make their views or even to hold schools accountable for the education and support of children. Consequently, Hornby (2011) believed that the absence of specific legislation on parental involvement leads to poor school-parent partnerships. Effective parental involvement is unlikely in the absence of legislation that provides the legal framework to protect both teachers and parents in case conflicts surface. An

official from the National Curriculum Development, during the interview, said that parents were "dragged into schools", unaware of their roles:

> *Ishuri rifite "PTA" igizwe n'ababyeyi n'abarimu. Icyo ababyeyi bakora ni kureba, guhuza no kwiga ibibazo bihari bagatanga n'umuti (Uhagarariye Minisiteri y'uburezi agashami k'uburezi bw'ibanze).* [Schools have PTA's composed of parents and teachers. Parents are there to oversee, co-ordinate and assess what the problems are and suggest solutions to such problems. (Directorate of Basic Education official)]

Parents should be involved in the schools' programmes, but their roles need to be clearly communicated as role confusion might lead to conflict that would seriously harm parents' good intentions and their willingness to support their schools, as mentioned by parents at U2, who stated that parents, instead of supporting schools, act as spies on what schools do and control teachers, which has undermined the teacher-parent relationships at U2. Donald et al. (2010) supported the need for role clarification and how roles are performed within a system, to enable the whole school, as a system, to function. The authors warned that role contradictions could cause conflicts and undermine relationships of the individuals in the system.

A number of factors were examined in the course of the study:

> ➢ *The parents' living context and family circumstances*: The findings show that schools in the study served disadvantaged and impoverished families and communities in which poverty was rife. The Inspectorate of Education official stressed that most families were unable to feed their children and pupils went to school on empty stomachs and without the necessary scholastic materials. A similar point was raised by teachers at R2, who said that parents were concerned about what to feed their children but not about their education, and as they tried to make ends meet, parents left education responsibilities to teachers. Hornby (2011) supports this finding that parents' life contexts can act as a barrier to parental involvement in education of their children due to the challenge of unemployment and money could be an issue.

> ➢ *The parents' educational background*: A recurrent finding from both school participants and the key informants, across all the schools in the study, was high illiteracy levels among parents in the school communities. For example, at R1, parents revealed that most parents were not educated and so did not understand the importance

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of education and did not understand how to support their children with schoolwork that they did not understand. Parents also seemed to think that school was not their business but that of teachers and pupils. Hornby (2011) claimed that parents' level of education will influence their views on whether they have sufficient skills and knowledge to engage in different aspects of parental involvement, and Moles (1999) observed that parents who have little education themselves participate less often in school-related parent involvement activities.

➢ *The poor academic achievement of children*: Although most parents were illiterate, they wanted the best education for their children. The low pass rates and pupils' failure in school tests and national examinations discouraged parents from becoming involved in the education of their children. In the study by Nkurunziza et al. (2012) that investigated the free education policy in Rwanda, similar findings were reported—that parents considered low-quality education a waste of time, implying that parents were interested in education of their children despite their family circumstances.

➢ *Teacher-parent relationships*: Findings across all the schools revealed that teachers and parents did not know each other and did not get along well. They lacked collaboration, co-operation, mutual respect, trust, openness and positive criticism and support. Teachers in all the schools in the study blamed parents for how they came to school inappropriately, quarrelling, confronting, attacking and controlling teachers even outside the schools. At R1, parents, too, blamed teachers, saying that whenever they went to school, they were not welcomed by teachers and this made them lose interest in the school and leave the education of children to teachers. As a result of such negative experiences, teachers and parents avoided each other to save themselves from unnecessary conflicts. Similar findings were made by the VSO's (2003) study that investigated the value of teachers in Rwanda. The researchers concluded that teachers' relationships with parents were sometimes non-existent, and where they did exist, they were often negative. Parents handed over their children to the school, showing no ownership for their education. Parents did not always support the school's disciplinary rules, leaving teachers feeling unsupported and undermined. Thus, teachers did not have positive perceptions of parents, and parents had negative perceptions of teachers. Hornby (2011, p. 19) pointed out that "teachers and parents each bring to the melting pot of parental involvement personal attitudes that are deeply rooted within their own

historical, economic, educational, and ethnic, class, and gendered experiences". In the Rwandan context, such negative attitudes between teachers and parents could be linked to past history, where communities lost faith and trust in teachers and schools because of their role in fuelling hatred and perpetrating genocide (Obura, 2003). Moles, (1999) argued that staff attitudes about parents are a barrier to parental involvement in schools. In addition, parents who experience schools as uninviting may decide that teachers do not really care about them or their children. Moore and Lasky (1999) posited that traditional relationships between teachers and parents can also perpetuate a power imbalance in favour of teachers. Smit et al. (1999) contended that teachers can make or break any effort to change the traditional separation of schools from the families and communities they serve. Without teachers' interest, support, and skill, much of what is commonly known as 'parental involvement' will not work.

➢ *School communication with parents*: Findings indicated that all schools in the study experienced communication difficulties between schools and parents as none of the schools that were included in the study had communication facilities in place. The schools had opted for communication exercise books, issued to children by schools. At the end of the school day, teachers would write whatever they wanted to communicate to parents and would expect feedback. However, teachers learned that parents did not make appropriate use of the initiative as pupils returned books without parents' remarks on what was communicated, probably owing to high levels of illiteracy among parents.

➢ *The invitation to meetings*: Inviting parents to school meetings was generally not the schools' practice, as the findings show. At R1, parents said that neither teachers nor school authorities ever invited parents to participate in school programmes. At R2, teachers said that parents did not respond to the school's invitation for meetings because of time constraints, but added that parents relegated school business to teachers because the school always invited parents to discuss problems but not for any development agendas, and with that in mind, parents tended to ignore anything to do with school invitations.

➢ *Lack of school administrators' and local authorities' commitment to involve parents*: Findings revealed that school leadership and local authorities hold an influential position and set the tone that establishes strong community links with the school, to

allow positive interactions through PTAs and PTCs between schools and their communities. The Ministry of Health officials, in the interview, reported that parents did not often participate in schools because school leaders did not motivate them to take an active role in schools. Epstein (1995), in her model of overlapping spheres of influence for students' learning, encouraged schools, homes, families and communities to work closely together to allow pupils to succeed in their learning. She maintained that will always be hard to achieve effective partnership of any of these spheres of influence if any is left to stand independently (Epstein, 1995). However, the government is pro-actively tackling the issue of parental involvement by instituting PTAs in schools to get parents not only involved in working closely with teachers and schools but also in assisting their children with homework at home, as indicated in the National School Health Policy draft of 2010.

3.10.5 Schools' Health Services

Findings showed a large gap concerning schools' health services or support services in public primary schools although pupils and teachers grappled with health challenges. Some of the health problems that were common to all the schools were health problems that included injuries, HIV/Aids, tuberculosis, helminthic infections, malaria, skin infections, jiggers, hunger and malnutrition. Unhealthy physical environments at schools, characterised by poor and inadequate sanitation practices, were mentioned. Behavioural problems related to alcohol and tobacco consumption, drug abuse and the use of other substance, pupils' ignorance about disease prevention, lack of health literacy skills among pupils, early sexual experimentation and unintended teenage pregnancies were claimed to compromise pupils' health and wellbeing. At UI, teachers were concerned that pupils who fell sick were sent home and only the seriously sick went to nearby health centres. In the case of serious injuries, U1 teachers regretted the fact that pupils did not receive immediate first aid. According to the Inspectorate General of Education official, it is not schools' practice to employ health personnel such as nurses, doctors, psychologists or social workers, so schools do not have health services. There are neither emergency, rescue or referral procedures in schools nor partnerships with local health departments, leading to situations that caused the Ministry of Education official to observe that there is no life in public primary schools, implying that children remain idle as

there are no games and sports in schools to keep pupils active and healthy, and schools also do not interact with each other.

The available evidence from research shows that schools provide a site where interventions that promote health and prevent many of the specific health problems and diseases noted earlier can be implemented. According to the WHO (1996b), ill-health prevents children from acquiring new knowledge and skills and from growing into productive, capable citizens who can help their communities grow and prosper. Moreover, studies on school-based health services show evidence that such services improve students' knowledge about being effective consumers of health services, thus reducing substance abuse among the students they serve and lowering hospitalisation rates for students. The WHO (2004a) reported that schools' health services help to treat health problems and prevent, reduce and monitor them. Health services, whose staff recognise and treat health problems resulting from exposure to environmental threats, work in partnership with and are provided for students, school personnel, families and community members.

3.10.6 Teacher Wellbeing

To understand the theme of teacher wellbeing requires a broader view of teachers' social context of practice at personal, classroom, school, community and society level and the national level factors that contribute to or constrain teacher wellbeing. The findings indicated that, at the classroom level, teacher wellbeing is influenced by working conditions and teacher-pupil relationships resulting from face-to-face interactions between teachers and pupil and the overall classroom climate. According to Aelterman et al. (2007, p. 2), "wellbeing expresses a positive emotional state, which is the result of harmony between the sum of the specific environmental factors, on the one hand, and the personal needs and expectations of teachers on the other hand". It should be noted from the onset that teacher wellbeing has not been the case-study schools' practice. Yet teachers' wellbeing and their vitality is an asset to schools as organisations. Thus, teachers' physical, emotional and mental health cannot be taken for granted but should rather be seriously promoted. Figure 10 shows the interaction between intensity of intrapersonal and intrapersonal factors such as relationships between teachers and pupils, recognition and support from school leadership and parents, and teacher in-service training. At the community and society level, factors include teachers' and teaching

professionals' status, while at the national level, factors are the education system and related policies, particularly relating to teachers' salaries and teachers' professional development.

The findings of this study indicated that teachers worked in poor conditions, ranging from heavy workloads to double shifting, having half of the class attending school in the morning and others in the afternoon. Teachers taught many subjects to different large classes, prepared lessons daily, marked papers and wrote daily reports. Teachers could not reach out to all pupils to give individualised attention and support and know pupils individually. Teachers were overwhelmed by classroom management and the control of pupils' behaviour, inadequate instructional materials and resources as well as the curriculum that did not have appropriate teaching materials. Such conditions of work not only left teachers exhausted and burned out but also negatively affected the quality of teaching.

Similar findings by a VSO (2003) study, which was conducted to investigate teachers' value in Rwanda and concluded that insufficient teaching and learning materials, lack of training, poor school infrastructure, including sanitation, water and electricity, class size and personal life factors, like welfare and status in the community, were seriously affecting teachers' wellbeing. Split et al. (2011) reported that from a database of 26 occupations, teaching is ranked as one of the highest in stress-related outcomes, and the emotional involvement of teachers with their students is considered the primary explanation for such findings.

Teacher-pupil relationships in the classroom have already been noted under pupil-teacher wellbeing (section 3.9.3.2). However, the classroom interactions between teachers and pupils were said to be marred by pupils' lack of respect for their teachers that subsequently made teachers feeling powerless and helpless. Teachers and pupils did not feel connected with each other. Although a paucity of literature exists on the effect of teacher-pupil relationships on teacher wellbeing, evidence from the transactional model of stress and coping indicates that judging by the emotional responses associated with students and teacher interactions in classrooms, teachers have a basic need for relatedness that is promoted by the teacher-student daily emotional interactions, which might promote teacher wellbeing over time (Split et al., 2011). Holmes (2005) posited that teachers are engaged in thousands of interpersonal interactions daily. It is therefore the nature of these interactions that promote or hamper teachers' sense of wellbeing or make the working environment a toxic one.

At the school level, findings show the importance of the intrapersonal relational factors, recognition and support from school leadership and of teacher in-service training as the potential factors that influence teacher wellbeing. In terms of intrapersonal relationships, teachers at R2 and U1 teachers collaborated, while R2 showed value and respect for each other and regretted the fact that they had no time for socialisation amongst themselves.

At U1, findings show that teachers supported each other through sharing responsibilities and holding monthly meetings to address problems as they arose but also thought of their own welfare and initiated a teachers' support fund to which they contributed money to support themselves when the need arose. The school principal of U1 was said to have set the tone for such positive interactions to occur between teachers, although more needs to done on this aspect to ensure that all in the school share a common purpose and goal. For example, making teachers' meetings part of school practice in U1 has promoted a positive collaborative atmosphere and a sense of collegiality among teachers, as opposed to R1 and U2, which showed a competitive atmosphere in schools. For example, teachers at R1 did not appreciate each other's work and this undermined the profession's status and their personal status in the minds of pupils and is perhaps why pupils did not respect them. In a study by Saaranen et al. (2006) on occupational wellbeing, they concluded that good fellow workers, good working atmosphere, active co-operation between workers, as well as the appreciation of others' work were key ingredients to staff satisfaction and occupational wellbeing in the participating schools.

Lack of recognition, teachers' lack of control over their work and lack of support from the school leadership influenced teacher wellbeing. The findings indicate that teachers are not rewarded for the job well done, have no control over their work and work under pressure, being controlled by both principals and parents. At R1, teachers expressed feelings of dissatisfaction emanating from the lack of reward and recognition when they deserved it, which had a negative impact on teachers' overall morale and job satisfaction. The Inspectorate General official emphasised that for teachers to successfully fulfil their responsibilities, they require support from both school leadership and parents, with whom they share education responsibility, and if teachers are not supported, they will not withstand the stress associated with their work alone. Roffey (2012) reported similar findings: when teaching staff feel appreciated and empowered, they are much more likely to show patience and empathy for

their students and will"go the extra mile" for the students in their care. They are also more likely to share and work with others in order to support their students and promote wellbeing.

Teacher in-service training was not the normal practice in the case-study schools. Teachers at all the schools in the study experienced feelings of inadequacy on curriculum content and were uncomfortable teaching the content they themselves did not understand. It is true that teachers cannot deliver more than their conditions of work allow and it is unfair to pupils to be taught by teachers who lack confidence and knowledge about what they teach. The available evidence shows that for effective learning to take place, teachers need to have optimal access to their knowledge base and be open to learning themselves (Roffey, 2012).

The status of teachers and the teaching profession in the community and society as a whole was noted as a cause for concern. Across all the schools in the study, teachers and principals pointed out that most of the community members did not treat teachers with respect but instead criticised, despised and looked down upon them, even at home in the presence of their children, who also, in return, disrespected teachers because of the prejudices picked from parents and community members. Teachers at R2 stated that community members humiliated them on the basis of their socio-economic status and living conditions and sometimes told them that they would be better off if they were to leave their teaching jobs and work on the gardens of the community members and that they would not miss the little salary they earn, which is even less than community members earn, although they never went to school. This finding shows how teachers and their profession are undervalued and no longer respected by children from such families and by the wider community.

At U2, the principal, in the interview, revealed that teachers suffered the humiliation of name calling and labelling based on teachers' life circumstances and hardships. A farmer was reported to have said he can "pay 10 teachers" with his harvest, pupils were said to complete their studies without expecting to become teachers, while some parents refused to allow their children to pursue a career in education and young people never aspired to pursuing education as a profession. At U1, teachers revealed that some banking institutions denied them loans because banks could not trust them, with their small salaries. Teachers added that they were being identified as people to be pitied in their communities. A similar finding by VSO (2003), in their study on valuing teachers in Rwanda, reported that teachers in Rwanda felt strongly

that they were held in low regard by the communities in which they live and by society at large and this seriously affects their motivation.

At the national level, policies on salary and teachers' professional development and training were said to seriously constrain teachers' wellbeing. It is these policies that determine the status of teachers and teaching profession. All the schools' participants and the key informants from national departments acknowledged that teachers' salaries were inadequate to meet their basic needs and did not allow them to provide for their families. Teachers struggled to pay for food and other basic needs; they could not pay their children's school fees, and they did not have the time and means to conduct business for extra income. Prices on the market became higher, while teachers' salaries remained the same for many years. The latter subjects teachers to poor living conditions, which affect teachers' overall morale and job satisfaction. The World Bank (2011) reported that teachers' salaries in Rwanda remain low, especially in primary education, compared with other sub-Saharan African countries. Teachers are perhaps most seriously affected by changes in education policy. Several government initiatives introduced in 2009 have had a major impact on primary teachers, including double shifting, the move to English as the teaching language, subject specialisation and the reduction of core subjects. The positive factor is that the Ministry of Education has a policy framework in the Teacher Development and Management Policy that targets teacher development.

3.10.7 Physical Environment of a School

Findings revealed that schools in the study shared similar challenges in their physical environments, although some were in a more critical condition than others. Respondents from all the schools in the study regarded the school's physical environment as an important aspect of schools, but which is always the most underdeveloped and overlooked. This theme covered the aspects of school infrastructure from the classrooms, offices and staffrooms, school library, toilets, water, sports and recreational facilities and grounds, to school boundaries and safety, as well as school land.

In terms of classrooms, findings revealed that all the schools had insufficient classrooms. For example, at R1, five classes did not have classrooms but had their lessons on school grounds on stony and bare ground, under trees hit by sun and rain, without chairs to sit on or desks to sit at. Other classrooms at R1 and at other schools observed during the study were crowded.

Classrooms were not only few but also old and in a poor state of repair and maintenance, across all the schools. Research evidence shows that a healthy school environment can directly improve children's health and effective learning and thereby contribute to the development of healthy adults as skilled and productive members of the society (WHO, n.d.). The findings of this study show how learning cannot take place in a hazardous environment where pupils and teachers feel unsafe and at a high risk of contracting environmentally-related diseases. Similar findings were reported by Engels et al. (2004), in their study about factors influencing pupil wellbeing in Flemish secondary schools, who found that when a school's physical environment is poorly maintained and in poor physical state of repair, with poorly designed classrooms, negative feelings and discomfort about the school might be created.

Poor ventilation in classrooms seriously affected teaching and learning. Many classrooms lacked windows. At U2, teachers reported intolerable humidity and stifling, smelly classrooms, resulting from overcrowding of pupils and heating of the iron sheets. This not only affected pupils' efforts to learn but also compromised their health and wellbeing. Hughes (2010) pointed out that the hot and poorly ventilated classrooms, which become very humid and smelly, are a health hazard, as they may lead to increased carbon dioxide levels that are associated with poor concentration. In addition, classrooms lacked electricity, which had serious implications for pupils' concentration, as they could not see what was written on the blackboards. The issue of limited access to natural light into classrooms, due to lack of windows, complicated the situation. Hughes (2010) stressed that lack of light is not only uncomfortable but can also make it difficult to see what has been written and is associated with poor concentration.

Furthermore, all schools in the study reported that the poor conditions of toilets, and their distribution, with no regard for gender or privacy needs, was of great concern. An exception was R1, where, at least, there was a toilet designated for teachers and pupils of the same sex. At R2, boys and girls used the same toilet and girls were uncomfortable sharing toilets with boys. U1 and U2 were not exceptional because pupils said, in the focus groups, that girls felt uncomfortable sharing toilets with boys, with no privacy, and objected to the dirtiness of the toilets. Toilets in schools were old and overused and smelled, a situation exacerbated by lack of water, bad sewage and inadequate solid waste management and cleaning procedures in all the schools:

Biteye isoni kandi birarenze kureba uko ubwiherero bw'ishuri bumeze. Ni ahantu umuntu atakwifuza gukoresha (*Abanyeshuri*, U1). [It is embarrassing and absurd to see the state of school toilets; it is not a place one would wish to use. (Pupil, U1)]

The poor condition of toilets in all the schools affected pupils' view of their schools, particularly girls, who did not enjoy sharing toilets, and held implications for their school attendance. The findings show that girls did not use the school toilets and waited until the end of the school day to go home, to ensure privacy. The WHO (2003) found that provision of separate toilets for girls helps in reducing the number of girls who drop out during and before menses. Hughes (2010) confirmed the observation that most children will choose not to use school toilets and rush home at the end of the day. This is obviously unhealthy and interferes with learning because it could lead to poor school attendance and even to school dropout, at the worst.

During my research, I observed with concern that none of the schools supervised pupils' usage of the toilets or provided sanitary materials in the toilets, a concern echoed by the school principal of R2. The R2 principal said they did not supply toilet paper rolls; thus, pupils touched excrement and messed the toilet walls, which he suggested could be the cause of the high incidence of helminthic infections among children. The WHO (n.d.) report noted that a contaminated school environment can cause or exacerbate health problems, such as infectious diseases, respiratory infections or asthma, which can reduce school attendance and learning ability. School children are particularly vulnerable to contracting environmentally-related diseases because of their little or lack of knowledge about how to protect themselves from diseases, and in this case, neither learning nor teaching nor health is possible in such a hazardous school environment. The WHO (1997c) confirmed that neither health nor education is possible if the environment is so compromised that it presents risks instead of opportunities, because a functioning latrine is a fundamental condition for a school, without which it is difficult to conceive of either health or education. Surprisingly, the cleaning of the toilets was a form of punishment to pupils, rather than a health habit to be learned by pupils so they could grow up with the habit of cleanliness, to reduce health threats in their own schools and homes, because their health and educational potential depends on the quality of the schools' and homes' physical environments (WHO, 2003).

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Lack of sports and recreational facilities was a characteristic feature of the case-study schools. For some schools, grounds were unprepared and unequipped for play activities, while other did not have playgrounds, which became a barrier to physical activity. For example, at U1, for pupils to play any game, the school hired the soccer field from the neighbouring church. In their meta-analysis of physical activity and cognition in children, Sibley and Etnier (2003) concluded that physical activity has a direct influence on improved cognitive performance and academic achievement. Bakir (2009), in turn, reported that pupils' participation in physical activities allows them to develop other talents, thus facilitating wholesome living.

Lack of working space such as offices and staffrooms, meeting rooms, storage space, reading places and library facilities was a challenge to all schools in the study. Teachers across schools lacked space for working and for socialising during their free time, a challenge that also affected school principals. Classrooms lacked storage spaces in which to keep teachers' and pupils' materials and belongings safe. The absence of a library to access information complicated their learning practice with feelings of inadequacy in lesson plans. As a result of having no safe storage, teachers did not enjoy working in their schools, did not fulfil their duties, and missed work because of the anticipated exhaustion of carrying teaching materials. Schools in the study not only lacked inbuilt facilities but also faced safety challenges because of lack of school fences and gates, as well as safe road crossings for pupils, with no road markings or guides to help pupils cross roads safely:

> *Ibaze ishuri ritazitiye aho inzira nyinshi zinjiramo zikanasohokamo. Abantu bagiye mu mirimo itandukanye banyura mu kigo: ari abajya ku isoko, ari abajya kuvoma, abana, inka n'ihene byose binyuriramo (Uhagarariye Minisiteri y'Uburezi)* [Imagine a school without a fence, where there is a way out and a way in. People going to different activities pass through the schools: some going to the markets, others going to draw water, children mixed with cows and goats. (Ministry of Education official)]

The principal at R1 reported that lack of fences around the schools gave unnecessary access to strangers into the school which put school safety at serious risk. At R2, teachers reported that the community around the school slowly encroached on the school land, which eventually caused a shortage of land for the school that exposed schools to difficulties related to school expansion and development, although land shortage is also a national problem (Thaxton, 2009).

3.10.8 Factors Affecting Teaching and Learning for all Children

The theme of "barriers to learning" covered various factors that affected teaching and learning for all children in the schools in the study. These ranged from health problems to risky behaviours to disability. Other factors included inadequate scholastic materials, domestic chores, orphans and vulnerable children, and hunger. The curriculum, pedagogy of teaching, language of instruction, absence of health and life-skills education in the curriculum, too many subjects, teacher shortage and attrition, as well as class size and inadequate instructional materials, double shifting and automatic promotion, school dropout and long distances were cited as potential barriers to learning. These barriers have their causes at different systemic levels of influence of the individual child: his or her home and family, classroom and school and also from the community and broader society, the broader national socio-economic policies and politics, as well as the history of the country.

At the individual level, the findings show that pupils suffered from health problems, as listed earlier, that affected both teachers and pupils in schools in the study. Schools experienced high teacher and pupil absenteeism and learning breakdown. In addition, risky behaviours such as sexual harassment and early sex experimentation, associated with teenage pregnancies, affected their learning. Although these risks could be considered personal, their causes could be traced to the neighbourhoods, communities and the broader society because most pupils involved in risky behaviours were under the influence of alcohol or drugs. Findings by the Ministry of Education (2010), in its survey, were that sexual abuse, drug abuse, consumption of tobacco and sometimes marijuana, and unwanted pregnancies were the major factors that caused learning breakdown. However, some schools were more affected than others; for example, R1, R2 and UI reported high incidences of risky behaviours among pupils, compared to U2.

At the personal level, findings revealed that children with disabilities had difficulty accessing education and those already enrolled were at high risk of dropping out because schools were not capable of addressing their educational and emotional needs and often built physical infrastructures that imposed restrictions on mobility. The World Bank (2011) reported consistent findings that children with disabilities dropped out of school, while others did not have an opportunity to access school. All schools were positive about desirability of inclusion of children with disabilities in the mainstream education but indicated that institutional,

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environmental and attitudinal barriers remained a problem. The institutional barriers included lack of appropriate structures to train teachers in special educational needs and lack of teaching aids and child friendly methodology. Environmental barriers were school classrooms with staircases and schools not being equipped with the teaching aids to facilitate the learning of children with disabilities.

Attitudinal barriers included the traditional beliefs and stigma that children with disabilities encountered at home or at school as well as in their communities. Similarly, Adelman and Taylor (2006) asserted that some children bring with them intrinsic conditions that make learning and performing difficult, whereas other students come to school really ready to learn in the most effective manner. Students' problems are further exacerbated when they internalise the frustrations of confronting barriers to learning and the debilitating effects of performing poorly at school, which interferes with teachers' efforts to teach.

Barriers encountered at home and family level were lack of basic scholastic materials due to poverty in families. For example, teachers at U1 indicated they were concerned that pupils went to school without uniforms and barefooted because they could not afford a pair of shoes, while others put on torn clothes, which were not mended because of lack of money. A key informant from UNICEF reported that some children went to school without school material, saying that even if education was free, parents still incurred some expenses, such as school uniforms, books, pens and teachers' "top-up", which they could not afford and therefore preferred to take their children out of school. Evidence from research has shown that poverty is harmful to an individual's mental and physical wellbeing and may affect a learner's academic performance if he or she is unable to obtain the necessary scholastic materials (Vaughn, Bos, & Schumm, 2000). Komro et al. (2011) contended that living in poverty and living in areas of concentrated poverty pose multiple risks for child development and for overall health and wellbeing.

At home, pupils were also expected to perform heavy domestic chores such as looking after animals, feeding animals, collecting animal feeds, caring for young siblings, fetching wood for fuel, collecting milk from farms and fetching water, leaving pupils with no strength to concentrate on schoolwork and, at worst, keeping them out of school. R2 pupils stressed that they had no strength to study and felt their education had become a ritual because they were not achieving academically because of exhaustion, hunger and poverty. This situation is

complicated by large family sizes and parents having a patronising attitude to girl-child education. Nkurunziza et al. (2012) argued that parents kept their children at home so that they could become involved in economic activities, to equip them with the basic life skills for future survival, which to them seemed more beneficial than sending children to school. Children from child-headed families, as a result of the genocide, children with HIV/Aids, and children whose parents were in prison on genocide charges experience learning difficulties and are at high risk of dropping out of school.

At R1, the school principal said, in the interview, that children who headed families were absent from classes, digging to find something to live on. At R2, pupils in the focus group indicated that pupils abandoned school to do some paying job so they can earn money to buy school materials and paraffin to light up the house to do their schoolwork. The key informant from the Welfare Department said, in the interview, that orphaned children were discouraged by their life circumstances, had no hope for the future, and easily gave up on education and dropped out of school to become street children, where they were influenced by criminal types. Nkurunziza et al., (2012) found that for children from child-headed households in Rwanda, going to school was often not an option, given the financial constraints they had and the household chores they had to do, which included regular trips to prisons to feed their confined parents.

At the classroom and school level, the curriculum affected learning for all children, because of its short-comings, such as the poor pedagogy of teaching, the language of instruction, and the lack of health education and life skills education that make the curriculum unable to accommodate the social and emotional needs of pupils and teachers. Pedagogically, pupils were not engaged in their learning because teaching did not encourage pupil participation. Consequently, pupils felt learning was done *on* them rather *with* them and *by* them. At R1, pupils said the style of teaching encouraged them to memorise rather than understanding and was teacher-centred.

The Ministry of Education official criticised the traditional system of teaching that encouraged pupils to learn by heart and not by being involved in their learning process. It would be appropriate to argue that the pedagogical practices in the case-study schools disempowered pupils and denied them the opportunity to participate in their learning. Barnekow et al. (2006) challenged such a curriculum by emphasising that a curriculum should

provide opportunities for young people to gain knowledge and insight and to acquire essential life skills, stimulate their creativity, encourage them to learn and provide them with the necessary learning skills.

The language of instructions was also cited as a barrier to learning. The principals at all schools were concerned that most teachers were from a Francophone background and struggled to understand English, which they were compelled to use and which not only affected the quality of teaching but also the overall morale and job satisfaction of teachers. Teachers at U2 said that the curriculum was a problem itself because its design did not match its teaching aids. The textbooks were in Kinyarwanda or French, which required translation to English, at which the teachers were not good. The Inspectorate General of Education official expressed sympathy for teachers who were not trained in the English language and therefore had no skills to teach in this language.

Furthermore, the curriculum was criticised for its inflexible and rigid nature and its inability to cater for social issues and emotional needs, as it does not provide for health education and life skills education. This, therefore, does not allow pupils an opportunity to acquire literacies in the knowledge, skills, values and positive behaviours essential to deal with everyday life challenges at this critical age of their development. Clift and Jensen (2005) felt that schools should provide a basic survival kit for young people. They need to be taught skills such as clarification of values, decision-making, how to cope with crises, intellectual and emotional problem solving, helping, assertiveness, relationship building, how to find appropriate information and use personal and physical resources which are available in the community. They need to be made aware of themselves, others and the world around them, in order to become more self-empowered people. Moreover, school children and adolescents in Rwanda struggle with multiple health, socio-economic and emotional stressors, all inherited from the past. The majority are children-headed families, others are orphans and vulnerable so they are compelled to make decisions on their own without adult guidance. They encounter relationship difficulties, engage in risky behaviours such as using drugs, and risk the scourge of HIV/Aids in the face of extreme poverty and social pressure that requires them to be fully equipped with the necessary skills and competencies to cope with these dangers.

Many subjects in the curriculum were identified as barriers to learning. The Ministry of Education official said that it was really unfair and beyond understanding that there were so

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many subjects in the curriculum that pupils were overloaded. At U2, teachers reported that there is danger in this kind of teaching because when overloaded by many subjects, pupils give up on studying and remain unconcerned; they become uninterested in learning because learning is hard and intensive. This is also complicated by shortage of teachers and their attrition. The main reasons why teachers left schools included gender, transport costs, low salaries, poor working conditions and a heavy workload. Male teachers changed jobs more often than females, as reflected by female dominance across all the schools in the study. This was attributed to the fact that males, culturally, are free to stay away from their families in contrast to their females counterparts. Traditionally, females stay closer to their families, particularly to oversee the children's upbringing, a responsibility that males do not normally take on. Transport difficulties affected teachers who were deployed to schools far from their homes and could not afford the transport costs involved and looked for other jobs close to their home areas. Teachers' poor salaries in the public schools also caused teachers to leave their schools and profession. For example, the Inspectorate General of Education official said that teachers left public schools because of low salaries and looked for jobs in the private schools to earn better pay and also left public primary schools to escape from poor working conditions, a challenge shared by all the participants across schools. These poor working conditions included large class sizes, not only causing overcrowded classrooms, with which teachers were uncomfortable but also acutely straining the limited instructional materials that are always in short supply, such as books, which had to be shared. The double-shifting programme was put in place to address the challenge of big numbers, but teachers' workloads still increased as they had to teach in the morning and evenings, without time to rest and to prepare lesson. The World Bank and IMF (2002) investigated the quality of primary education in Rwanda and concluded that it suffered from a shortage of qualified teachers, a heavy curriculum, and a lack of appropriate educational materials. Such poor learning conditions may explain the high primary school dropout rate. The key informant from UNICEF confirmed that there was a very high dropout rate, particularly among girls, orphans and vulnerable children. She added that even though there were very high national enrolment rates, many pupils drop out and do not go on to secondary schools. The possible causes for school dropouts have already been noted in the previous sections. These findings concur with those of Pillay and Nesengani (2006), who posited that the school dropout rate is related to the impoverished child-headed families, which lack parental control, or to inadequate

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opportunities for parent-child interaction. The authors also asserted that this type of school dropout is mainly caused by the individual's socio-economic challenges and other interrelated difficulties.

The burden of long distances walked by school children to school became a twin burden to that of domestic chores. The principals of R1 and U2, in the interviews, attributed the long distances pupils covered to the scarcity of schools in the districts, which meant that schools had wider geographical catchment areas. Teachers from R2 said pupils arrived at school tired and unable to concentrate in class, a point which was also echoed by pupils at U2 and U1 and to which they attributed their failure in school, because they arrived at school exhausted and started slumbering instead of concentrating on their learning.

Nkurunziza et al. (2012) reported similar findings, that long distances to school was a constraint to school attendance, particularly for the very young children and girls, especially in rural school settings. It can be seen that most of the barriers to learning are complex and arise from different systemic levels: the individual, family and home, classroom and school as well as the neighbourhoods, communities, and the broader societal issues, including the history of genocide and the wider national, macrosystemic, issues related to the policies of the education system. These complex multiple factors affect teaching and learning for all children, and the implications of these factors on the health and wellbeing of school children and school staff cannot be underestimated. This, therefore, provides a firm justification for why this study proposes the development of a model for health-promoting schools for Rwanda that is appropriate to address the barriers to learning, as noted earlier, and to promote healthy development of school-aged children.

3.11 Section 4: Proposed Model for Health-Promoting Schools for Rwanda

In this section, the Rwandan health-promoting schools model is conceptualised and developed, using the eight themes that emerged from the data. A tentative model structure will be used to present the model in a diagram. The development of the model is guided by the model development steps proposed by Chinn and Kramer (2004, p. 92) that follows six steps that should be used to guide model development:

1. What is the purpose of the developed model?
2. What are the components in the model?
3. What are the definitions of the components in the model?
4. What are the relationships between the components in the model?
5. What is structure of the model?
6. What are the assumptions about the model?

3.11.1 Purpose of this Model

Chinn and Kramer, (2004) asserted that the purpose of a model may not be stated explicitly, but it should be identifiable. The general purpose of the model is important because it specifies the context and situations in which the model applies. Thus, the Rwandan HPS model is proposed to provide a framework useful for planning, on which schools could base their practices and inform interventions that would bring about change in schools.

3.11.2 Components of this model

The eight components that are used to construct the model were generated from the data listed in Chapter 4. These components are leadership and management; health policies; pupil wellbeing; school partnership with parents, families and the wider school community; health services; teacher wellbeing, physical environment of school, and factors affecting teaching and learning for all children, as well as the core category of whole-school development. These components are defined in the following section.

3.11.3 Definitions of components in this model

Chinn and Kramer (2004; 2011) explained that definitions exist to clarify the nature of the abstractions that a model is built in, in a way that others can comprehend.

3.11.3.1 School leadership and management

For this model, leadership includes setting direction, developing people and redesigning the organisation, as suggested by Leithwood et al., (2004). Leithwood and Riehl (2003) expanded on each of the core functions of leadership:

- Setting the direction includes identifying and articulating a vision, creating shared meaning, creating high performance expectations, fostering the acceptance of group goals as well as monitoring organisational performance and communicating.
- Developing people includes offering intellectual stimulation, providing individualised support and providing an appropriate model.
- Redesigning the organisation involves strengthening school culture, modifying organisational structure, building collaborative processes to foster participation in school decision-making, and managing the environment.
- Management in this model includes planning, organisation, supervision and deployment of human personnel and resources.

3.11.3.2 School health policies

In this model, the concept of school health policies includes the national policies and guidelines that guide school health programmes. It includes policies, rules and regulations formed by the schools to guide the day-to-day school activities, and practices and programmes. These include the National School Health Policy (Rwanda Ministry of Education, 2010) the, Special Needs Education Policy (Rwanda Ministry of Education, 2007b), the Adolescent Reproductive Health Policy (Rwanda Ministry of Health, 2003) and the Girls Education Policy (Rwanda Ministry of Education, 2008a).

3.11.3.3 Pupil wellbeing

For this model, the concept of pupil wellbeing includes intrapersonal and interpersonal competencies such as peer relationships, pupil-teacher relationships, and pupil-parent relationships; discipline and behaviours; school and family support for orphans and vulnerable children; and a drug- and substance-free school environment. Other attributes include empathy, care, trust, respect, safety, moral development, pupil-school connectedness, learning and achievement, and child rights.

3.11.3.4 School partnerships with parents, families and the wider community

For this model, the component of school partnership includes the connections between school and parents/families and local community members; involvement of parents in school programmes, activities and in the decision-making process, as well as dialogue, consultation

and participation. Collaboration with local community organisations such as voluntary organisations and school involvement in community activities and programmes are included. Parents' follow-up of children and support for learning at home, teacher-parent relationships, trust, respect, communication between teachers and parents, as well as invitation of parents to school meetings and other school functions and, last, school collaboration with the local administration are also included.

3.11.3.5 Schools' health services

In this model, school health services are concerned with the promotion of child and adolescent health and education through direct provision of health services to pupils within the school. This model also takes teachers' health promotion into consideration; thus health promotion for teachers and other school personnel are considered in the model.

Teachers' skills development in health services delivery, along with the school nurse, school doctor, and school psychologist are also considered in this model. Health services include raising awareness and guidance of pupils, teachers and parents about health habits and attitudes that promote health. They also include a hygienic and sanitary, safe and healthy school environment that protects school children and staff from diseases. Furthermore, they cover screening and referral programmes for pupils and staff for early detection and treatment of disease, participation in physical activity by pupils and staff, nutrition and school feeding, providing healthy foods, as well as oral health and dental care.

Included in health services are a designated space for sick and unwell pupils and staff, a first-aid kit and medications, attention to critical incidents, including injuries and emergency care procedures. Partnership with health-service providers and local health clinics for effective collaboration and immunisation services as well as care for disabled children and provision of their special learning needs are catered for as well.

3.11.3.6 Teacher wellbeing

Wellbeing refers to physical, mental and emotional, social and spiritual health (New Zealand Ministry of Health, 2003). For this model, teacher wellbeing includes working conditions, workloads, remuneration, and teacher-teacher relationships: respect, trust and information sharing. Empathy, safety, teacher-pupil relationships, recognition, support from school

administration and parents, job demands, job resources, performance, in-service training, professional development, teacher status and teaching profession status are also included.

3.11.3.7 Physical environment of school

In this model, the physical environment of a school refers to the buildings, grounds, equipment for both indoor and outdoor activities and the areas surrounding the school. The term also refers to basic amenities such as sanitation, toilet facilities, washing and drinking. It also includes recycling of renewable resources, appropriate disposal of waste, and playground space and safety (Lee et al., 2005).

3.11.3.8 Factors affecting teaching and learning for all children

In this model, this theme covers all the factors affecting teaching and learning for all children, as described in section 3.9.8 in greater detail. These include health problems, risky behaviours and disability, inadequate scholastic materials, domestic chores, orphans and vulnerable children, issues of hunger, curriculum, pedagogy of teaching, language of instructions, teacher shortage and attrition, class size, double shifting, automatic promotion, inadequate instructional resources and materials, and school dropout, as well as long distance to and from school.
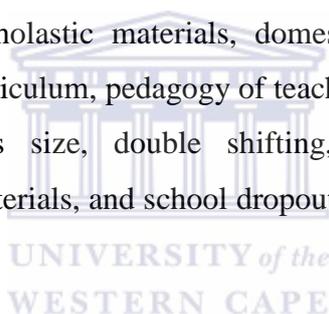
3.11.4 Relationships between the Components of This Model

The Rwandan HPS model is composed of eight inter-linked and interactive components. These components bear equal weight. The nature of the relationships between components is interactive as there are bidirectional pathways in which components interact and influence each other. For example, the school leadership and management and health policies are strong in the sense that school leadership is supported by the policies in place, and at this point, a strong relationship exists between the two components in the model.

The health policies may assist in maintaining a healthy physical environment, teacher wellbeing, school health services, pupil wellbeing and school partnerships with parents/families and local communities. The health policies have many pathways of relationships with regard to other components in the model. Each of the components needs a policy guideline to ensure that it is functional. Teacher wellbeing and pupil wellbeing directly

interact with each other and, at the same time, are supported by the school's physical environment, school health services and partnership with parents/ families and the local school community. School health services can only thrive within a healthy physical environment and with full support and partnership with parents/families and the local community, under a policy guideline, to ensure that planned school-health activities are implemented and the necessary resources are allocated. However, this would be realised if health services are viewed as part of the school practice and under the guidance and support of the school leadership. Other pathways of relationships exist: school leadership and management can help promote a healthy physical environment and partnerships between parents/families and local community through its leadership style, regardless of policy. Another strong bidirectional relationship exists between school leadership and management and teacher wellbeing. In schools where teachers feel empowered with a sense of purpose and a clear-cut direction of where their school is going, they tend to assume leadership and management roles at various levels in the school. Also, teachers and pupils have the potential to influence effective health policies in their school, which can be realised through democratic participation in decision-making and consultation arenas. These relationship pathways within the funnel filter down into solutions for the realisation of the whole school development.

The link and relationship between leadership and management and the rest of the components is a strong one. According to Samdal and Rowling (2011), a balance of leadership and management has been found to be essential to achieving organisational development and change. Tjmosland et al. (2009) contended that the principals' commitment and leadership is a central factor influencing the sustainability of health promotion in schools. School leadership and management in the Rwandan HPS model play a central role in ensuring that the rest of the components are planned, implemented and sustained. Samdal and Rowling (2011) identified school leadership as crucial in ensuring that sustainability for the health-promoting schools. For Leithwood et al. (2008) leadership acts as a catalyst without which other beneficial effects are quite unlikely to occur in schools.

However, leadership and management need a guiding policy that provides a framework in which schools operate to realise the goals. Samdal and Rowling (2011) identified school policies as of great importance for successful implementation of health-promoting schools. Policy or other planning documents ensure that priority will be given by the leadership in

terms of facilitation and resource allocation. If a policy is made through a consultative process by school leadership and stakeholders, it provides an important combination of top-down and bottom-up initiative (Samdal & Rowling, 2011).

Some components in the model have the potential to influence each other positively or negatively, depending on how they are developed. For example, effective or ineffective school partnership with parents, families and local community may have an effect on pupil wellbeing and teacher wellbeing and school physical environment and school health services alike. In situations where the school, as an organisation, is in balance with all its components, they all filter down to overcome barriers to teaching and learning for all children, with eventual whole school development.

3.11.5 The Structure of This Model

According to Chinn and Kramer (2004), the structure of a model gives the overall form to the conceptual relationships within it. In the previous section (3.11.4), relationships were explored and the overall model structure and the structures of individual components began to emerge (Chinn & Kramer, 2004). However, at this level, the final structure of the model could not be determined until after describing the participants' understanding of the model and its components after the survey. Tentatively, in the Rwandan HPS model (Figure 11), two circles are used to illustrate the conceptual relationships within the model. Central to the inner circle lies a health-promoting school to illustrate that all the components in the outer circle synergistically and holistically contribute towards creating a health-promoting school. Based on the relationships between the components within the model, the model tentatively took the structure shown in Figure 11 and all the model components had equal weight.
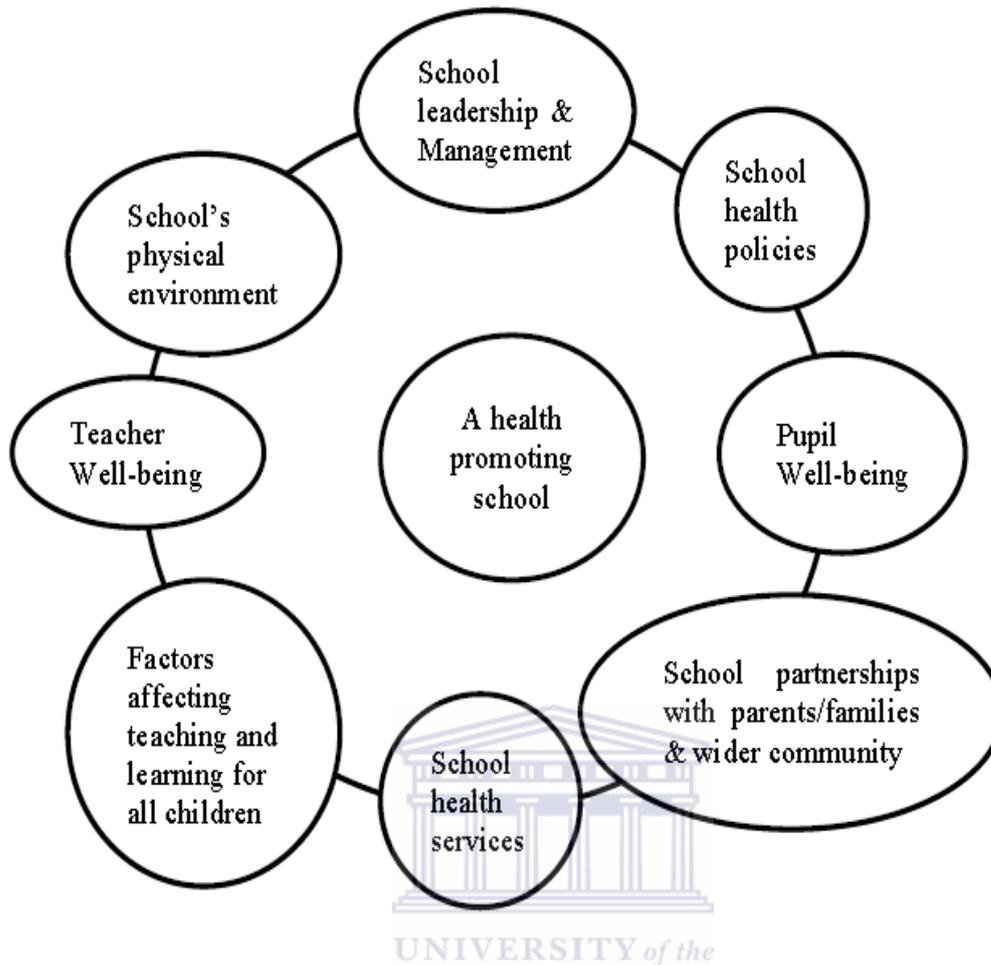
Figure 11. **The initial conception of the structure of the Rwandan health-promoting schools model.**

(Note: The final structure of the model (see section 4.4, Figure 15) is presented based on how it evolved through the insights gained from the survey, as presented in Chapter 5.

3.11.5.1 The initial model structure and interpretation

The model structure in Figure 11 shows relationships between the components in the outer circle and the central concept. The structure emphasises that the components in the outer rings of the circles contributes to the concept of a health-promoting school model for Rwanda.

3.11.5.2 Assumption on which model is based

According to McEwen and Wills (2002), assumptions are notations that are taken to be true without proof. They are beliefs about a phenomenon that one must accept as true to accept a model, and although they may not be empirically testable, they can be argued philosophically.

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The assumption behind the Rwandan HPS model development was that stakeholders were open and honest in the data collection and in sharing their views, which then informed the model development.

3.12 Limitations

The conduction of interviews, focus group discussions, a transect walk and observations by this researcher was an overwhelming fieldwork exercise that required more researchers in order to capture all the nuances of the qualitative fieldwork and to overcome any personal bias. Peer examinations and reviews, as well as debriefings, were done to keep up personal reflection and eliminate personal bias.

3.13 Reflections

Conducting this study was, for me, not a mere exercise of collecting data but an opportunity to appreciate how knowledge and the realities of the school-health status were constructed by the participants and interpreted by me. It required honest and personal integrity to handle the participants' meanings in regard to their school health status situation by allowing the information gleaned from the data to speak for itself to the maximum level.

The process of data collection, analysis, and interpretation and reporting of the findings has been an important and valued learning experience. The fieldwork involved learning, thinking and practice over time, through which I have grown as an emerging researcher. Participants were more open to sharing their point of view about their schools' health status than anticipated.

3.14 Summary and conclusion

This chapter provided the account of the methodology employed for Phase 1, the qualitative component of the study, a component that was concerned with identification and conceptualisation of the components to develop the health-promoting school model for Rwanda. Section 1 of this chapter detailed the research approach and design adopted for this study as well as the methods for data collection and analysis. It also gave an account of the ethical considerations and trustworthiness of the study and the procedures followed to conduct the study. In Section 2, the findings of the study were presented. Section 3 of the chapter

offered the findings with reference to the ecosystemic theory that underpins the study and the literature reviewed for the study. Section 4 presented the development of the health-promoting schools model for Rwanda.

CHAPTER 4: PHASE 2, UNDERSTANDING OF THE HEALTH-PROMOTING SCHOOL MODEL

In this chapter, which is on the qualitative component of the study, the participants' understanding of the Rwandan health-promoting schools model presented in Chapter 3, Figure 8 is described. This was in response to the second research question:

> RQ2: What is the participants' understanding of the model for its future use in their schools?

The chapter is organised under four sections; the first provides the overview of the methodology adopted for Phase 2, the second presents the findings, the third contains a discussion of the findings, and the fourth presents the developed health-promoting schools model for Rwanda.

4.1. Methodology

This section presents the methodology. Phase 2 addresses the first objective of the study, which is
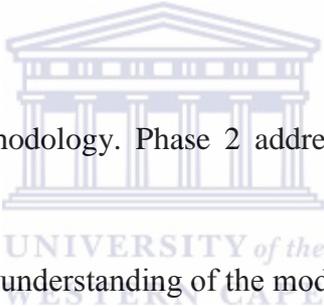
a) describing the participants' understanding of the model and its components;
b) giving the participants' views of the appropriateness of the model components for their schools;
c) naming the component on which the participants would to start action, as an entry point to becoming a health-promoting school;
d) showing the participants' ranking of the relative importance of components in which they would need the most support in developing at their schools to become health-promoting schools; and
e) identifying the participants' suggested changes to the model.

4.1.1 Research Setting

The study was conducted nationwide, covering 29 districts from the four Provinces and Kigali City, as indicated in Table 5 and Figure 12, which shows the Provinces and districts from which schools were drawn. The purpose of such a wide coverage in the sample was to reach

as many schools of different geographical and socio-economic features and backgrounds as possible so that participants' opinions about their understanding of the model would be well understood.

Table 7. *Provinces and Districts in Which the Study was Conducted*.

Eastern Province	Northern Province	Southern Province	Western Province	Kigali City
(7 Districts)	(5 Districts)	(8 Districts)	(6 Districts)	(3 Districts)
Bugesera	Burera	Gisagara	Karongi	Gasabo
Gatsibo	Gakenke	Huye	Ngororero	Kicukiro
Kayonza	Gicumbi	Kamonyi	Nyabihu	Nyarugenge
Kirehe	Musanze	Muhanga	Nyamasheke	
Ngoma	Rulindo	Myamagabe	Rubavu	
Nyagatare		Nyanza	Rutsiro	
Rwamagana		Nyaruguru		
		Ruhango		
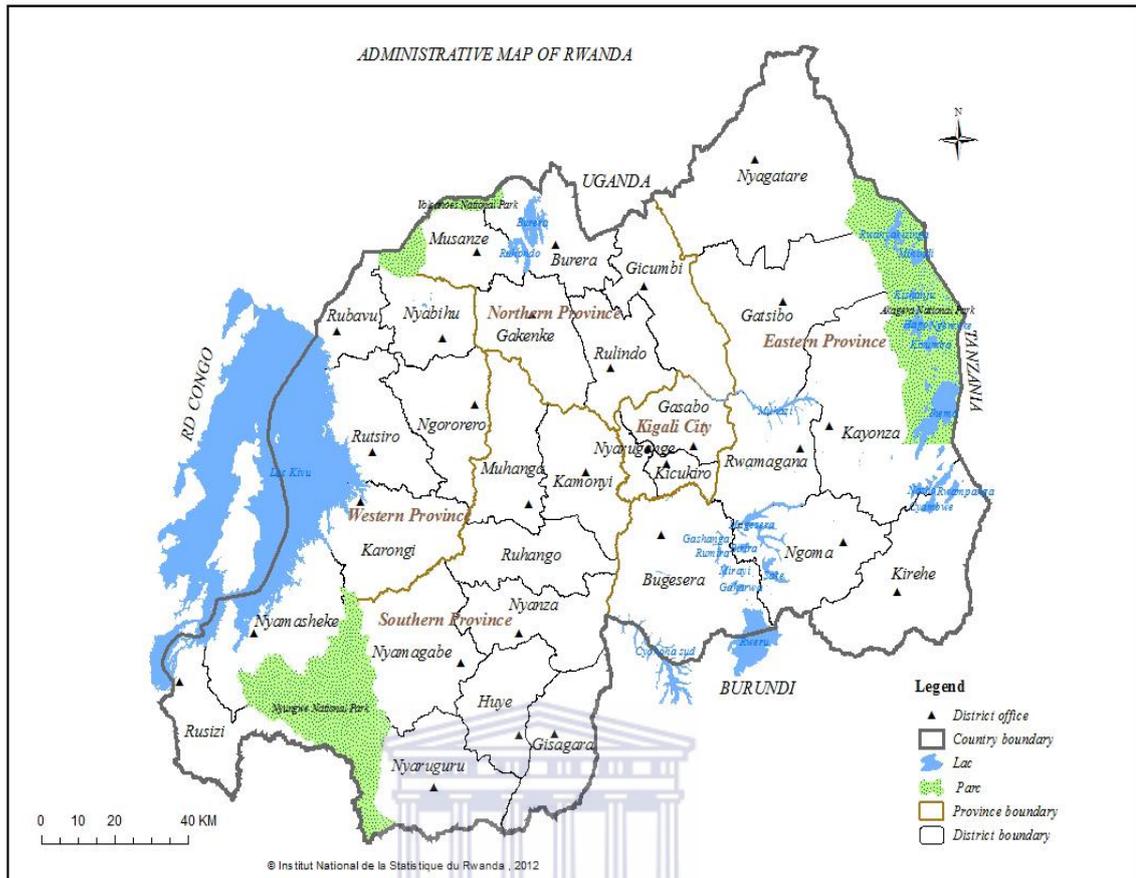
Figure 11. **Map of Rwanda showing the location of schools in provinces and district.**
(Source: National Institute of Statistics of Rwanda (NISR), 2012)

4.1.2. Research Design

As suggested by Creswell (2005), a cross-sectional survey using a workshop strategy is a good procedure to use when the researcher is interested in seeking to describe trends of opinions in a large population of individuals. In this case, a survey research strategy was used. Descombe (2010) claimed that surveys are useful, first, because they enable researchers to take a broad or panoramic view, second, surveys provide a snapshot of how things are at a specific point in time, and third, a survey purposefully seeks the necessary information. This is also in line with McMillan and Schumacher's (2006) view that as different methodological designs are embedded in different strategies, the researcher has to choose the most appropriate design in order to obtain the desired data. Similarly, Creswell and Plano Clark (2011) asserted that research designs are useful because they help guide the methods and decisions

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researchers must make during their studies and set the logic by which they make interpretations at the end of the their studies. They conclude that a research design has to do with procedures for collecting, analysing, interpreting, and reporting data in research studies.

The proposed model was not developed as a fixed model to be implemented in schools but sought the opinion of all the intended users about their understanding of the model and its components. This was based on the assumption that the participants' clear understanding of the model and its components is a key to its future use in their schools. The decision to use a workshop strategy was based on the understanding that a health-promoting school requires the participation of all stakeholders in the school and beyond, to include parents, education officials, and others concerned in the community, to identify their needs, priorities and problems, based on their context and circumstances (Gray et al., 2006). Deschesnes et al. (2003) considered that gleaning participants' understanding of the health-promoting schools model and comprehensive school-health programmes is a good way of validating model components to see if they are sufficient and appropriate to achieve the intended purpose. To this end, it can be concluded that this model was empirically understood and revised by the users and is a reflection of Rwandan public primary schools' context and circumstances.

4.1.3 Study Population and Sample

The study population included school principals, teachers, pupils, parents and key informants from the Ministries of Education and Health, UNICEF and WHO Rwanda. A population is a group of elements or cases, whether individuals, objects, or events, that conform to specific criteria and to which researchers intend to generalise the results of the research (McMillan & Schumacher, 2006). Because the target population is often different from the list of elements from which the sample is actually selected, it is important for the researcher to carefully select and make known the target population, the sample and the sampling strategy. The following section gives a detailed description of the sampling strategy used to obtain the sample for the study, as recommended by McMillan and Schumacher (2006).

4.1.3.1 Schools in sample

The sample schools were drawn from 721 public primary schools of Rwanda (Ministry of Education, 2009). The sample size was based on estimates of the proportion of schools

responding "yes" to questions such as "Do you understand this model and its components?" According to Cochran (1977), the sample size needed to achieve an estimate within a margin of error with high probability is

$$n_0 = \frac{Z_{\alpha/2}^2 * p * q}{d^2},$$

where $z_{\alpha}/2 = 1.96$ and d=0.10 would correspond to a 95% probability that the margin of error is within 10% of the true proportion. While this value depends on p and q (which is defined as 1-p), the largest sample size required occurs when p=0.5. This conservative estimate was chosen:

$$n_0 = \frac{Z_{\alpha/2}^2 * p * q}{d^2} = \frac{1.96^2 * 0.5 * 0.5}{(0.10)^2} = 96.04 \cong 96$$

Since the sampling was done from a relatively small population of 721 schools, this number was reduced, based on the following relationship (Cochran, 1977):

$$n_c = \frac{N * n_0}{N + n_0} = \frac{721 * 96}{721 + 96} \approx 85$$
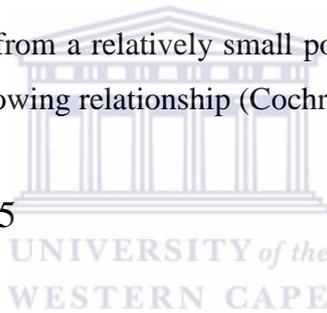
The sample size was thus to be 85 schools. First, the number of schools per district was identified (see Table 8).

Table 8. *Selection of Schools Across Provinces and Districts*.

Provinces	Total schools per Province (n)	Schools to be selected per Province (n)	Districts per Province (n)	Schools selected per district (n)	Final sample of schools per Province (n)
Kigali City	51	6	3	2	6
Eastern	241	28	7	4	28

Western	117	14	7	2	14
Northern	176	21	5	5	25
Southern	136	16	8	2	16
Total	**721**	**85**	**30**	**15**	**89**

Note: In the Northern Province, there are 21 divided by 5 districts, giving 4.2 schools per district. This was increased to 5 schools per district, giving 25 schools. Thus the total number of schools in the sample was 89. An additional three schools were randomly selected from all the schools in 29 districts in case any schools dropped out. As none of the schools dropped out, the extra three schools were kept in the final sample. Thus the total number of schools in final sample was 92.

4.1.3.2 Schools sampling method

A random sampling method was used to select the schools from which the participants were to be drawn. Public primary schools in all the 29 districts were sampled at the district level. Each public primary school in the district was assigned a number, written on a piece of paper. Thereafter, each piece of paper was folded and placed in a basket and shuffled. The researcher picked pieces of paper one by one, while recording them, until the desired sample per district was obtained. The same procedure was used until 89 schools were obtained. An additional three schools were randomly selected from all the schools in the 29 districts in case any schools from the sample dropped out. As none of the schools dropped out, the extra three schools were kept in the sample.

4.1.3.3 Participants in sample

Participants from schools and the key informants from the national departments were recruited for the study, as indicated in Tables 7 and 8. Participants from schools and the key informants were purposively selected to obtain information from specific individuals with particular characteristics. School principals purposively selected the teachers, pupils and parents, based on the inclusion criteria. The key informants were selected by their government departments or by their organisations, using the inclusion criteria. In the schools, excluding the principals, a questionnaire was completed by a group of four participants. The total of 376 questionnaires was completed, which included 368 from the 92 schools and 8 from the key

informants from the Ministries of Education and Health, with their line institutions as well as agencies that work directly with schools.

Table 9. *School Participants and Inclusion Criteria*

Participant group	Participants per school (n)	Total (n)	Gender		Number of Questionnaires completed	Inclusion criteria
			Male (n)	Female (n)		
Principals	1	92	69	23	92	School principal Fluent in Kinyarwanda
Teachers	4	368	184	184	92	Three years working experience in the same school, Fluent in Kinyarwanda
Pupils	4	368	184	184	92	Grades 4-6, 12-16 years old Prefects, Fluent in Kinyarwanda
Parents	4	368	184	184	92	Member of school parents' committee, Living near the school, Fluent in Kinyarwanda
Total	**13**	**1196**	**621**	**575**	**368**	

Table 10. *Key Informants and Inclusion Criteria*

Ministry /Organisation	Participants	Gender	Department /Directorate	Inclusion criteria
Ministry of Education (n=4)	KI* 01	Male	Planning	Employed by government department or organisation working with schools. High level of responsibility in employment
	KI*02	Female	National Curriculum Development Centre (NCDC)	
	KI* 03	Female	Inspectorate General of Education (IGE)	
	KI*04	Male	Basic education	
Ministry of Health (n=1)	KI*05	Female	Maternal and Child Health (MOH)	
UNICEF-Rwanda (n=2)	KI* 06	Female	Education	
	KI*07	Male	Special Education	
WHO-Rwanda (n=1)	KI*08	Male	Public Health	

*KI=key informant with the number assigned to each individual.

UNICEF: United Nations International Children's Emergency Fund.

WHO: The World Health Organisation

4.1.4 Questionnaire

A questionnaire was used to collect the data in the survey. Descombe (2010) pointed out that there are many types of questionnaires. They vary enormously in terms of their purpose, size and appearance. Questionnaires work on the premise that if one wants to find out something about people and their attitudes, one simply asks them about whatever one wants to know and obtains the information directly.

4.1.4.1 The development of the questionnaire

No published study was found in which stakeholders' understanding of an HPS model was described, either in Rwanda or internationally. Thus, there is no standardised questionnaire available to assess the participants' understanding of an HPS model and components within the model. Therefore, it was necessary to develop a new questionnaire for the survey. A questionnaire (see Appendices M & N) was developed. The questionnaire included eight closed-ended questions and rating scale items that would be helpful in gaining insight into and describing the participants' understanding of the model. To allow participants to express their understanding of the model and components within the model better, qualitative comments were sought. Every item in the questionnaire offered participants space to describe their understanding of the model without being limited by "yes" and "no" responses. In response, participants freely expressed their opinions by writing extra comments to allow the researcher to have a more insightful understanding of the participants' opinions about the use of the model and its components. A question using a rating scale (Question 4) was also added to rank the components on a scale of 1 to 8, 1 requiring most support, and 8 requiring least support.

4.1.4.2 Translation

The target language was Kinyarwanda, while the questionnaire was designed in English (see Appendix M). When the questionnaire was finalised, translation was done. The purpose of translation was to devise a Kinyarwanda version of the questionnaire (see Appendix N) that could be understood by the participants, who would read the questiommaire in both languages, and was capable of yielding content equivalence and similar results in both languages. To maintain the accuracy, quality and content of the original questionnaire, both forward and back translations were included (Ponce et al., 2004). Two native Kinyarwanda speakers, bilingual professional questionnaire translators, did the forward and back translation. One translated from the English to Kinyarwanda and the second translator blindly translated back from Kinyarwanda to English (Brislin, 1970). A session was arranged to compare forward and back translations to determine whether the translated questionnaire maintained the meaning within the content and quality of the original source questionnaire and to discuss discrepancies and divergences. The two versions were not consistent in their use of the word "model." Following a discussion, the translators decided the appropriate word

was "*Urusobe*." The word "*Urusobe*" was preferred as it reflected the concept of a model and the intent of the wording of the original English questionnaire (Ponce et al., 2004).

4.1.4.3 Reliability

The questionnaire was tested with a group of 20 individuals: 10 teachers and 10 pupils from a public primary school with similar characteristics to the schools in the study but which were not included in the study. Two groups of teachers and two groups of pupils, each with five participants, completed one questionnaire per group, discussing each of the questions as a group as this would be the process in the workshop at each school for the survey. After one week, the same process was repeated as a re-test with the same participants. The two sets of scores were correlated to check for internal consistency of the items in the questionnaire. This was assessed using Cronbach's alpha coefficient and yielded a Cronbach's alpha coefficient value of 85% for all the items in the questionnaire. According to Robert (1994), a reliability of 70-90 % is recommended for most research purposes. Robert also recommended that scales exhibiting a very high alpha coefficient, above 0.90, should be avoided because they simply imply a high level of item redundancy but not scale reliability. Thus, the two test scores were considered to have sufficient internal consistency across time, and hence the questionnaire can be considered to be reliable.
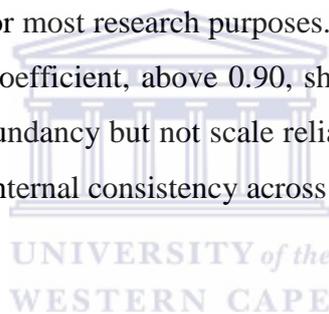
4.1.4.4 Validity

The draft questionnaire was reviewed and critiqued by two professors from the education and public health fields to ensure content or face validity. Based on their suggestions, the wording and order of the items in the questionnaire were revised and modified. Following the reliability study, one group of teachers suggested that the Kinyarwanda word "*amabwiriza*" (meaning "policies") was more appropriate to use instead of "*amategeko*", meaning "laws." This small modification was made.

4.1.5 Procedure

A formal letter with a copy of the proposal was submitted to the Ministry of Education and other organisations included in the sample (see Appendix L). The permission was granted and copies were sent to the districts, schools, other ministries and agencies concerned (see Appendix A). The district officials, institutions and agencies were contacted telephonically to

ask if they had received the documents, and a request for permission from district officials for access to schools was submitted. This was granted and the school principals' contact details were provided.

The Ministry of Education and the Ministry of Health, UNICEF, and the WHO selected the key informants from their departments, to participate in the survey. The key informants and school principals were then contacted telephonically, one by one, informed about the study and asked to participate in the study. The participant information sheets (see Appendices O & P), consent and assent forms (aee Appendices B, C, D, & E), and ethical clearance forms (see Appendices J &K) were posted to the key informants and schools.

The data collection started with schools. School principals were requested to select the participants who met the inclusion criteria and a convenient date for data collection was set at each school. Workshop presentations and questionnaire completion were conducted between 9h00 and 13h30 and data collection took 3 months.

The workshop process is described in detail for one school and was similar in all other schools. The first school workshop was at a rural school in the Western Province. The school principal briefly welcomed teachers, pupils and parents and thanked them for the good turn out to attend the workshop. He welcomed me, the researcher, and asked the participants to "welcome our esteemed guest and researcher to give you more details about the survey". I introduced myself and the study to the participants and asked them to introduce themselves. Teachers, parents and the principal handed in their signed consent forms, while pupils handed in their signed assent forms, agreeing to participate in the study, together with the permission from their parents/guardians. All the participants gave verbal consent to participate in the study to ensure no one was forced to take part. The programme and the housekeeping rules (see Appendices Q & R) were explained to the participants.

Prior to the administration of the questionnaires, I presented a workshop. At each school, the workshop took place in a classroom setting, where all the participants assembled and sat in a semi-circle at desks. The purpose was to introduce participants to the HPS model and its components and explain how it was developed; questions and comments were encouraged (see Appendices S & T).

Later, participants moved their chairs to sit in a group of teachers, pupils or parents to discuss and complete the questionnaire. Each group completed a single questionnaire. The school principals completed questionnaires individually. The time taken to complete the questionnaire was one hour. The questionnaires were checked for completeness as they were returned and participants were requested to complete any missing data. Completed questionnaires were assigned questionnaire numbers. On closing the session, I thanked the participants for the time given to completing the questionnaires.

The key informants' workshop took place after those in the schools were completed. Each key informant was contacted telephonically and a date was set that brought together all the key informants for the workshop presentation and completion of the questionnaire at a convenient venue, the Kigali Health Institute (KHI) boardroom. They attended the workshop presentation and thereafter completed the questionnaires individually. The difference between this particular workshop and the school workshops was the introductory session made by principals at schools, while at the key informants' workshop, I, the researcher, introduced the workshop. Otherwise, the procedures and content remained very similar.

4.1.6 Data Analysis

Quantitative data were analysed using the SPSS 19 version. Data were manually coded and first entered into Excel for cleaning before being transferred to SPSS for analysis, using descriptive statistics including frequency tables and percentages to summarise data and interpret results. The additional comments by participants were typed and translated from Kinyarwanda to English. These comments were carefully analysed for recurrent categories and themes.

4.1.7 Ethical Considerations

The study obtained ethical approval from the UWC Senate Research Ethics Committee (see Appendix I). The Kigali Health Institution Review Board approved the study protocol and provided ethical clearance (see Appendix J). Permission to conduct the study was obtained from the Ministry of Education (see Appendix A). The purpose of the study was explained to the participants using the participant information sheet (see Appendices O & P). Participation in the study was voluntary and confidentiality of the participants' information was assured.

Participants were assured that withdrawal from the study by any participant at any time during the course of the study was allowed and would not prejudice them in any way. The participants were informed that the results of the study would be made available to them on completion of the study. Participants agreed to participate in the study by voluntarily signing the consent or assent forms (see Appendices B, C, D, & E).

4.1.8 Summary of section 1 (Phase 2)

In this chapter, the research setting and context in which the study was conducted were described. It included the design and the methodology adopted for the study as well as.the details of population, sample, sampling strategies and the sample characteristics. The process of questionnaire development, its translation, and determining its reliability and validity were clarified. The process of gaining access to the schools, seeing participants and data collection and analysis were described. The steps taken to protect participants' anonymity, confidentiality of their information and other important aspects of ethical considerations were elaborated on.

4.2 Findings (section 2 of Phase 2)

In this section, participants' demographic characteristics are presented. Their understanding of the model and views of the appropriateness of the model components for their schools, the priority components they would select to take action on, the ranking of the model components in which the most support is needed to develop at their schools, and suggested changes to the model components are presented.

4.2.1 Demographic Characteristics

The sample included 92 primary schools (79 rural and 13 urban). The number of pupils in schools varied from 606 to 3051 (mean 1591, males 780, females 805). Fifteen (16.3%) schools had fewer than 1000 pupils, 56 (60.9%) schools had between 1001-2000 pupils and 21 (22.8%) schools had over 2001 pupils. The age of pupils varied from 6-16 years (mean age of youngest pupil in each school was 6 years and oldest pupil was 16 years). The total number of teachers per school varied between 12 and 59 teachers (mean 29, 15 males and 14 females).

4.2.1.1 Participants' demographic characteristics

This section summarises the participants' demographic characteristics.

Table 11. *Participants' Demographic Characteristics* **N=1204**

Participant	Total n (%)	Male n (%)	Female n (%)	Pupils' Grades	Questionnaires completed* n (%)
Principals	92 (7.6)	69 (75)	23 (25)		92 (24.5)
Teachers	368 (30.6)	184 (50)	184 (50)		92 (24.5)
Pupils	368 (30.6)	184 (50)	184 (50)	4-6	92 (24.5)
Parents	368 (30.6)	184 (50)	184 (50)		92 (24.5)
Key informant	8 (0.6)	4 (50)	4 (50)		8 (2%)
Total	**1204**	**625**	**579**		**376 (100)**

*One questionnaire was completed by four participants as a group. There was one group of teachers, one group of pupils and one group of parents. The school principals and the key informants completed individual questionnaires.

4.2.2 Participants Understanding of the Model and its Components

The question in which the participants were asked whether they felt they understood the model and its components was completed with a "Yes" response in 100% (n=376) of the questionnaires. This response was supported by the written comments in which participants described 10 different factors that facilitated the understanding of the model and its components. These included the explanation given before answering the questionnaire, the interactive group discussion, the relevance of the model to schools' practices, and the simplicity and clarity of the model, as well as the language of presentation and discussion.

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4.2.2.1 Explanation of the model

The first reason participants gave for why it was easy for them to understand the model and its components was that the workshop presentation and the explanation given during the workshop sessions were very clear. I had explained the content of each component and how they relate to each other:

> *Twumvise uru rusobe n'inkingi zirugize bihagije kubera ko umushakashatsi yarusobanuye neza* arutwereka *aduha ibisobanuro byimbitse* (*Itsinda ry'abarimu ishuri ry'icyaro*, 31). [We have clearly understood the model and model components as the researcher has given a thorough explanation about it and presented it to us in his presentation. (Teachers' group, Rural School, 31)]

4.2.2.2 Interactive group discussion

The interactive group discussions held within groups while they completed the questionnaires was cited to have facilitated their understanding of the model and its components. It offered them an opportunity to collectively discuss the model and its components and reach a consensus built on the explanation given:

> *Uru rusobe n'inkingi zarwo birasobanutse. Twabiganiriyeho mu matsinda twungurana ibitekerezo uko tubyumva twemeranya ku gisubizo twumva kitunogeye kandi gikwiye ndetse tubihuza n'ibikorwa by'ishuri ryacu. Twasanze ari ibintu duhura nabyo buri munsi twunganiwe n'ibisobanuro twahawe n'umushakashatsi* (*Itsinda ry'abanyeshuri ishuri ry'icyaro*, 36). [This model and components are clear. After discussing it among ourselves sand listening to what each one of us said about the model and components, we agreed on the appropriate response based on how the components relate to our own school. We learned that the components are the things that we experience in our school, but we also built on the explanation given by the researcher. (Pupils, Rural School, 36)]

Completing the survey during the workshop after the presentation helped participants in understanding the model and its components. This suggests that group discussion is effective when it follows a presentation in which the background information is provided. The presenter's explanation and knowledge of the content helped the participants to understand the model.

4.2.2.3 Relevance of the model to schools' practices

The other reason participants gave for their understanding of the model was the relevance of the model's components to their schools. The components of the model reflected familiar aspects of the school setting and they could recognise whether their school had all the components. They said that the components reflected the school communities' practices they find themselves involved in on a daily basis at school and thus were easy to understand:

> *Uru rusobe n'inkingi zarwo birerekana ubuzima dukoreramo, inshingano za buri munsi twisangamo n'ibindi bikorwa by'ishuri n'uburyo bikorwa kimwe ku kindi cyangwa muri rusange; byaba ibyo dufite cyangwa tudafite bikadufasha kumva uru rusobe byoroshye* (Umuyobozi w'ishuri ry'umujyi, 81). [The model and its components represent our working conditions and activities and the responsibilities we attend to at school and the aspects of different school functionalities in part or whole that we have or lack, thus making it is easy to understand. (Principal, Urban School, 81)]

4.2.2.4 The model is simple and clear

Furthermore, participants said they understood the model because it was simple and clear to understand. Participants said that any school would aspire to develop the components in order to improve school functioning and promote health and wellbeing of the school community:

> *Uru rusobe rurumvikana kuko inkingi zirugize ni ibintu bisanzwe bigize ishuri ndetse ishuri ryatangiriraho ibikorwa kugira ngo rizahure kandi riteze imbere ubuzima n'imibereho myiza y'abagize ishuri bose* (*Umuyobozi w'ishuri ry'umujyi,* 87). [The model is basic to understand because components are the school aspects that the schools would take action on to improve and promote health and wellbeing of us all in the school. (Principal, Urban School, 87)]

4.2.2.5 Language of presentation and discussion

The use of Kinyarwanda, the participants' primary language, during the workshop presentation enabled them to follow the presentation and to interact freely with one another while they completed the questionnaire, without a language barrier:

> *Uru rusobe n'inkingi zarwo ntibigoye kubyumva kubera ko rwateguwe, rukerekanwa kandi rugasobanurwa mu rurimi rwacu twumva ntambogamizi z'ururimi. Ibi byadufashije gukurikira ikiganiro ndetse no kuzuza urutonde rw'ibibazo mu rurimi rwacu* (*Itsinda ry'ababyeyi ishuri ry'icyaro*, 56). [The model and its components are easy to understand because it is presented and explained in our own language that we all understand without language barriers

and this has made it easy for us to enjoy the whole session. It was easy for us to complete the questionnaire in our own language. (Parents, Rural School, 56)]

4.2.2.6 Graphic presentation of the model components

The graphic presentation that depicted model components and their mutually supportive relationships that contribute to the health-promoting school helped participants to understand the model and its components:

Uru rusobe n'inkingi zarwo turabyumva kubera uburyo rwubatswe n'isano riri hagati y'inkingi ni ibintu byumvikana kandi bigaragara nubwo tutazifite mu ishuri ryacu (*Itsinda ry'abarimu ishuri ry'icyaro*, 36). [We understand the model and model components because of its graphic presentation, and the relationship between components is straightforward to understand, though we do not have them in place at our school. (Teachers, Rural school, 36)]

4.2.3 Participants' Views of the Appropriateness of the Model Components for Their Schools.

All the participants (n= 376) said the model was appropriate for their schools. The reasons they gave in the written responses included that the model components facilitate insight into understanding the school, identification and understanding of problems in schools, planning interventions for changes in schools, and whole-school development.

4.2.3.1 The model components facilitate insight into understanding the school

The participants said that the way the model components are arranged helped them to understand many things about their schools that they did not realise were essential for their schools until they saw the model. They mentioned that the components guide them into understanding their conditions of work more clearly:

Jye mbona izi nkingi ari ingenzi ku kigo kuko nasanze zimfasha kumenya ibintu bimwe na bimwe bikenewe gukorwa mu kigo. Uburyo izi nkingi zubatswe kuri uru rusobe nabyo biradufasha kumenya ikigo cyacu birushijeho no gusobanukirwa iby'ingenzi bifitiye ikigo akamaro (*Umuyobozi w'ishuri ry'umujyi*, 82). [I find these model components essential for the school because they make me realise certain things that need to be done. The components' arrangement in the model provides a learning opportunity to know our school better and to recognise the aspects that are essential for our school. (Principal, Urban School, 82)]

Inkingi z'uru rusobe zatuyobora mu gusobanukirwa ubuzima bw'ishuri muri rusange, ibintu nkenerwa byaba ibyagezweho n'ibitaragerwaho ndetse n'ibyibanze mu kigo cyacu (Umuyobozi w'ishuri ry'umujyi, 87). [The model components guide us into the understanding of our conditions, needs both met and unmet and the priorities of our school. (Principal, Urban School, 87)]

4.2.3.1 Model components facilitate identification and understanding of problems in schools

Participants felt that the components were appropriate for their schools as they would help them improve their school practices, deal with challenges and guide them in addressing such challenges.

Uru rusobe n'inkingi zarwo bidufasha kubona ibibazo bigaragara mu mashuri yacu no mu miterere y'uburezi muri rusange (Umuyobozi w'ishuri ry'icyaro, 51). [The model and components helps us to identify problems that we apparently have in our schools and the education system in general. (Principal, Rural School, 51)]

For the participants, the model components could be used as self-assessment tool that identifies where challenges are not only in schools but also beyond:

Izi nkingi zirakwiye ko tuzigira mu ishuri ryacu kuko ziradufasha gusobanukirwa ibibazo ishuri rifite tutumvaga, hanyuma tukabasha kuba twabikemura (Umuyobozi w'ishuri ry'umuji, 91). [These components are appropriate for our school. They help us to understand the problems in our school that we did not understand, so we will be able to solve them. (Principal, Urban School, 91)]

4.2.3.3 Model components facilitate planning for interventions in school

The model components provide the basis on which principals and teachers could plan actions to bring about change in the way the schools operate:

Izi nkingi zirakwiye mu ishuri kuko zakwifashishwa mu gutegura gahunda y'ibyakorwa mu kuzamura imyigire n'imyigishirize (Intsinda ry'abarimu ishuri ry'icyaro, 43). [The components of the model are appropriate for our school to have as they may facilitate planning for what could be done to improve learning and teaching and dealing with the poor conditions apparent in our schools that threaten pupils wellbeing and their capacity to learn, as well as teachers wellbeing, and eventually make pupils dislike school and destroys their overall school satisfaction. (Teachers group, Rural School, 43)]

4.2.3.4 Model components facilitate whole school development

The components in the model were considered appropriate because they would provide a holistic approach through which the all the aspects of the school could be addressed. They provide a model for a well-functioning school:

> *Izi nkingi ni ngombwa mu ishuri ryacu. Ndabona zifite aho zihuriye kandi zose ni magirirane. Ziruzuzanya mu mu mikoranire yazo. Ibi bikaba byazahura imyigire, imyigishirize n'iterambere mu ishuri muri rusange (Umuyobozi w'ishuri ry'icyaro*, 9). [The model components are appropriate and necessary for our school. They holistically encompass all the school functionalities and practices which would subsequently lead to whole-school development. (Teachers group, Rural School, 61)]

The components synergistically complement each other and could facilitate whole-school development:

> *Izi nkingi ni ngombwa mu ishuri ryacu. Ndabona zifite aho zihuriye kandi zose ni magirirane. Ziruzuzanya mu mu mikoranire yazo. Ibi bikaba byazahura imyigire, imyigishirize n'iterambere mu ishuri muri rusange* (*Umuyobozi w'ishuri ry'icyaro*, 9). [These components are very appropriate for our school to have. I can see how they are inter-linked and interdependent with a synergistic complementary relationship to each other, which would improve learning and teaching and school development as a whole. (Principal, Rural School, 9)]

4.2.4 Components on which Schools Needed to Take Action to Become Health-Promoting Schools

This section presents the components that participants indicated they would choose to begin action in their schools, to become HPSs.

Table 12. *Component Selected for Initial Action to become an HPSl* (N=376)

Participant groups	Setting	MODEL COMPONENTS								TOTAL
		School leadership management n (%)	Schools' &physical environment n (%)	Pupil well-being n (%)	Aim for solutions n (%)	Teacher well-being n (%)	School partnerships with parents/Families & communities n (%)	School health services n (%)	School health policies n (%)	
Principals (n=92)	Urban	3 (43)	3 (43)	0 (0)	0 (0)	1 (14.3)	0 (0)	0 (0)	0 (0)	7 (7.7)
	Rural	39 (45.9)	17 (20)	9 (10.6)	6 (7.1)	4 (4.7)	1 (1.2)	4 (4.7)	5 (5.9)	85 (92.3)
	Total	**42 (45.7)**	**20 (21.7)**	**9 (9.8)**	**6 (6.5)**	**5 (5.4)**	**1 (1.1)**	**4 (4.3)**	**5 (5.4)**	**92 (100)**
Teachers groups* (n=92)	Urban	5 (71.4)	0 (0)	0 (0)	0 (0)	2 (28.6)	0 (0)	0 (0)	0 (0)	7 (7.7)
	Rural	39 (45.9)	16 (18.8)	4 (4.7)	8 (9.4)	13 (14.1)	3 (3.5)	2 (2.4)	0 (0)	85 (92.3)
	Total	**44 (47.8)**	**16 (17.4)**	**4 (4.3)**	**8 (8.7)**	**15 (16.3)**	**3 (3.3)**	**2 (2.2)**	**0 (0)**	**92 (100)**
Pupils groups* (n=92)	Urban	3 (43)	0 (0)	3 (43)	0 (0)	0 (0)	0 (0)	1(14.3)	0 (0)	7 (7.7)
	Rural	19 (22.4)	22 (25.9)	20 (23.5)	8 (9.4)	1 (1.2)	2 (2.4)	8 (8.2)	6 (7.1)	85 (92.3)
	Total	**22 (23.9)**	**22 (23.9)**	**23 (25)**	**8 (8.7)**	**1 (1.1)**	**2 (2.2)**	**8 (8.7)**	**6 (6.5)**	**92 (100)**
Parents	Urban	3 (43)	0 (0)	1 (14.3)	0 (0)	0 (0)	3 (43)	0 (0)	0 (0)	7 (7.7)

groups* **(n=92)**	Rural	31 (36.5)	17 (20)	4 (4.7)	11 (12.9	6 (7.1)	9 (10.6)	3 (3.5)	4 (4.7)	85 (92.4)
	Total	**34 (37)**	**17 (18.5)**	**5 (5.4)**	**11 (12)**	**6 (6.5)**	**12 (13)**	**3 (3.3)**	**4 (4.3)**	**92 (100)**
K I (n=8)	Urban	3 (37.5)	3 (37.5)	0 (0)	0 (0)	0 (0)	1 (12.5)	0 (0)	1 (12.5)	8 (100)
Total	**Urban**	**17 (11.7)**	**6 (7.7)**	**4 (9.8)**	**0 (0)**	**3 (11.1)**	**4 (21.1)**	**1 (5.9)**	**1 (6.2)**	**36 (9.6)**
	Rural	**128 (88.3)**	**72 (92.3)**	**37 (90.2)**	**33 (100)**	**24 (88.9)**	**15 (78.9)**	**16 (94.1)**	**15 (93.8)**	**340 (90.4)**
Total		**145 (38.6)**	**78 (20.7)**	**41 (10.9)**	**33 (8.8)**	**27 (7.2)**	**19 (5.1)**	**17 (4.5)**	**16 (4.3)**	**376 (100)**

*A group included four teachers, four pupils or four parents

Table 10 indicates how participants prioritised the model components, based on the needs, priorities and aspirations and challenges apparent in schools. School leadership and management was named as the top priority component across all the participant types (except pupils): teachers, 47.8% and principals, 45.7%, followed by key informants, 37.5%, and parents, 37%, and pupils, 23.9%. The second choice for action for all the participants was the school's physical environment: key informants, 7.5%, pupils, 23.9%, principals, 21.7%, parents, 18.5%, and teachers, 17.4%.

The priorities, by participant type, indicate that principals' priority components were in the sequence of school leadership and management, physical environment of school, pupil wellbeing, aim for solutions, teacher wellbeing, school health policies, school health services, and last, school partnership with parents, families and local communities. For teachers, the sequence of priority components were school leadership and management, the physical environment of the school, teacher wellbeing, aim for solutions, pupil wellbeing, school partnership with parents/families and the local communities, and last, school health services. Pupils' sequence of priority were pupil wellbeing, school leadership and management, school physical environment, aim for solutions, school health services, school health policies, school partnership with parents, families and the local school community, and last, teacher wellbeing. Parents' sequence was school leadership and management, the physical environment of the school, school partnership with parents, families and local communities, aim for solutions, teacher wellbeing, pupil wellbeing, school health policies, and last, school health services. The key informants' sequence was school leadership and management, the physical environment of the school, school partnership with parents, families and local communities, and school health policies.

4.2.4.1 School leadership and management

Overall, 38.6% (n=145) identified the school leadership and management component as the priority for their schools to start action on to become HPSs. Of these, 30.3% (n= 44) were groups of teachers, 28.9% (n=42) were principals, 23.4% (n=34) were parents, while 15.17% (n=22) were pupils and 2.1% (n=3) were key informants.

Their reasons were that school leadership and management set the vision and direction for the schools' development; improved school relationships; improved co-ordination and supervision of school programmes and activities; and promoted democratic values of collaboration, participation and partnership. Participants regarded school leadership and management as a pivotal component for the schools' present and future development. They said that without it, other components would not be realised. They said that leadership and management had the potential to influence the school vision and provide direction for its development and transformation. They also emphasised that school leadership and management need to be good because when a school was well led and managed, it does well and its development is certain, as opposed to bad leadership and management that could bring a school's development to a standstill:

> *Ubuyobozi n'imicungire y'ishuri ni ipfundo ry'ubuzima bw'ishuri kuko nibyo musemburo ku bindi bikorwa by'ishuri. Bitanga icyerekezo n'umurongo ngenderwaho hejo hazaza h'ishuri. Hatari ubuyobozi n'imicungire myiza mu mashuri, nindi mikorere y'ishuri iba itagishobotse kugerwaho (Itsinda ry'ababyeyi ishuri ry'icyaro, 37).* [School leadership and management is central to the life of the school because leadership acts as a catalyst to the rest of the school activities. It sets the vision and direction of where the school is going and leads the school into its future. Without good leadership and management in schools, other functionalities of the school become impossible to realise. (Parents group, Rural School, 37)]

Others said that good leadership and management could engender a positive school climate, modelled by leadership values and virtues demonstrated by the school communities:

> *Dukeneye ubuyobozi buzana kandi bugateza imbere imikoranire myiza hagati ya bose bagize ishuri. Twese abagize ishuri dukeneye kubaka ubuyobozi bwimakaza ikizere, kubahana, kutabogama, guha agaciro no gushimira abarimu ku bwitange bagira mu kazi kabo ka buri munsi (Itsinda ry'abarimu ishuri ry'icyaro, 1).* [School leadership and management initiates and sustains good working relationships within and among all the stakeholders. We need to start action on this component to ensure leadership that encourages trust, respect, treats school members as equal and recognises teachers' hard work in their daily duties. (Teachers group, Rural School, 1)]

Other participants said effective leadership and management that co-ordinated and supervised school programmes and activities would pave the way for the other initiatives in which all the stakeholders would work together with a common purpose and goal:

> *Ubuyobozi n'imicungire y'ishuri nibyo ntango ya byose kuko ihuza abagize ubuzima bw'ishuri aribo abarezi, abanyeshuri, ababyeyi, imiryango ndetse n'abaturiye ishuri, kandi ikagenzura ibikorwa by'imyigishirize n'imyigire hakorwa ibishoboka byose kugira ngo ishuri rigire umwuka mwiza utuma kwiga no kwigisha bigenda neza* (*Umuyobozi w'ishuri ry'icyaro*, 81). [School leadership and management plays a pivotal role in the school's life because it co-ordinates teachers, pupils, parents, families and the wider school community. It supervises learning and teaching activities of the school, ensuring that the school environment is supportive of and safe for learning and teaching. (Principal, Rural School, 81)]

Other participants chose to start action on leadership and management because of its potential to influence collaboration, participation and partnership, democratic values and practices in schools. These, in return, would provide an opportunity to all the stakeholders to take part in the decision-making process and ensure that their views were heard, valued and respected:

> *Twasanze ubuyobozi n'imicungire myiza y'ishuri aribyo by'ibanze ku ishuri ryacu kuko n'inkingi ikomeye. Dukeneye ubuyobozi bufatanyiriza hamwe n'abarezi, abanyeshuri, ababyeyi n'abaturage ku buryo busesuye* (*Itsinda ry'abarezi, ishuri ry'icyaro,* 81). [We have selected school leadership and management as our priority component for our school because it is an important aspect for our school. We need leadership that works hand in hand with teachers, pupils, parents and the wider school community, without reservation. (Teachers group, Rural School, 8]

> *Ubuyobozi bwiza n'imicungire myiza y'ishuri bigizwemo uruhare n'abagize ubuzima bw'ishuri ni ingenzi. Ubuyobozi buha amahirwe bose mu gufata ibyemezo ku mabwiriza agenga ibikorwa by'ishuri, bateza imbere ubwubahane hagati y'abagize ishuri, ni ingirakamaro ku ishuri ryacu* (*Umuyobozi w'ishuri ry'umujyi*, 88). [Good school leadership and management that co-operates with all the stakeholders in a school's life is important. The leadership that involves and engages school community members in the decision making regarding which policies a school needs to guide the school activities, leadership that

values and encourages mutual respect of all in school, is vital for our school. (Principal, Urban School, 88)]

4.2.4.2 School physical environment

The physical environment of the school was the second choice for action across all the participant types: 20.7% (n=78). Of these, 28.2% (n=22) were groups of pupils, 25.6% (n=20) were principals, 21.7% (n=17) were groups of parents, 20.5% (n=16) were groups of teachers, and 3.8% (n=3) were key informants. Reasons they gave for wanting to start action on this component included improving hygiene and sanitary facilities in school and maintaining, repairing and upgrading school infrastructure.

Poor water supply and sanitation deficiencies lead to pupils and staff becoming ill:

> *Mu mashuri nta suku n'isukura bihagije bihari. Kubura k'ubwiherero buhagije, bituma abahungu n'abakobwa bakoresha ubwiherero bumwe hatitaweho imitandukanire yabo. Ubwiherero ntibumeze neza bikarushaho kuba bibi kuko nta buryo bwagenwe bwo gutunganya imyanda ibuvamo. Imiterere mibi y'ubwiherero n'umwanda wabwo nuw'ibikikije ishuri bikururira abanyeshuri n'abarimu indwara zituruka ku mwanda zihungabanya ubuzima n'imyigire by'abana ndetse n'ubuzima bw'abakozi. Abana bakananirwa kwiga neza n'intego y'ubuzima bwa bose ntigerweho. Ibura ry'amazi mu kigo rigatuma ikibazo kiba ingorahabizi* (Itsinda ry'abarezi ishuri ry'icyaro, 71). [There are no proper hygiene and sanitary facilities in place. Lack of sufficient toilets to the extent that males and females share the same toilet facility, irrespective of gender differences is common. School toilets are in a poor state, aggravated by lack of sewage and waste management measures. The poor condition of school toilets and the physical environment exposes children and staff to environmental diseases and illnesses that compromise children's health and school attendance. The situation becomes even worse because of lack of water the in school. (Teachers group, Rural School, 71)]

The schools in the study faced infrastructure challenges that affected school activities and programmes. These ranged from the most basic, such as lack of toilets, to inadequate classrooms, staffrooms and offices and playgrounds. Such infrastructural deficiencies made the school environment less conducive to learning and teaching, as commented on by the participants:

Inyubako ni ikibazo kingorabahizi mu mashuri. Ntanyubako zikenewe nk'ibyumba by'abarimu, ibiro, ibyumba byo kwigiramo n'ibyumba by'inama (*Umuyobozi w' ishuri ry'icyaro*, 9). [Infrastructure is a cause for concern in schools. We lack important buildings like staffrooms, offices, classrooms, meeting rooms. (Principal, Rural School, 9)]

Poor maintenance, lack of repair, and school buildings in an appalling state were reported to be common. Teaching and learning took place in poorly maintained classrooms. Classrooms were not equipped with basic amenities:

Mu mashuri cyacu turacyafite ikibazo k'inyubako zishaje, ari ibyumba by'amashuri ari ubwiherero. Izubatwe mu mwaka 1984, ntizigeze zivugururwa, cyangwa ngo zongerwe kugira ngo zakire abana bahora biyongera buri mwaka bituma bahora bacucitse mu byumba by'amashuri (*Umuyobozi w'ishuri ry'icyaro*, 11). [In schools, we have a challenge of old classrooms that need upgrading, the buildings of 1984, the year in which most schools were built, have not been repaired nor upgraded nor increased to accommodate the ever increasing number of school children; pupils are overcrowded in small classrooms. (Principal, Rural School, 11)]

Land shortage was said to be a common challenge at all the schools, as it was for the general population. Most schools are nested within communities, where there is no land left for expansion, with communities encroaching on the school land. Most schools are built without policy guidelines or technical support to ensure that schools are built to standard measures, with appropriate planning for their future development.

Ikigo cyacu dufite ikibazo cy'ubwisanzure. Ibyumba by'amashuri ni bito cyane. Dukeneye ubutaka bwo kwagura amashuri, kuvugurura inyubako zishaje hongerwa ibikoresho nkenerwa n'umwanya kugira ngo abana babone umwanya wo kwisanzuriramo mu kigo (*Itsinda ry'abarimu inshuri ry'icyaro*, 71). [Our school classrooms are narrow; we need school land that allows school expansion and development, adequate and up-to-date school infrastructure, enough resources and adequate space to allow free movement of children in school. (Teachers group, Rural School, 71)]

4.2.4.3 Pupil wellbeing

Of the participant groups, 10.9% (n=41) selected pupils' wellbeing as the component they would like to start action on at their schools. Among these, 56.1% (n=23) were groups of pupils, 21.9% (n=9) were principals, 12.2% (n=5) were groups of parents and 9.8% (n=4) were groups of teachers. None of the key informants chose the "pupil wellbeing" component. Participants gave three reasons why they needed to take action on pupil wellbeing: healthy pupils learn well and adopt positive behaviours and relationships, pupils' health and wellbeing should be a priority, and to ensure that pupils feel supported.

A principal said that taking action on pupil wellbeing might improve pupils' health to ensure that they were capable of better learning and academic achievement. This in turn may make them feel good about themselves, others and school and influence their behaviour and relationships with peers and teachers through mutual respect.

> *Abana bafite ubuzima bwiza biga neza kandi bagatsinda. Bishimira kuba ku ishuri kandi bagira uburere bwiza buzana ubwumvikane n'ubwubahane hagati yabo n'abarimu* (*Umuyobozi w'ishuri ry'umujyi*, 82). [Pupils who feel well and healthy learn better and achieve more. They enjoy being at school and are likely to adopt positive behaviours that influence positive teacher-pupil relationships and create mutual respect. (Principal, Urban School, 82)]

Another principal commented that pupils' health and wellbeing need to be treated as a priority because their present health and wellbeing determines their contribution to the welfare of the society and that of generations to come.

> *Abana nibo ejo hazaza h'igihugu. Kwita ku buzima bwabo rero ni ukwita kuri ejo hazaza habo n'abandi bazavuka* (*Umuyobozi w'umutegarugori ikigo cy'umujyi*, 84). [Children are the future of our country; investing in their health and wellbeing is an investment in the future generations. (Principal, Urban School, 84)]

Another principal said that pupils needed to feel cared for, valued and nurtured into resilient individuals who could bounce back and rise above their circumstances and situations.

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Iyo abana baziko bitaweho ku ishuri bibatera imbaraga no kumva bahamye bakavamo abantu nyabantu biyitaho bikwiye bakita no kubandi (*Umuyobozi w'umugabo w'ikigo cy'ishuri ry'icyaro*, 57). [Psychologically, when pupils feel supported at school, they grow into resilient individuals, who are responsible enough to care for themselves and others. (Principal, Rural School, 57)]

4.2.4.4 Aim for solutions

A total of 8.8% (n=43) of the participants identified the "aim for solutions" component as a priority for their schools. Of these, 33.3% (n=11) were groups of parents, 24.2% (n=8) were groups of pupils, 24.2% (n=8) were teachers and 18.2% (n=6) were principals. Taking action on this component is an attempt to address different factors affecting teaching and learning for all children in schools.

A group of teachers expressed concern about the multiple factors affecting learning:

Mu mashuri hari ibibazo bitandukanye bibangamira ubuzima n'imyigire y'abanyeshuri bikenewe gukemurwa kugira ngo abana bishimire kuba ku ishuri, kandi bige neza batsinde n'abarimu babo bishimire akazi kabo (*Itsinda ry'abarimu, ishuri ry'icyaro*, 2). [In our schools, pupils are faced with various factors that affect health of pupils and their capacity to learn and hinder them from achieving their full potential. Such factors need to be addressed to allow children to enjoy and benefit from learning and to allow teachers to enjoy their job too. (Teachers' group, Rural School, 2)]

4.2.4.5 Teacher wellbeing

Of the participants, 7.4% (n=27) indicated they would start action on the teachers' wellbeing component at their schools to become an HPS. Of these, 55.6%) (n=15) were groups of teachers, 22.2% (n=6) were groups of parents, while 18.5% (n=5) were principals, and 1.1% (n=1) were a group of pupils. Among the reasons for choosing this component were that teacher wellbeing is a pre-requisite to pupil wellbeing and to healthy teachers who are hardworking and productive, and healthy teachers assume responsibilities with ease. They commented that they played a pivotal role in educational activities in schools, including teaching and learning as well as supporting pupils. They, however, stressed that this was only possible when they were well; otherwise, their ill-health affected the whole school.

Abarimu nibo shingiro ry'ibikorwa by'uburezi, n'ibindi bikorwa nkenerwa mu mashuri ariko bakora batameze neza. Kubw'iyo mpamvu imyigire n'imyigishirije bikaba bibi. Mu gihe abarimu bameze neza bigisha bakanita ku bana babafasha gusohoza inshingano zabo zo kwiga (*Itsinda ry'abarimu ishuri ry'icyaro*, 37). [Teachers play important educational roles and perform necessary activities in schools. When they often experience ill-health and not well, poor teaching and learning is inevitable, and the whole school is affected. In contrast, healthy teachers teach well and care for and support children to realise their full potential. (Teachers' group, Rural School, 37)]

Teachers used the metaphor of milking a cow to illustrate why their wellbeing was important:

Ninde uzateza imbere imyigire n'imyigishirize by'abana bose niba abarimu babayeho mu buzima bubi. Byose bihera ku mibereho myiza y'abarimu, nta kuntu wategereza umukamo ku nka ishonje, nta nubwo watekereza kuyikama (*Itsinda ry'abarimu, ishuri ry'icyaro*, 71). [Who is going to promote learning and teaching for all children if teachers are not well? It all starts from teachers' wellbeing; you cannot expect milk from a hungry cow, neither would you attempt to milk a hungry cow. (Teachers group, Rural School, 71)]

Teachers were expected to be more productive than their conditions of work allow. If they are not well, how can they be expected to fulfil their responsibilities? They cannot look after pupils when they themselves are not looked after or are feeling unwell. Teachers added that when they were well, they assumed responsibilities and were motivated to look after and listen to pupils:

Abarimu bafite ubuzima mwiza ku kazi bakorana umurava basohoza inshingano zabo mu kazi bita ku bana bashinzwe (*Itsinda ry'abarimu, ishuri ry'icyaro*, 38). [Healthy teachers, who feel well at work, are likely to work hard and deliver and have the will to listen to, and look after the pupils that they teach. (Teachers' group, Rural School, 38)]

Teachers said that poor teaching and learning becomes inevitable when teachers are not taken care of. They added that any schools that wants to exploit its teachers' skills, talents and competencies, should make teacher wellbeing a priority and part of school practice because everyone benefits when teachers feel well:

Igihe imibereho myiza ya mwarimu ishyizwe imbere muri gahunda z'ishuri, abarimu bita ku mibereho myiza y'abanyeshuri. Abarimu bafite ubuzima bwiza buzuza inshingano zabo byoroshye. Ariko iyo

batitaweho, nabo ntibita ku bana kandi bagirana ibibazo n'ubuyobozi (*Umuyobozi w'ishuri ry'icyaro*, 8). [Whenever teachers' wellbeing is part of the school's priorities and practices, teachers take pupils' wellbeing as their responsibility in return. Healthy teachers assume responsibilities easily. If teachers are not looked after, they will not look after pupils and they will tend to have difficulties with the school administration. (Principal, Rural School, 8)]

4.2.4.6 School partnerships with parents, families and the wider community

Of the participants, 5.1% (n=19) chose to start action on school partnerships with parents, families and the wider community for their schools to become HPSs. Of these, 63.1% (n=12) were groups of parents, 15.8% (n=3) were groups of teachers, 10.5% (n=2) were groups of pupils, and 5.3% (n=1) were key informants. Participants commented that schools worked in isolation, without co-operation and collaboration with all the stakeholders in education, which hampered the schools functioning. Participants said that it was important that all the stakeholders' roles and efforts be synchronised for the schools' development.

Ntibishoboka kugera ku mikorere inoze y'ishuri igihe abantu babaye banyamwigendaho. Amashuri yagombye gufatanya n'abafatanya bikorwa bose, baba ababyeyi, imiryango n'abaturage bose uruhare rwabo rugahabwa agaciro kugira ngo ishuri rigere ku nshingano zaryo (*Itsinda ry'ababyeyi ishuri ry'umujyi*, 81). [It is impossible to achieve proper functioning of the schools when people are working in isolation. Schools need to engage all the stakeholders. Parents, families, wider school communities need to be involved and their roles recognised if schools are to fulfil their obligations. (Parents group, Urban School, 81)]

In addition, a principal at a rural school recognised that when parents worked hand-in-hand with the schools, they were in a better position to understand the conditions in which learning took place, and, together with the school leaders and teachers, they could find ways of addressing problems that hinder children from learning well:

Ababyeyi bakwiye kugira uruhare mu myigishirize n'imyigire y'abana bafatanije n'abarimu batoza abana umuco n'imibanire myiza bibashoboza kuba abaturage batanga umusaruro mu kubaka igihugu (*Umuyobozi w'ishuri ry'icyaro*, 84). [Parents need to be involved in the learning and teaching of their children, working alongside teachers to

instil children with values, positive behaviour and relationships that enable them to become responsible citizens who contribute to a better society. (Principal, Rural School, 84)]

Iyo ababyeyi bagize uruhare mu burezi bw'abana babo, bumva neza ibibazo abana bahura nabyo bagafatanya n'ubuyobozi bw'ishuri mu gushakisha uko ibyo bibazo bibangamira imyigire kandi bidindiza imikurire y'abana byakemuka kugira ngo uburyo bw'imyigire bugende neza (*Umuyobozi w'ishuri ry'umujyi*, 80). [When parents are involved in education of their children, they understand the conditions of learning and are able to collaborate with school leadership to suggest the possible ways to address such conditions that hinder learning and hamper child development, to improve the learning conditions of children. (Principal, Rural School, 80)]

The principal at an urban school indicated that they needed to encourage and facilitate parental follow-up on their children's education to maximise the benefits of education and to enable them to achieve their full academic potential and to allow schools to achieve their mission of education:

Iyo ababyeyi bisanga mu ishuri, bituma inshingano yo gukurikirana uburezi bw'abana ishyirwamo imbaraga haba mu rugo no ku ishuri bigafasha ishuri kugera ku ntego zaryo z'ibanze z' uburezi (*Umuyobozi w'ishuri ry'umujyi*, 88). [When parents are part of school, the parents' follow-up role of children's education is enhanced, both at home and at school, thus enabling the school to achieve its primary goal of education. (Principal, Urban School, 88)]

The need to address skills gaps and illiteracy levels among parents was another reason why they chose to start action on this component. Parents needed training to enable them have a sense of fulfilment and to understand their roles in assisting their children and promoting their wellbeing:

Amashuri akwiye kwita ku kuzamura imibereho myiza y'ababyeyi, bagahabwa amahugurwa ajyanye n'ubumenyi bakeneye, bagahugurirwa uruhare rwabo mu burezi bw'abana babo kuko bigaragara yuko ababyeyi bahariye abana abarimu bishoboka ko biterwa cyane nuko batazi uruhare rwabo mu burezi bw'abana babo (*Itsinda ry'ababyeyi ishuri ry'icyaro*, 43). [Schools need to promote parents' wellbeing, train parents on the knowledge and skills that they need, and train them on their roles in the education of their children, because as the situation is, parents have left children to teachers, mostly

because they don't understand their role in the education of their children. (Parents group, Rural School, 43)]

4.2.4.7 School health services

Of the respondents, 4.5% (n=17) indicated the need to start action on the school health services component for their school to become an HPS. Of these, 47% (n=8) were groups of pupils, 23.5% (n=4) were the principals, 17.6% (n=3) were groups of parents and 11.8% (n=2) were groups of teachers. The reason for taking action on this component was the need to promote health and wellbeing of school children and staff to enable them to fulfil their duties and responsibilities:

> *Ibikorwa by'ubuzima mu ishuri n'ingenzi mu guteza imbere ubuzima n'imibereho myiza y'abanyeshuri n'abarimu igihe ibikorwa by'ubuzima bw'ibanze bibegereye kandi bakabibona bigamije kuvura no gukumira indwara n'ibindi byose byahungabanya bikabangamira ubuzima harimo ni imyifatire kugira ngo ishuri n'ibirikikije habe ahantu hateza imbere ubuzima kandi hanogeye imyigire n'imyigishirije* (*Itsinda ry'abarimu, Ishuri ry'icyaro*, 42). [School health services are essential to promote health and wellbeing of school children and staff through availability and accessibility of basic health services for treatment and prevention of health compromising diseases, illnesses and behaviours to ensure that the school environment is healthier and supportive of learning and teaching. (Teachers group, Rural School, 42)]

Teachers said that health-compromising problems ranged from psychological or emotional difficulties to physical and behavioural health problems that affect both schoolchildren and staff:

> *Abanyeshuri n'abakozi bahura n'ibibazo by'ibitekerezo bibagoye, ibibazo by'ubizima bwo mu mutwe n'amaranga mutima n'indi myifatire ihungabanya ubuzima bw'abanyeshuri harimo gutwara inda bidateganijwe, gukoresha ibiyobyabwenge, ibisindisha, imibanire itari myiza, indwara n'ibindi bibazo by'ubuzima, imvune ni indi myifatire yashyira ubuzima bw'abanyeshuri n'abarimu mu kaga, bisaba ko amashuri agira ibikorwa by'ubuzima n'inyunganizi zabyo abagize ishuri bakeneye kugira ngo bagire ubuzima bwiza* (*Itsinda ry'abarimu, ishuri ry'icyaro*, 2). [School children and staff experience psychological, mental and emotional difficulties and other health compromising risk behaviours like unintended pregnancies, abuse of drugs and alcohol, relationship difficulties, diseases and illnesses, injuries and other risky behaviours that compromise the health of children and staff and which

require schools to have the health and support services that the school community needs. (Teachers group, Rural School, 2)]

4.2.4.8 School health policies

Of the respondents, 4.3% (n=16) indicated they would start action on the school health policies component for their school to become an HPS. Of these, 37.5% (n=6) were groups of pupils, 31.3% (n=5) were principals, 25% (n=4) were groups of parents and 6.3% (n=1) were key informants. Participants said that there were no specific policies on the most pressing health and education issues facing schools at the present moment. The participants indicated the need for policies to guide and co-ordinate school activities and practices as well as health interventions, school health services and teachers' skills development:

> *Nta mabwiriza ngenderwaho agaragara mu mashuri yacu. Nta mabwiriza ku mirire no kugaburira abanyeshuri, ku kwirinda no gukumira indwara, ku imyigishirize kuby'ubuzima, ku isuku n'isukura, ku ibikorwa by'ubuzima mu mashuri, ikinyabupfura n'imyitwarire biranga abanyeshuri, ku gukumira ibisindisha, ibiyobyabwenge, ku uruhare rw'ababyeyi n'abaturage muri gahunda z'ishuri n'amahugurwa y'abarimu ku bikorwa by'ubuzima mu mashuri* (*Umuyobozi w'ishuri ry'umuyji* 30). [There are policy gaps in schools. We lack policy guidelines on school nutrition and feeding, disease prevention and health education, hygiene and sanitary services, health services in schools, discipline and conduct of pupils, alcohol, drugs and substance abuse, parents and local community involvement in schools programmes, as well as teachers' skills training on school health services. (Principal, Urban School, 30)]

4.2.5 Component in which Participants Needed the Most Support in Developing to Become an HPS.

Participants were asked to rank the model components in which they needed most support in developing. On a scale of 1-8, a ranking of 1 indicated most support needed and a ranking of 8 indicated least support needed. Table 13 shows the mean rank assigned to each component by participant type. The component requiring most support was the physical environment of the school for all participant groups (except key informants). Using a repeated measure analysis of variance (with each 'participant type' assigning a rank of support to each of 8 components), when

tested for differences in responses among the participant groups and for differences in responses across components, there was no significant association between participant type and component ranking (p=0.50) and no significant participant group effect (p=0.99).

Table 13. *The Participants' Ranking of the Model Components Most or Least Needed for Support in Developing Their School into HPSs.*

Participants/ Questionnaires (n=92)	Components	(n)	Mean	Median	Std Dev.
Principals **(n=92)**	Physical environment of school	91	2.47	1.00	2.20
	School health services	90	3.48	3.00	1.89
	Aim for solutions	91	4.29	4.00	2.05
	Partnerships with parents/families/local community	88	4.68	5.00	1.63
	Teacher well-being	91	4.76	5.00	2.14
	School health policies	91	4.92	5.00	2.11
	Pupil well-being	91	4.95	5.00	2.03
	School leadership and management	91	6.42	7.00	2.09
Teachers' Groups* (n=92)	Physical environment of school	89	2.51	1.00	2.12
	School health services	90	3.73	3.00	2.12
	Aim for solutions	89	4.08	4.00	1.88

	School health Policies	89	4.84	5.00	2.10
	Partnerships with parent/families/local community	90	4.86	5.00	2.12
	Teacher well-being	90	4.86	5.00	1.94
	Pupil well-being	90	5.36	5.00	1.95
	School leadership and management	90	5.81	6.00	2.33
Pupils' Groups* **(n=92)**	Physical environment of school	89	2.71	1.00	2.61
	School health services	92	3.63	4.00	1.79
	Aim for solutions	92	4.05	3.00	2.01
	Partnerships with parents/families/local community	92	4.71	5.00	1.79
	Pupil well-being	92	5.01	5.00	1.86
	School health Policies	92	5.20	6.00	2.15
	School leadership and management	92	6.36	8.00	2.12
	Teacher well-being	92	4.70	5.00	2.06
Parents' **Groups*** **(n= 92)**	Physical environment of school	92	2.30	1.00	2.19
	School health services	89	3.70	3.00	1.82
	Aim for solutions	89	4.33	4.00	2.17

	School health Policies	89	4.47	4.00	2.11
	Partnerships with parents/families/ local community	88	4.56	5.00	1.82
	Pupil well-being	89	4.98	5.00	1.62
	Teacher well-being	88	5.12	5.00	2.02
	School leadership and management	89	6.12	7.00	2.42
Key Informants **(n=8)**	School health services	7	3.71	5.00	1.88
	Pupil well-being	7	3.71	3.00	1.60
	School leadership and management	7	4.00	1.00	3.74
	School health Policies	7	4.14	2.00	2.67
	Partnerships with parents/families/local community	7	4.14	4.00	0.69
	Aim for solutions	7	4.71	6.00	1.70
	Teacher well-being	7	5.71	7.00	1.70
	Physical environment of school	7	5.85	8.00	3.07

* A group included either, four teachers, four pupils or four parents.

According to the school participants, the physical environment of school was the component that required the most support, while the key informants indicated that they considered it needing the least support to develop.

Although the key informants regarded the physical environment of school as needing the least support to develop, they concurred with the school participants in their qualitative comment that the physical environment of school component needed particular attention to ensure that physical environment of a school is health-promoting and supportive of the wellbeing of all in the school:

Mu mashuri ya leta hakeneye ibikorwa by'ibanze by'ubuzima nkaho gukarabira mu rwego rwo guteza imbere isuku y'ibanze y'umubiri hitabwaho kugira amazi ahoraho mu ishuri. Ishuri ni ibirikikije kuri jye n'iby'ibanze kandi n'ingenzi (*Uhagarariye* UNICEF, 5). [In public schools, basic health facilities are required starting with washing facilities, basic hygiene and to ensure that there is availability of water. The schools' physical environment, for me it is the most basic and essential. (Key informant, UNICEF, 5)]

Participants said that the school physical environment was a key to everything that they did, and if it was not health-promoting, it might undermine their wellbeing and the fulfilment of their duties and responsibilities:

Amashuri n'ibiyakikije nibyo sangano cyangwa ipfundo ry'uburezi bufite ireme n'imibereho myiza y'abarigize. Iyo ibikikije ishuri bidateza imbere ubuzima, ntacyo imbaraga n'ubwitange by'abarimu n'ubayobozi biba bimaze kuko inshingano zabo zitagerwaho imbaraga zabo n'ubwitange biba imfabusa keretse imbogamizi zose zibangamiye ubuzima bijyanye n'ibikikije ishuri byitaweho kandi bigakosorwa ariko bihenze (*Itsinda ry'abarimu, ishuri ry'icyaro*, 71). [The physical environment of a school is central to the delivery of quality education to and the wellbeing of all in the school. When the school environment is not health-promoting, no matter how teachers and school leadership are committed to fulfil their duties, their efforts are a waste until the school environment issues are looked into and addressed, and this is costly. (Teachers group, Rural School, 71)]

The school participants ranked school health services as having the second greatest need for support in developing, but the key informants ranked school health services the foremost need for support. Participants indicated that it was difficult to tackle health concerns experienced in their schools without appropriate skills and knowledge, as teachers were not trained in this area:

Amahugurwa y'abarimu mu bikorwa by'ubuzima, n'ubundi bumenyi bwose bakenewe ku bikorwa by'ubuzima kugira ngo bashobore gufasha abanyeshuri (*Umuyobozi w'ikigo cy'ishuri ry'icyaro*, 30). [Teachers

need training in school health services and other health-related skills to enable them to work well with pupils in schools. (Principal, Rural School, 30)]

The third greatest need of support cited by all the school participants was to aim for solutions. However, the key informants had considered it needing the least support. Participants indicated the need for the greatest support to proactively address various factors that affected teaching and learning for all children. Some are related to the curriculum and its delivery, for example, insufficient teaching and learning materials, resources and services. Others factors are health-related and socio-economically oriented:

> *Amashuri akeneye ubufasha cyane mu gukemura uburyo bubi abanyeshuri bigiramo n'abarimu bigishirizamo bica abana intege zo kwiga abana bakava mu ishuri bigatuma batiga bikwiye ngo bagere aho bifuza no kugera ku inshingano zabo zo kwiga* (*Itsinda ry'abarimu, ishuri ry'icyaro*, 2). [Schools need the most support to address the existing harsh conditions of learning and teaching that force pupils out of school and hinder them from achieving their full potential. (Teachers group, Rural School, 2)]

Other components fell into the middle-mean ranks. For example, school partnership with parents, families and local communities was ranked 4.14 by key informants, 4.56 by parents, 4.68 by principals, 4.71 by pupils and 4.86 by teachers. Teacher wellbeing was ranked 4.70 by pupils, 4.71 by key informants, 4.76 by principals, 4.86 by teachers, and 5.12 by parents. School health policies was ranked 4.14 by key informants, 4.47 by parents, 4.84 by teachers, 4.92 by principals and 5.20 by pupils. Pupil wellbeing was ranked 3.71 by key informants, 4.98 by parents, 5.00 by principals, 5.01 by pupils, and 5.36 by teachers. It can therefore be deduced that all the components in the model will require support of some sort for development in the schools, despite variations in their mean ranks.

4.2.6 Changes Suggested to the Model Components

Of the respondents, 98.9% (n=372) indicated that there was no need to add an extra component as the existing ones were adequate for their schools:

> *Nta nkingi zindi zikenewe kongerwa kuri uru rusobe ku ishuri ryacu, cyane ko izi hari zifata kuri byose k'ubuzima bwose bw'ishuri. Zirafata ku bintu byose bigize ubuzima bw'ishuri* (*Itsinda ry'abarimu ishuri ry'icyaro*, 36). [No extra components needed to be added on the model for our school; moreover, the existing components are exhaustive and all-inclusive. They cover the widest range of the essential aspects of school life. (Teachers group, Rural School, 36)]

A total of 1.1% (n=4) indicated the need to add extra components. A key informant, two groups of teachers and one group of pupils suggested that extra components could be included. The key informant from UNICEF suggested "child participation", the group of pupils suggested "dance and recreational activities", while one group of teachers suggested "local administration involvement in school programmes" and the other group of teachers suggested "school safety". Of the respondents, 12.5% (n=47) suggested that some of the model components could be grouped for their schools (see Table 14).
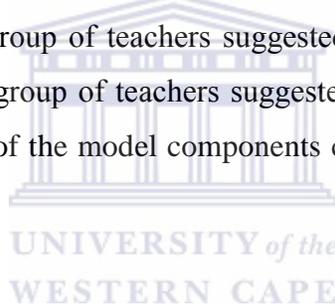
Table 14. *Grouping of Components* (n=47)

PARTICIPANTS					TOTAL	COMPONENTS
Principals **(n=13)**	**Teachers Groups*** **(n=11)**	**Combination**	**Pupils Groups*** **(n=8)**	**Parents Groups*** **(n=9)**	**Key Informants** **(n=6)**	**Total** **n (%)**
7 (14.9)	7 (14.9)	Pupil + Teacher we being	1 (2.1)	2 (4.3)	2 (4.3)	**19 (100%)**
6 (12.8)	4 (8.5)	School Health Policies + School Health Services	7 (14.9)	7 (14.9)	4 (8.5)	**28 (100%)**

* A group included either four teachers, four pupils, four parents.

4.2.7 Summary

In this section, the findings describing participants' understanding of the model and its components were presented. All participants, 100% (n= 376), indicated they understood the model and that the components were appropriate for their schools. All the participants prioritized the model components based on their school priorities, needs, aspirations and challenges apparent in their schools. The principals' priority components were in the sequence of school leadership and management, physical environment of school, pupil wellbeing, aim for solutions, teacher wellbeing, school health policies, school health services, and last, school partnership with parents, families and local communities. For teachers, the sequence of priority components were school leadership and management, the physical environment of the school, teacher wellbeing, aim for solutions, pupil wellbeing, school partnership with parents/families and the local communities, and last, school health services. Pupils' sequence of priority were pupil wellbeing, school leadership and management, school physical environment, aim for solutions, school health services, school health policies, school partnership with parents, families and the local school community, and last, teacher wellbeing. Parents' sequence was school leadership and management, the physical environment of the school, school partnership with parents, families and local communities, aim for solutions, teacher wellbeing, pupil wellbeing, school health

policies, and last, school health services. The key informants' sequence was school leadership and management, the physical environment of the school, school partnership with parents, families and local communities, and school health policies. The overall priority components across all the participant groups were in the following sequence: physical environment of school; school health services; aim for solutions; school partnerships with parents, families and wider local community; teacher wellbeing; school health policies and pupil wellbeing; and school leadership and management. Overall, all the participants expressed the need for the most support to least support to implement the model components in their schools as presented in details in table 13.

Only 1.1% (n=4) of the responses indicated the need for additional components and 12.5% (n=47) of responses indicated the need for some components to be combined. The model is presented in a funnel structure that shows the interrelationships between the components and how they influence and are influenced by each other for their overall interaction, which might lead to whole-school development and, in particular, address barriers to learning and promote healthy development of school-age children and wellbeing of the entire school community.
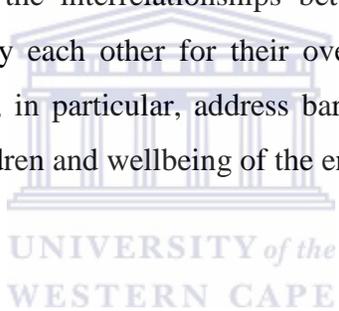
4.3 Discussion

In this section, the survey findings describing the participants' understanding of the proposed health-promoting school model for Rwanda is discussed, as presented in Chapter 3, in section 3.11.5, Figure 11. This was in response to RQ2: What are the participants' views of their understanding of the developed model and its potential use in their schools? The ecosystemic theory provides an organised framework to discuss the findings in relation to the literature consulted for this study. The discussion begins by grounding the findings in the ecosystemic theory (see Figure 13).
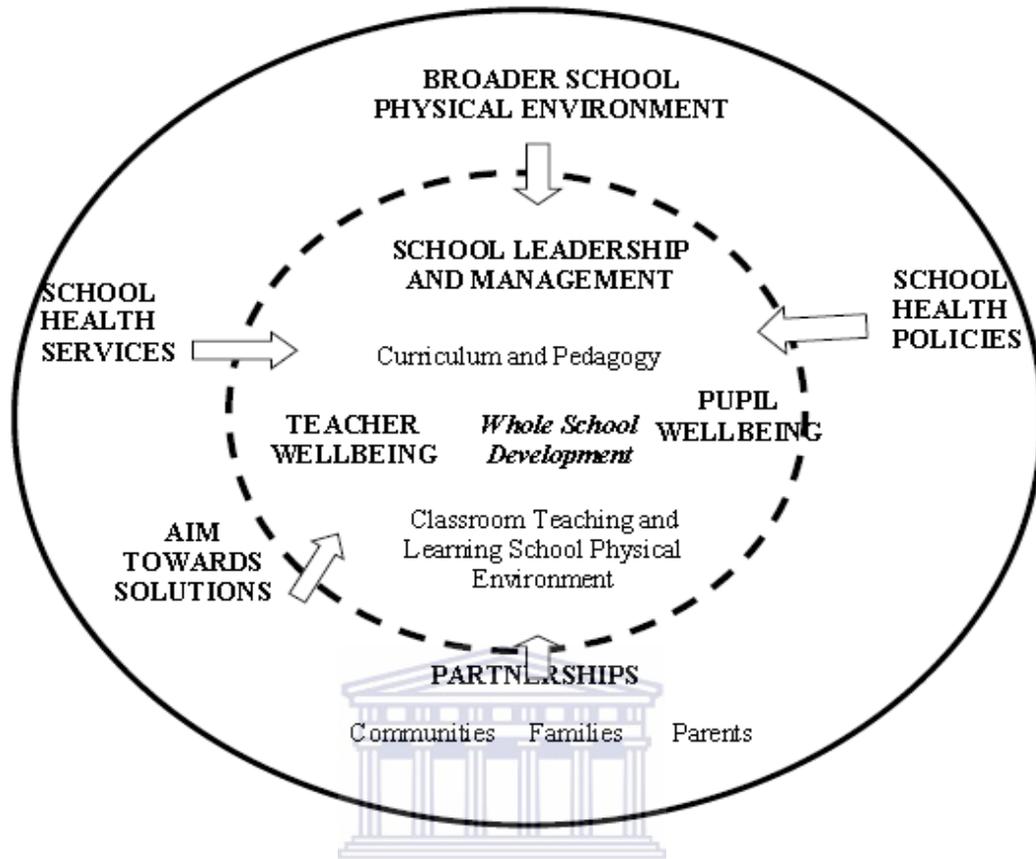
Figure 12. **The ecosystemic theory and the discussion of the findings of the study.**

The discussion is organised according to the following objectives: 1) the participants' understanding of the model and its components; 2) participants' views of the appropriateness of the model components for their schools; 3) participants' priority components in which they would need to start action in their schools to become HPSs; 4) the overall ranking of the model components in which they needed most support in developing to become HPSs; and 5) the changes to the model components suggested for its future use for their schools.

4.3.1 Demographic Findings

A national survey that involved 92 schools from all the provinces and Kigali City, across 29 of 30 districts in the country, was conducted. The model components concerned teachers, pupils and principals, parents and key informants from the Ministries of Education and Health and their line institutions and agencies working directly with schools, such as UNICEF and the WHO. These

individuals had particular knowledge either of the schools, interpersonal interactions between peers, colleagues, school administrators, neighbourhoods and communities as well the institutional and national factors and policies that influenced the overall functioning of the schools. Thus, a total of 1204 participants, 1196 school and 8 key informants, were surveyed. In all, 100% (n=376) administered questionnaires were completed, giving a 100% response rate. This high response rate can be attributed to the workshop approach in which the questionnaires were completed, immediately after the presentation. Most schools (60.9%) in the sample were large schools (1001-2000 pupils), with 79 rural and 13 urban. Schools in the study were predominantly rural, partly because public schools in the provinces were located in remote areas but also because there were few public primary schools in Kigali city, compared to public-subsidised schools, which offer 70% of the primary education.

4.3.2 Participants' Views of the Understanding of the Model and its Components

All respondents to the questionnaires, 100% (N=376), responded "yes" to the item that inquired about understanding of the model. In their qualitative comments, participants gave the following reasons why they understood the model: the workshop process approach; the simplicity and basic content of the components within the model; and the graphic representation of the model.

4.3.2.1 Use of workshop

Participants did not have prior knowledge or understanding of a health-promoting schools model concept, so it was necessary to present to them, through a workshop, the background information that had informed the model development. The workshop approach served as a mechanism to allow participation and involvement of all the stakeholders to express their views on their understanding the model and its components. Nilsson (2005) maintained that participants concerned about a programme should be given an opportunity to share their perspectives and their voices should be welcomed and mediated with a climate of open communication. As a result of their participation, participants were able to prioritise the components they would start action on and the components for which they would need most support in developing their schools to become health-promoting schools. The aim of using the workshops strategy was to empower

participants with a sense of ownership and collaborative spirit in matters concerning their schools.

The explanation provided during the presentation was claimed to have helped participants in the understanding of the model. At each participating school, the model and its components and the questionnaire were explained and presented to allow participants insight into the understanding of the model and its components. Pawson and Tilley (1997) supported the importance of giving an explanation of a programme to clarify participants' understanding. Although Pawson and Tilley did not refer to the workshop, they suggested that collecting data that is relevant involves testing the respondents on the particular programme or theory so that respondents can provide responses which show their understanding of the context at issue. Having insight into the model and its components, participants are able to respond in a particularly informed way.

The interactive group discussions that participants held during the completion of the questionnaire, in their small subgroups of four of parents or pupils and parents, offered them an opportunity to discuss the model and its components and to collectively reach a consensus for their response on course building based on the prior explanation gained from the presenter during the workshop session. In a study by Finch and Lewis (2003), they pointed out that when the group members have an understanding of the background information about the research subject, they are really engaged, informed and articulate about it. The group begins to work co-operatively and may be particularly keen to find common ground, to agree with each other, and to reinforce what others say and may deepen the commentary themselves. In addition, grouping participants of similar characteristics together might have contributed to more interaction and effectiveness within the group and to their ability to arrive at fair consensus since they had so much in common. Finch and Lewis (2003) asserted that participants tend to feel safer with, and may prefer being with, others who share similar characteristics, but this does not necessarily make for the fullest discussion.

Using the participants' primary language in the workshop presentation and design of the questionnaire, as well as in the preceding interactive group discussions, where they completed the questionnaire, facilitated participants' understanding of the model. They followed the

presentations and completed the questionnaire without any language difficulties. Arthur and Nazroo (2003) had stressed the need to use the language spoken fluently by the participants in order for them to carry out effective fieldwork without language difficulties.

4.3.2.2 Content of the model components

The relevance to the schools' practices, simplicity, and basic content of the model components were pointed out by the participants as having enabled them to understand the model. In terms of relevance, on the one hand, participants considered the components as familiar aspects of their schools and thus easy for them to understand. On the other hand, the relevance reflected the comprehensiveness of the model components. When the different aspects of the school's life have been identified, they can be taken out of the curriculum and become part of the school practices, so they can be addressed.

The ecosystemic theory provided an organised approach through which to examine these aspects in order to understand how the different components interact to collectively bring about the functioning and development of the school as a whole. Donald et al. (2010) observed that to understand a school as a whole system, the relationships between its different parts need to be examined. The relevance of the model components is confirmed by the fact that the model has an empirical basis as it was developed from home-grown ideas and the views of both school participants and the national departments' key informants, with the local knowledge of the schools' context, needs, priorities, problems and circumstances in which the schools operate. This is in line with Gray et al. (2006), who believed that the health-promoting schools idea should be developed in a way that suits the local context to reflect the local needs, interests, priorities and problems. The relevance of the model components to the local situation of schools is the main value inherent in the Rwandan health-promoting schools model.

The simplicity and clarity of the content of the model's components facilitated the participants' understanding of the model, as was proposed by Chinn and Kramer (2004; 2011). The model gains its clarity and simplicity from the context in which it was developed, as mentioned earlier, because the views and perspectives that formed the basis for the model development were from

individuals with the knowledge of the local context of schools, needs, challenges, priorities and aspirations. As Jensen and Simovska (2002) pointed out, every model is a result of dialogue and consensus among its constructors and has meaning within a certain value framework in a particular context.

4.3.2.3 Graphic representation of the model

The structure that depicted the model and its components (see Appendices S & T) was cited to have facilitated the participants' understanding of the model and its components. The structure is illustrative and descriptive of the working mechanism of the model's component. It mapped the inter-linkages and interdependence of the model components to show how each of the eight components is part of the whole school as a system and their collective effect is more than the sum total of its parts. The structure emphasises that the components in the outer rings of the circles contribute to the concept of the health-promoting school in the central circle (see Chapter 3, Figure 11). This implies that the health-promoting schools model was influenced by the collective output of the eight components, based on mechanism of their interaction. Jensen and Simovska (2002) have said that the principle of presenting health-promoting schools models is to adopt shapes and structures that are compatible with the environments in which they are developing.

4.3.3 Participants' views of the appropriateness of the model components for schools

Overall, 100% (n= 376) respondents to the questionnaires answered "yes" to the item concerning the appropriateness of the model components. Participants supported this choice with reasons that included the following: the model components facilitate insight into understanding the school; they facilitate understanding and identification of problems in schools; they facilitate planning interventions for change; and they facilitate the whole school development.

Taking a view through an ecosystemic lens helped in understanding how the eight components in the model interact interdependently to influence one another so that the whole effect is more than the sum of the components. Figure 15. shows that the model components are mutually supportive of each other. It is thus this interactive and interdependent relationship between components that

helped participants to learn and reflect more on their schools, thus understanding them better than before. The schools' general practices in Rwanda focus on classroom teacher-centred teaching (Balsera, 2011), which has diverted the schools' attention from the broader view of a school as an organisation. The fact that this model identified all the essential aspects of school life represented in in the eight themes provided schools with an opportunity have a broader view of their schools. Miluše (2002) reported similar findings from his study of the Czechoslovakian health-promoting schools model. The author identified as many areas of the school life as possible so that they may become part of the school health promotion programme. This was based on the understanding that what takes place unnoticed may become a source of serious risk, which may threaten or even impair health.

The model and its components provided an organised framework through which schools could base their school self-assessment to identify and understand problems they face in order to address them. Once the components are clearly identified, schools may use the model as a framework to guide their plans and approaches and develop policies on the eight components in the model to effect change in their schools. McBride and colleagues, in Australia, reported that HPS models facilitate the identification of critical areas for consideration to maximise the skills and efforts for planning and implementation for school-health promotion interventions The HPS model provides a valuable framework on which to base standards against which to measure the success (McBride et al., 1999). Jensen (2002) described the Danish health-promoting schools model as an organising framework through which various components that need policy development could be addressed through policy development.

The idea that the model components facilitate planning interventions for change in the schools is closely related to two previous findings, one about understanding the school and the other one related to the identification of the problems in schools. Having understood their schools' needs and priorities, it becomes easy for the schools to plan for interventions to bring about change in schools, to improve the current conditions in which schools operate, which, in return, would support learning, teaching and wellbeing. The model components are designed with an eco-holistic view of school environment, structures, organisation and procedures and policies (see Figure 13), where all the components collectively contribute towards the whole school's

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development. Buijs (2009) shared this view, sayingthat HPS models provide a systematic planning for structured interventions to bring about health and wellbeing and development of good relationships of all pupils, teachers and the whole school community.

In terms of the model components facilitating the whole school development, this is brought about by the comprehensiveness and holistic nature of the model components, as mentioned earlier. These components interactively influence and are influenced by each other to bring about the whole-school development and change, which answers Chinn and Kramer's (2004; 2011) question of how general this model is how important and accessible is and Chinn and Kramer's (2004; 2011) question of how important and accessible it is. The model is general in the sense that it holistically takes into account all the aspects of school life, which is in accordance with the health-promoting framework that touches every aspect of school life (Moon, 2000). Donald et al. (2002), too, maintained that health promotion in schools requires a comprehensive whole-school development approach involving all aspects of the school as an organisation with complex systems, as shown in Figure 15. Because of its comprehensiveness, this current model provides a framework that is useful for planning for change in schools. It offers a simple empirical framework that schools can use to guide school health promotion activities, assess progress and estimate the successes of their practice. McBride et al. (1999) asserted that HPS models simplify and support the complex process of encouraging schools to adopt health promotion as part of their organisational practices by identifying areas that bear on adoption and scope of activity.

4.3.4 Participants' Priority Component on which to Start Action to Become an HPS.

The findings on prioritisations of component shows that the components were mainly prioritised in the sequence of school leadership and management, physical environment of school, pupil wellbeing, aim for solutions, teacher wellbeing, school partnerships with parents/families and wider school community, school health services, and school health policies. The purpose of prioritising the model components was based on the understanding that the implementation of the eight components needs sufficient resources so that schools may not find it difficult to implement the model. Participants were therefore allowed an opportunity to prioritise the components on which they would need to start action to become HPS, based on their needs, priorities,

aspirations, circumstances and problems. This was done to avoid the risk of unrealistic implementation that undermines the credibility of the HPS if interventions are judged ineffective by the stakeholders and partners (Deschesnes et al., 2003). Viig and Wold (2005) and Deschesnes et al. (2003) suggested that implementation of a health-promoting schools model would be unsuccessful if schools find it requires significant change or if it is too large and ambitious, demanding and complex.

4.3.4.1 School leadership and management

School leadership and management was considered the top-most priority area on which schools needed to start action to become health-promoting schools. Teachers (30.3%), principals (28.9%) and parents (23.4%) had a high regard for the componebt of leadership and management. Moreover, pupils (15.2%) and key informants (2.1%) also chose the same component. Among the reasons they gave to support this finding were that it would a) set the vision and direction for schools' development; b) improve school relationships; c) improve co-ordination and supervision of school programmes and activities; and d) promote democratic values of collaboration, participation and partnership.

The participants chose to start action on school leadership and management with an understanding that it might help in setting the vision and direction for the school's development. Participants regarded school leadership and management as the catalyst to any school's development as without it, other aspirations would be hardly realised. Leithwood, Harris and Hopkins (2008) agreed that school leadership acts as a catalyst without which other beneficial things are quite unlikely to happen. Donald et al. (2010) claimed that at the heart of the school, as an organisation, is leadership, management and governance, the attributes that hold together and develop all the other aspects of the school. It is not possible to understand school leadership and management in isolation of the past history in which the former government institutionalised discrimination, oppression and social injustices, poor management and unequal distribution of national resources (Shyaka, n.d.). School administrators themselves participated in the genocide in public schools (Masire et al. 2000) and teachers fuelled hatred and perpetrated violence, leading to a total erosion of faith in the education system (Obura, 2003). It could be argued that

participants not only prioritised this component but were also sensitive to it because of the poor leadership and management that have characterised public primary schools. They therefore need effective and visionary leadership and management that will lead schools into their future. As Hoyle et al. (2008) noted, visionary and effective leadership and management are essential for articulating a vision, mobilising people, sharing that vision, empowering others and enabling collective action for the sustainability of a health-promoting school. The application of school leadership and management remains a complex and difficult responsibility in Rwandan schools. In effect, leadership and management roles are vested within the individual school principals, who have to manage finances and human and material resources that are always in short supply. The situation is complicated by a lack of the necessary leadership and management skills as they are not trained (Rwanda Ministry of Education, 2008b). Participants prioritised school leadership and management for its potential to improve relationships in schools. According to the findings of this study, schools are characterised by mistrust, lack of mutual respect and discrimination among the school community members. Leithwood & Beatty (2007) suggested that the principal is the most potent factor in determining school climate, which implies that his or her influence on the prioritisation of certain conditions within the school and associated variables is likely to make a difference. As already mentioned, due to the past legacy of discriminative and oppressive leadership, unhappy relationships may exist and have a profound effect on interpersonal relationships, particularly in schools.

Participants prioritised school leadership and management based on the understanding that it would improve the co-ordination and supervision of school programmes and activities. Leithwood and Jantzi (2005) observed that school leadership and management is responsible for the creation of productive working conditions for teachers and for fostering organisational stability. It deals with staffing, and provides instructional support, monitoring of school activities and buffering of staff against external pressures or distractions from their work. However, it could be argued that this description carries within it a narrow view of school leadership and management. For a school to develop, leadership responsibilities need to be widely distributed across the whole school, involving teachers, pupils, parents and principals because the old-school leadership approach of the 'leader-manager-followers' does not suit the current complex school

community needs, as leaderships has become more of a function and a practice than a role (Harris & Spillane, 2008).

The last reason why participants considered school leadership and management as the priority area was that it would promote democratic values of collaboration, participation and partnership. This holds true for schools wanting to become health-promoting and to achieve their goals, which requires the concerted efforts of all the stakeholders through collaboration, partnerships and participation:

> *Dukeneye ubuyobozi bufatanyiriza hamwe n'abarezi, abanyeshuri, ababyeyi n'abaturage ku buryo busesuye* (Itsinda ry'abarezi, ishuri ry'icyaro, 81). [We need leadership that works hand in hand with teachers, pupils, parents and the wider school community, without reservation. (Teachers group, Rural School, 81)].

This calls for the participation and involvement of all stakeholders and is a crucial aspect of the school's development, but it was found to be a missing element in the schools in the study. Fullan (2001) considered a school principal as the gatekeeper of change. School principals are capable of deciding to work with people or not because they are at the forefront of the schools' life. They also set the tone for positive collaborative relationships among the school community members.

4.3.4.2 The physical environment of a school

The physical environment of the school was cited as the second priority on which participants needed to start action to become health-promoting schools. The findings show that pupils 22 (28.2%) and principals 20 (25.6%) place more emphasis on this component, compared to parents, 17 (21.7%), teachers, 16 (20.5%) and the key informants, 3 (3.8%). Among the reasons they gave were to improve school hygiene and sanitary facilities; to improve school infrastructure; to maintain, repair and upgrade school infrastructure; and to develop and expand the school.

The schools in the study reported that they grappled with various infrastructural challenges; some are related to inadequate classrooms and others to basic amenities such as sanitary facilities in schools, issues of land shortage, poor maintenance and the poor state of the school's physical environment. However, all these challenges are associated with the legacy of the past which was

characterised by social injustices such as unequal distribution of national resources that favoured those in power (Shyaka, n.d). The effects of genocide went beyond human devastation to destroying even schools' physical infrastructure. According to Obura (2003), resources of all kinds were destroyed, and many school buildings were either used as slaughterhouses or as concentration camps. Schools were ransacked and destroyed, as was the Ministry of Education (Obura, 2003). Over three-quarters of nearly 1,800 primary schools were physically destroyed (Masire et al., 2000). The situation was exacerbated by rapid population growth that continues to make land shortage a public concern for Rwanda (Thaxton, 2009).

Participants from schools included in the study observed that they find it difficult to operate in an adverse physical environment that is not supportive of learning. It is against this background that participants thought of taking action on this component, to improve the conditions of teaching and learning. Schools grappled with lack of water and basic hygiene and sanitary amenities, such as insufficient toilets and their dirty condition, which expose school communities to environmental diseases and illnesses that compromise children's health and school attendance. Thaxton (2009) reportedsimilar findings—that access to safe water and sanitation are important health concerns in Rwanda. It is well documented that an appealing physical environment in schools contributes to the health and wellbeing of a school community and the learning outcome for school children. According to the WHO (2004), a "healthful school physical environment is one that protects students and staff against disease and promotes prevention of activities and attitudes against known risk factors that might lead to future disease or disability" (p.2). This reflects the participants' need for a physical environment at school that is conducive to the health and wellbeing of all those in school and safe and supportive of learning, teaching, living and playing. This is in accordance with the view that schools aspiring to become health-promoting often work to create a school environment that is more attractive, ecologically appropriate, civilised and user friendly (ENHPS, 1998).

In terms of improving school infrastructure, the views of respondents reflect the challenge of inadequate basic learning, teaching and working spaces, such as classrooms, staffrooms, offices and playgrounds, that impact seriously on schools' functioning. Not only did schools in the study lack the basic physical facilities, but the available physical structures were not maintained,

repaired or upgraded, which explains why they are in a poor state, insufficient and inevitably overcrowded. I observed that most schools in the study were nested within communities where no land was left for school expansion and with communities encroaching on the school land, a point also raised by the teachers of a rural school. The challenge of land shortage is not only a concern of schools but is also a national challenge, as land scarcity has forced people to settle on hillsides and fragile wetlands, leading to soil erosion (Thaxton, 2009).

4.3.4.3 Pupil wellbeing

An examination of this component shows that 56.1% (n=23) of pupils prioritised their wellbeing, followed by principals, 21.9% (n= 9), parents, 12.2% (n=5) and teachers, 9.8% (n= 4). This finding suggests that pupils, rather than other participants, place strong emphasis on their wellbeing. The reasons given for choosing this component were that healthy pupils learn well and adopt positive behaviours and relationships and that children's health is worth investing in because they are the future of the country.

Participants believed that healthy pupils learn well and adopt positive behaviours and relationships. Bad behaviour and poor relationships were cited as the current challenges affecting schools. It was emphasised by a school principal at an urban school that pupils who feel well and healthy learn and achieve better. They enjoy being at school and are likely to adopt positive behaviours that influence positive teacher-pupil relationships and mutual respect. As a result, these positive relationships encourage their learning and lead to better attainment and school enjoyment. As a result, school children, psychologically, develop a sense of self-worth and self-esteem, which promotes positive interpersonal relationships and behaviours. These findings also suggest that health and wellbeing of school children are human rights, social-justice imperatives and democratic values. This provides a firm justification for participants to choose to take action on pupil wellbeing.

> *Iyo abana baziko bitaweho ku ishuri bibatera imbaraga no kumva bahamye bakavamo abantu nyabantu biyitaho bikwiye bakita no ku bandi* (Umuyobozi w'ishuri ry'icyaro, 57). [Psychologically when pupils feel supported at school, they grow into resilient individuals who

are responsible enough to care for themselves and others. (Principal, Rural School, 57)]

The ecosystemic theory provides a holistic approach to understanding the psychosocial needs of children at different systemic levels of influences that contribute or constrain children's health, wellbeing and education outcome in Rwanda. The effects of genocide that devastated the country did not spare children. Williams et al. (2012) found that children in Rwanda were seriously affected by HIV/Aids, which some children acquired during the 1994 genocide through sexual abuse. The Ministry of Education, (2010) reported that a number of children suffer from varying degrees of malnutrition, HIV/Aids, and endemic poverty, emanating from social and economic deprivation that subjected the majority of children to situations that compromised their health, security and wellbeing. The study by Balsera (2011) found that Rwanda has the highest proportions of orphans and child-headed households, 10% of school-aged children live with disabilities and require special needs, and there are no resources or suitable infrastructure for these children in schools. The World Bank (2011) reported that school children in Rwanda learn in a poor, unsupportive learning environment because of inadequate and insufficient school infrastructure. These factors result in a learning breakdown, hindering children from benefiting from the free education policy as they impose difficulties in accessing education. The need to start action on pupil wellbeing is based on this background to the status of school children in Rwanda. By their nature, health-promoting schools are founded upon the social model of health and upon the principles of democracy. They create an environment which encourages personal and social development, and in so doing, better health. The whole approach empowers younger people; it is positive in outcome and achievement-oriented. Through equity, students are better able to reach their potential (WHO, 1997c).

4.3.4.4 Aim for solutions

After they learned that different factors affected teaching and learning for all children in schools, participants expressed the need to start action on pursuing an aim for solutions. The majority of the participants who chose to start action on this component were parents, 33.3% (n=11), followed by teachers, 24.2% (n=8), and principals, 18.2% (n=6). The qualitative findings from teachers' supports why they chose to start action on this component:

Mu mashuri yacu, hari ibibazo bitandukanye bibangamira ubuzima n'imyigire y'abanyeshuri bikenewe gukemurwa kugira ngo abana bishimire kuba ku ishuri, kandi bigeneza batsinde n'abarimu babo bishimire akazi kabo (*Itsinda ry'abarimu, ishuri ry'icyaro*, 2). [In our schools, pupils are faced with various factors that affect their health and their capacity to learn and which hinder them from achieving their full potential. Such factors need to be addressed to allow children to enjoy and benefit from learning and also to allow teachers to enjoy their job too. (Teachers' group, Rural School, 2)]

The factors that affect teaching and learning for all children in the schools in the study were said to be associated with the broader social and health issues that cause learning breakdown. These factors include the macro level issues of an inflexible and overladen curriculum and its delivery, in combination with those mentioned under pupil wellbeing. Consequently, children resort to survival strategies such dropping out or abandoning school, while others attempt vandalism to secure their basic needs. Others engage in risky behaviours, such as sex resulting in infection or in teenage pregnancy.

It is to be appreciated that participants made an effort to prioritise the 'aim for solution' component as an area of priority in order for their schools to become HPSs. The available evidence suggests that a health-promoting schools framework attempts to shape the whole school with positive outcomes for both health and education (Inchley et al., 2007; Lister-Sharp et al., 1999). Weare and Markham, (2005), Nutbeam, (1992), and Lister-Sharp et al. (1999) suggested that a health-promoting school takes into account various aspects of the school, not only offering the taught curriculum and pedagogic practices but also learning experiences that equip school children with competencies such as knowledge, attitudes, skills and positive behaviours that they need to protect their health. Collectively, these competencies enable young people to make healthy and informed decisions and choices about their health and that of others (WHO, 1997c).

The HPS model looks outwards to involve parents, communities, local health service providers, agencies and all relevant parties at all levels. It involves the government and education authorities to ensure that the total experiences of school life are conducive to the health of all who learn and work in schools (Weare & Markham, 2005). Although schools have been recognised as settings

that promote pupil wellbeing, schools can also offer an appropriate setting to promote teacher wellbeing.

4.3.4.5 Teacher wellbeing

The findings show that teachers, 55.6% (n=15), predominantly chose to start action on their wellbeing, more so than the other subgroup, parents, 22.2% (n=6), principals, 18.5% (n=5), and groups of pupils, 1.1% (n=1). The reasons for starting action on this component were that teacher wellbeing is a prerequisite to pupil wellbeing, healthy teachers are hardworking and productive, and healthy teachers assume responsibilities with ease.

Teachers in public primary schools of Rwanda face a multitude of issues. At the micro level, these inclue, among others, heavy workloads, lack of training and professional development, and lack of a support system at the classroom level, lack of incentives, poor working conditions and poor teacher management in schools. Other teachers' challenges include feelings of being undervalued or neglected, a lack of trust among teachers and in school administration, a lack of support either from the school leadership or parents and poor pay, all of which undermine teachers' overall job satisfaction, commitment and motivation and result in demoralisation (Ministry of Education, 2003; VSO, 2003; World Bank, 2011). These factors permeate down from the macro level, the policy level, to the micro level, because in Rwanda, schools are not autonomous; schools implement policies from the national Ministry of Education, which partly explains why they have little influence to enable them to address most of the factors at the micro level.

The two reasons that teachers gave for why they chose to start action on the teacher wellbeing component are not unusual but common sense. If any school wants to exploit its teachers' skills, talents and competencies, it should make teacher wellbeing a priority and part of school practice because everyone benefits when teachers feel well. As teachers said their wellbeing is a prerequisite to pupil wellbeing and that healthy teachers are hardworking and productive and assume responsibilities with ease: All too often, teachers' wellbeing is taken for granted, yet schools depend on teachers to achieve their educational goals:

Ninde uzateza imbere imyigire n'imyigishirize by'abana bose niba abarimu babayeho mu buzima bubi. Byose bihera ku mibereho myiza y'abarimu, nta kuntu wategereza umukamo ku nka ishonje, nta nubwo watekereza kuyikama (*Itsinda ry'abarimu, ishuri ry'icyaro*, 71). [Who is going to promote learning and teaching for all children if teachers are not well? It all starts from teachers' wellbeing; you cannot expect milk from a hungry cow, neither would you attempt to milk a hungry cow. (Teachers group, Rural School, 71)]

In the current study, teachers not only stressed the importance of their wellbeing but also the effects associated with ill-health among teachers. Teachers cannot be productive if their conditions of work do not allow them to be. If teachers suffer from ill-health, they cannot take initiatives to promote health and wellbeing of pupils. Many teachers suffer particularly from stress and often feel undervalued, either by school management, pupils, parents or the society (ENHPS, 1998). One of the issues raised wasa lack of support from parents. Although teachers play a crucial role in schools, they need to work collaboratively, in partnership with parents and local communities and agencies, in order to raise a child as a whole human being. Lemerle and Stewart (2005), McBride et al., (1999), and Samdal and Rowling (2011) agreed that teachers' health and wellbeing is an organisational asset that affects the school environment. It is not unusual that teachers, rather than the other participants, said their wellbeing was particularly important, given the scope of their responsibilities, duties and roles in schools.

Evidence drawn from the literature consulted suggests that teachers cannot be enthusiastic about health-promotion programmes in schools if they do not feel their own health is being promoted. They need constant support, from staff development programmes, from positive and helpful appraisal, and by having a voice in all aspects of school management and organisation (ENHPS, 1998). When teacher wellbeing is part of school practice, teachers feel supported and encouraged to promote the health of their pupils and their own health. Lemerle and Stewart (2005) observed that healthier teachers are more committed and provide a more positive learning environment for students as well as greater collegiality for all members of the school staff, a view consistent with teachers' views. Fortunately, the government of Rwanda believes that healthy teachers, with appropriate training, who are motivated and well supported are crucial for the realisation of quality education for all Rwandans now and in the future (World Bank, 2011). The current policy

on teacher development and management has given this area special attention to ensure that teachers are sufficiently supported to fulfil their duties and responsibilities (World Bank, 2011).

4.3.4.6 School partnership with parents, families and the community

A with other components in the model, participants indicated the need to start action on this component as their entry point to becoming health-promoting schools. Parents (63.1%) showed more interest in this component than teachers (15.8%), pupils (10.5%), principals (5.3%) and the key informants (5.3%). This finding suggests that parents have a greater interest in the education of their children, compared to the other participants. The reasons given to support this finding were that school partnerships would promote participation and collaboration with and recognition of all the stakeholders' roles; facilitate follow-up of children's education by parents; and promote parents' wellbeing and skills development.

Traditionally, Rwandan education had excluded parents, a fact reflected in the lack of a legal framework that accords parents and other stakeholders the right to be involved in the education of their children, which partly explains why parents have left education responsibilities to schools. The lack of a policy framework stipulating the roles and responsibilities of parents in schools constrains parents' willingness to work with schools. Second, at the micro level, lack of clear structures to involve parents makes partnership a difficult task for both schools and parents. The majority of the schools grapple with poor school leadership and management, particularly in the important areas of financial management and accountability (Rwanda Ministry of Education, 2010a). Although most of the schools have parents/teachers' associations, parents and community members who are not part of the PTAs are always unaware of the schools' programmes and activities, thus constituting an underutilised resource (Rwanda Ministry of Education, 2010b). Third, the legacy of the past that erodes the communities' interest and faith in education and schools in particular cannot be underestimated (Obura, 2003; Shyaka, n.d.). All these different systemic levels of influence undermine schools' efforts to collaborate with their communities in an effective way:

> *Ntibishoboka kugera ku mikorere inoze y'ishuri igihe abantu babaye banyamwigendaho. Amashuri yagombye gufatanya n'abafatanya*

bikorwa bose, baba ababyeyi, imiryango n'abaturage bose uruhare rwabo rugahabwa agaciro kugira ngo ishuri rigere ku nshingano zaryo (*Itsinda ry'ababyeyi ishuri ry'umujyi* 81). [It is impossible to achieve proper functioning of the schools when schools are working in isolation. Schools need to engage all the stakeholders. Parents, families and communities need to be involved and their roles recognised if schools are to fulfil their obligations. (Parents group, Urban School, 81)]

Other studies also emphasise the need for schools partnerships with parents and other stakeholders given the complex and dynamic educational and emotional needs of children. Hoyle and colleagues claimed that the mission of schooling cannot be realised in isolation; schools and their educators cannot do it all, nor can they do it alone. Schools cannot be expected to address the nation's most challenging health and social problems (Hoyle et al., 2008). This notion echoes the statement by the parents group in urban school 81 and the objective of the health-promoting schools model to endeavour to shift the traditional isolation of schools by interesting schools in collaboratively interacting with parents and their community. This will, however, require schools to make their partnership goals clear to, and consult with, parents about their involvement in schools. Schools also must ensure that their partnership goals are in line with the culture of the school, homes, families and community backgrounds from which children come if they are to win active support from parents (ENHPS, 1998). Deschesnes et al. (2003) found that the design of this partnership determines the participation and collaboration between the school community and those representing other community sectors. While the design of the partnership is in most cases neglected, ENHPS (1998) suggested that community participation and collaboration with schools is a two-way process and that schools have much to contribute as well as receive, but only if health-promoting schools take their community responsibilities seriously will partnership be possible.

Thomas et al. (1998) concluded that health-promoting school initiatives are most effective when true partnership is practised between schools, including pupils and teachers, all stakeholders and interested parties. When true partnerships are established, parents and the local community members are not only willing to participate in the schools' projects and training events but also to raise money for training and teaching materials and help to improve the school environment and

to lobby local officials for support. It would be appropriate to argue that effective partnership empowers teachers, pupils and parents, especially when all parties have clarity on their roles and feel welcomed, involved, valued and recognised. To this end, everyone needs to have a shared understanding of the needs and resources available that enable them to contribute meaningfully towards the welfare of pupils. Teachers and parents work alongside each other to improve the conditions of teaching and learning. Such close working relationships facilitate follow-up of children's education by parents, not only at school but also at home. This, in turn, allows children to exploit the opportunities offered by education to achieve their full potential and schools to achieve their mission of teaching and learning.

Another interesting reason that parents gave for prioritising this component was to was remind schools of their obligation to promote parents wellbeing as well. This finding is consistent with that of Turunen, et al. (2005), who proposed that schools could also be a health-promotion setting for parents and families and serve as a forum for dialogue between pupils and adults to share opinions and views of health issues collaboratively. Henricson and Roker (2000) challenged the perception that parents must meet all the needs of their growing children, pointing out that it is unlikely because many parents lack the knowledge, skills and competencies necessary to give their children the best upbringing. This is even more complex in the information era, with all the fast-growing technology that parents do not necessarily have access to.

Turenen et al. (2005) found that parents need more knowledge about issues affecting health. In other words, parents felt a sense of inadequacy in terms of the knowledge and skills they need to allow them make their involvement visible. School partnerships with parents and other stakeholders play a crucial role in the delivery of school health services by bringing their expertise and contribute to the running of school health services.

4.3.4.7 School health services

The findings concerning this component suggest that more groups of pupils (47%) considered taking action on this component than did principals (23.5%), parents (17.6%) and teachers (11.8%). The reason why participants decided to start action on this component was that such

services would promote health and wellbeing of school children and staff. School children in Rwanda continue to grapple with health and social issues (see section 3.9.8) that make health services in schools an urgent need:

> *Ibikorwa by'ubuzima mu ishuri n'ingenzi mu guteza imbere ubuzima n'imibereho myiza y'abanyeshuri n'abarimu igihe ibikorwa by'ubuzima by'ibanze bibegere kandi bakabibona bigamije kuvura no gukumira indwara n'imyifatire igira ingaruka k'ubuzima kugira ngo ishuri n'ibirikikije habe ahantu hateza imbere ubuzima kandi hanogeye imyigire n'imyigishirije* (*Itsinda ry'abarimu, ishuri ry'icyaro,* 42). [School health services are essential to promote health and wellbeing of school children and staff through availability and accessibility of basic health services for treatment and prevention of health compromising diseases, illnesses and risk behaviours, to ensure that the school environment is healthier and supportive of learning and teaching. (Teachers group, Rural School, 42)]

This finding reaffirms the importance of school health services in a health-promoting school. As posited by Jensen and Jensen (2005), a health-promoting school's overall aim is to improve the young people's ability to take action and generate change. It is clear that pupils had an understanding of what is important to them, despite the fact that, all too often, their voices are not listened to or heard. According to WHO (n.d.), school health services are provided for students, school personnel, families and community members and co-ordinated with members of the school and community to recognise and treat health problems resulting from exposure to environmental threats. The challenge that faces Rwandan schools today is that schools do not employ nurses, doctors, psychologists or social workers to deliver support services and health services to school children and staff, because such services are not part of the schools' practice. Schools neither have support services nor health services in place to cater for the health and emotional needs of school children and staff, despite the fact that most school children and staff suffer from psychological and mental health issues related to the trauma caused by the genocide and the war of 1994. This has caused family structural changes in which many children became orphans, others inherited poverty due to loss of family bread winners, children head families and take family responsibility that exposes them to multiple stressors, which school health services would help to curb. However, this cannot happen without a friendly policy environment to promote health services in schools, as emphasised by Bakir (2009), who contended that schools

need to create a healthy environment to ensure that students are learning in, and school personnel are working in, healthy environments supported by a school health policy. Fortunately, the government has developed the National School Health Policy, still in its draft form, after realising that various health and social problems in schools continue to undermine the efforts to achieve education for all. In the foreword, the policy states that it provides the legal framework for a comprehensive school health programme, designed to promote students' physical, social, psychosocial and educational development. The policy provisions address health, hygiene, environment, physical education, nutrition and diseases and prevention of use of drugs, but also mention offering guidance and counselling services to attend particularly to the psychosocial needs of children (Rwanda Ministry of Education, 2010b).

4.3.4.8 School health policies

The findings relating to this component show that 37.5% of the pupils and 31.3% of the principals, 25% of the parents and 6.3% of the key informants chose taking action on school health policies in order to become health-promoting schools. The reasons given to support this choice were twofold: first, to develop specific policies on the most pressing health, social and education issues in schools, and second, to use such policies to guide and co-ordinate interventions to bring about change in the entire school and beyond and to effect change in the wider local communities.

Participants, particularly principals, emphasised the need to develop specific policies on specific issues affecting schools:

> *Nta mabwiriza ku mirire no kugaburira abanyeshuri, ku kwirinda no gukumira indwara, ku imyigishirize kuby'ubuzima, ku isuku n'isukura, ku ibikorwa by'ubuzima mu mashuri, ikinyabupfura n'imyitwarire biranga abanyeshuri, ku gukumira ibisindisha, ibiyobyabwenge, ku uruhare rw'ababyeyi n'abaturage muri gahunda z'ishuri n'amahugurwa y'abarimu ku bikorwa by'ubuzima mu mashuri* (*Umuyobozi w'ishuri ry'umuyji,* 30). [We lack policy guidelines on school nutrition and feeding, disease prevention and health education. Hygiene and sanitary services, health services in schools, discipline and conduct of pupils, alcohol, drugs and substance abuse all lack policy guidelines. Parents and local community involvement in school

programmes, teachers' skills development and training suffer policy gaps. (Principal, Urban School, 30)]

This response suggests the need for the development of school health policies across the model components as well as translation of these components across the taught curriculum. School health policy is a core component of a health-promoting schools model and the vehicle for the implementation of health promotion programmes. It offers policy guidelines on where to base action on all the components within the model (Samdal & Rowling, (2011); Gray, Young and Barnekow (2006) and Hopkins (1996) claimed that components in a health-promoting school model components influence one another and all need careful policy consideration. As discussed previously, the chronological way that schools selected their priority components does not make any component more essential than the other but was only to rationalise their implementation and to guide the action plan. Consequently, Samdal and Rowling (2011) found that school health policies were central to the successful implementation of a health-promoting school programme. The written school health policies ensure that priority is given by the school leadership through facilitation and provision of resources to enhance the health initiative. Hoyle et al. (2008) found that supportive policies and procedures provide top-down support that fosters behaviour change in the system and for the individuals within the system. Supportive policies clarify the leadership and management structures, internal and external support, development and allocation of adequate resources and on-going professional development that provide organisational capacity to sustain health-promoting schools.

4.3.5. Participants' Ranking of the Model Components in Which They Needed the Most Support in Developing to become HPSs.

An item with a scale of 1-8, equal to the number of components within the model was devised. The lowest rank of 1 denoted most support and the highest rank of 8 denoted the least support. The ranking item was intended to allow participants to select the component in which they would need the most or the least support in developing, for their schools to become health-promoting schools. The components were ranked for support (greatest to least) as follows: physical environment of school, school health services, aim for solutions; school partnership with parents, families and the wider school community; school health policies; pupil wellbeing; and teacher

wellbeing; and school leadership and management, respectively. Important to note is that none of the model components was ranked needing the least support, but rather all the components in the model were regarded as needing the most support across the entire model for development of the whole school. This is congruent with the ecosystemic theory underpinning this study—that the whole is more than the sum total of all the parts. The school, as a system, is likely to be in balance if all the components are functional, and if one or some of the components is dysfunctional, it affects the model or the entire school as a system.

The school's physical environment was selected as the foremost component in which participants would need the most support in developing their schools, with the lowest mean average rank (see Table 11). Participants regarded the physical environment of the school as the core foundation for other aspects of school life and quality education, health and wellbeing, and if neglected or overlooked, the effects on all aspects cannot be over exaggerated. This finding, on the one hand, revealed how critical the physical environment of the school is in the schools in the study. On the other hand, this finding explains the issue of poverty in schools, whereby schools are unable to improve the school's physical environment because they do not have sufficient finances and therefore find it costly to address. Not only school participants identified the school's physical environment as a priority area needing the most support in developing but the key informants also commented:

> *Mu mashuri ya leta hakeneye ibikorwa by'ibanze by'ubuzima nkaho gukarabira mu rwego rwo guteza imbere isuku y'ibanze y'umubiri hitabwaho kugira amazi ahoraho mu ishuri. Ishuri ni ibirikikije kuri jye n'ibyibanze kandi n'ingenzi* (*Uhagarariye* UNICEF, 5). [In public schools, basic health facilities are required, starting with washing facilities, basic hygiene and the availability of water. The schools' physical environment, for me, is the most basic and essential. (Key informant, UNICEF, 5)]

Schools in the study reported inadequate physical environments in schools, aggravated by insufficient teaching and lack of learning facilities and essential amenities. These schools pose a threat to the health and wellbeing of the entire school community, hindering children from reaching their full potential by hampering their healthy development so they cannot flourish. Evidence from the literature review suggests that inappropriate physical environment will

contribute to poor health (St. Leger, 1999). The physical environment of a school and its health services are the major factors determining the health and social outcome of students and are also the factors which would have an impact on the determinants of health (Lee et al., 2005). Turunen et al. (2000), in a study in Finland, reported that the school's general infrastructure, comprised of a healthy and safe teaching and learning environment that fosters physical and mental safety during lessons, is essential in a school. Samdal and Rowling (2011) claimed that the philosophy underlying the HPS approach is that achieving change in the school environment can bring about change at the individual level.

The other lower ranked component needing most support in being developed was cited as the school health services (see Figure 11, Chapter 3): However, schools do not have the necessary resources and competencies to tap into this area. Teachers' lack of skills was cited as a major limitation which provides a strong justification for needing the most support in developing the health services component for their schools. McBride et al. (1999) referred to teachers as the agents of change in a school setting. It can be argued that primary school teachers' training does not provide them with sufficient exposure nor does it expose them to health-related knowledge, and as a result, teachers have limited knowledge, skills and attitudes with which to influence health services in schools. St. Leger (1998) found that for schools to realise the school-health services component, effective collaboration between teachers and healthcare professionals is crucial, to assist teachers in developing a health-related curriculum and understanding of the local health issues that should be addressed in the school curriculum. Particularly important is the training of teachers on health concepts and issues and also training them on the complexities of the health-promoting schools model.

The aim for solutions component was ranked as the third priority component needing the most support in developing an HPS (see Chapter 4, section 4.2.5):

> *Amashuri akeneye ubufasha cyane mu gukemura uburyo bubi*
> *abanyeshuri bigiramo n'abarimu bigishirizamo bica abana intege zo*
> *kwiga abana bakava mu ishuri bigatuma batiga bikwiye ngo bagere*
> *aho bifuza (Itsinda ry'abarimu, ishuri ry'icyaro*, 2). [Schools need the
> most support to address the existing harsh conditions of learning and

teaching that push pupils out of school and hinder them from achieving
their full potential. (Teachers group, Rural School, 2)].

Schools in the study struggled with a wide range of factors that cause learning breakdown and that call for redress if schools are to achieve their educational goals and the wellbeing of their communities. This, therefore, gives firm justification for participants ranking the aim for solutions component as needing the most support in developing in their schools, to become HPSs. Given the breadth and the impact of such factors on children's and school communities' health and wellbeing, it deserves the most support.

School partnership with parents, families and local communities, school health policies, pupil wellbeing, and teacher wellbeing fell in the middle, with close mean ranks, while school leadership and management was the lowest ranked component by the school participants, perhaps because they did not find it to be their concern because school leaders are overseen by the district. However, the key informants found it needing the *most* support in developing in schools, perhaps because it falls under their responsibilities and they are aware of the shortcomings, poor school leadership and bad management, apparent in schools. Overall, this finding suggests that the development of all components in the model need the equal support because none of the components was ranked at 8, to indicate least support. This, however, raises the concern that participants might have perceived the development of the model components in their schools as a new, discrete programme that was being added on. Other studies have also identified similar concerns; for example, St. Leger (2001) and Inchley et al. (2007) suggested that HPS should not be seen as a discrete endeavour but as a new way of thinking that permeates all aspects of school life and links to the core objectives of the school. Even if schools in the study are under resourced, they have the already existing structure of leadership and management (Hoyle et al., 2008). Teachers, pupils and parents are assets to their schools and the establishment of partnerships with the local community agencies and health-services providers can be initiated. They may start simple actions on the most pressing social and health problems, for example, keeping the school environment free of litter, one step at a time. Changing school climate does not require funds but does require a new way of thinking and doing things differently (WHO, 2000). The principle underlying a health-promoting approach is that schools are encouraged to

use their available resource, no matter how few or how many they may be. What is likely to be hard for the schools in the study is changing norms, values, incentives, skills and relationships within their schools to promote productive working relationships to enable them to work together (Inchley et al., 2007). Inchley et al. (2007) concluded that funding, although important, is not the most important support, but ownership, leadership, collaboration and integration are crucial to bringing about change in schools. To achieve these collaborative values, Samdal and Rowling (2011) suggested that preparation for readiness is crucial and effort needs to be made to ensure that stakeholders have shared values and beliefs that such an initiative is important for students' development and learning and will also influence the organisational climate of the school.

It is likely that the participants were overwhelmed by the complexity and comprehensiveness of the model components, and when judging it from their local context, needs and resources, such a holistic programme can be demanding (Hoyle et al., 2008; Tjmosland et al., 2009;). The findings show that the kind of support that participants cited included the need for better physical environmental structures in schools, which are supportive of healthy learning and teaching and that support mental safety (Turunen et al., 2000). Schools also need resources such as funds because they find it difficult to improve the school's physical environment without finances.

The other support highlighted was skills development for teachers, who said they had no understanding about school health services owing to lack of training and exposure. Inchley et al. (2007) posited that schools may struggle with any one of the components; thus, support needs to be tailored appropriately and attention needs to be given to the various factors that facilitate implementation of an HPS approach into practice, as without real change, development is unlikely to happen. Various health-promoting schools implementation studies have reported the need for support (Deschesnes et al., 2003; Hoyle et al., 2008; Samdal & Rowling, 2011). Different studies have used different concepts interchangeably for support, such as capacity building (Hoyle et al., 2008) and maintenance or sustainability (Tjmosland et al., 2009).

All four studies mentioned above, although conducted in different settings, show common ground about what support is needed for the implementation of a health-promoting schools initiative. Hoyle et al. (2008) described support mechanisms that are common to the other three studies and

included visionary and effective leadership and management; extensive internal and external supports; professional development and allocation of sufficient resources; supportive policies and procedures as well as on-going embedded professional development. In addition, Deschesnes et al. (2003) emphasised negotiated planning and co-ordination, which Tjmosland et al. (2009) referred to as *collaborative cultures* that support collaboration and productive working relationships in and outside of the school.

It can be seen that all the five forms of support are reflected in the model components, which is the strength of this model. The components are interrelated, synergistic and complementary to each other and hence reflect the possible pathways for the realisation of the support mechanisms highlighted in the literature. Overall, the model provides a wide array of organisational learning areas through which schools could learn to empower themselves. In order for this model to achieve its intended goal, all the components need to be developed (Deschesnes et al., 2003; Samdal & Rowling, 2011). Deschesnes et al., (2003) claimed that schools should be supported in developing these comprehensive programmes because of lack of support and because the interventions risk not being intensive enough to produce visible and long-term effects. It is essential to develop appropriate support in the form of resources, proper training and available time (Deschesnes et al., 2003).

4.3.6 Suggested Changes by Participants to the Model Components

To increase their participation, ownership and the collaborative democratic values that underpin the health-promoting schools practice (ENHPS, 1998), participants were told they were welcome to suggest changes that they deemed helpful for future use of the model. These included adding extra components to the model or grouping of model components they deemed to fit together. The majority of the participants (98.9%) indicated that there was no need to add extra components because the existing components adequately covered all the important aspects of their school life. This shows the comprehensiveness and holistic nature of the Rwandan health-promoting schools model. Only 4 (1.1%) of the participants suggested adding extra components that were not represented in the model (see Chapter 4 section 4.2.6), and these included *child participation*, suggested by the a key informant from UNICEF, *dance and recreational activities*,

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suggested by a group of pupils, *local administration involvement*, suggested by a group of teachers, and *school safety*, suggested by another group of teachers. However, all the suggested components could be considered as subsections of the broader components of the model.

Regarding the grouping of the model components, 12.5% (n=47) of the respondents suggested two combinations: "teacher wellbeing + pupil wellbeing" and "school health policies + school health services". Although these components sound closely related and fitting together, in reality, they differ, and grouping them may cause overlap or risking being hidden in the curriculum. It is clear that each particular component in the model serves a vital purpose and, although mutually supportive, they need to remain ungrouped. Taking the example of teacher wellbeing and pupil wellbeing, the needs are not exactly the same and factors contributing or undermining their wellbeing differ despite a grey line of some commonalities. The same argument applies to school health policy structures and health service structures. The grouping of the model components is not the best idea, and where it is done, it should be done with caution to ensure that important aspects of school life are not hidden or one developed at the expense of others, but rather made visible in order to be addressed and made part of school practice.

4.4 Final Model Structure

The model structure evolved through a diverse series of structures, based on the survey feedback about the participants' understanding of the model. The model structure presented in Chapter 3 (see Figure 1) illustrates the equal weight of the components of the model and how their interactive, synergistic, mutually supportive relationship contributes to a health-promoting school.
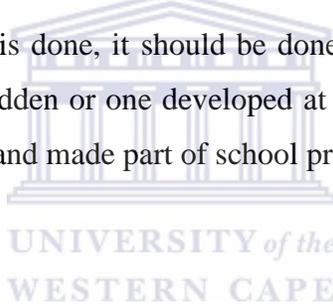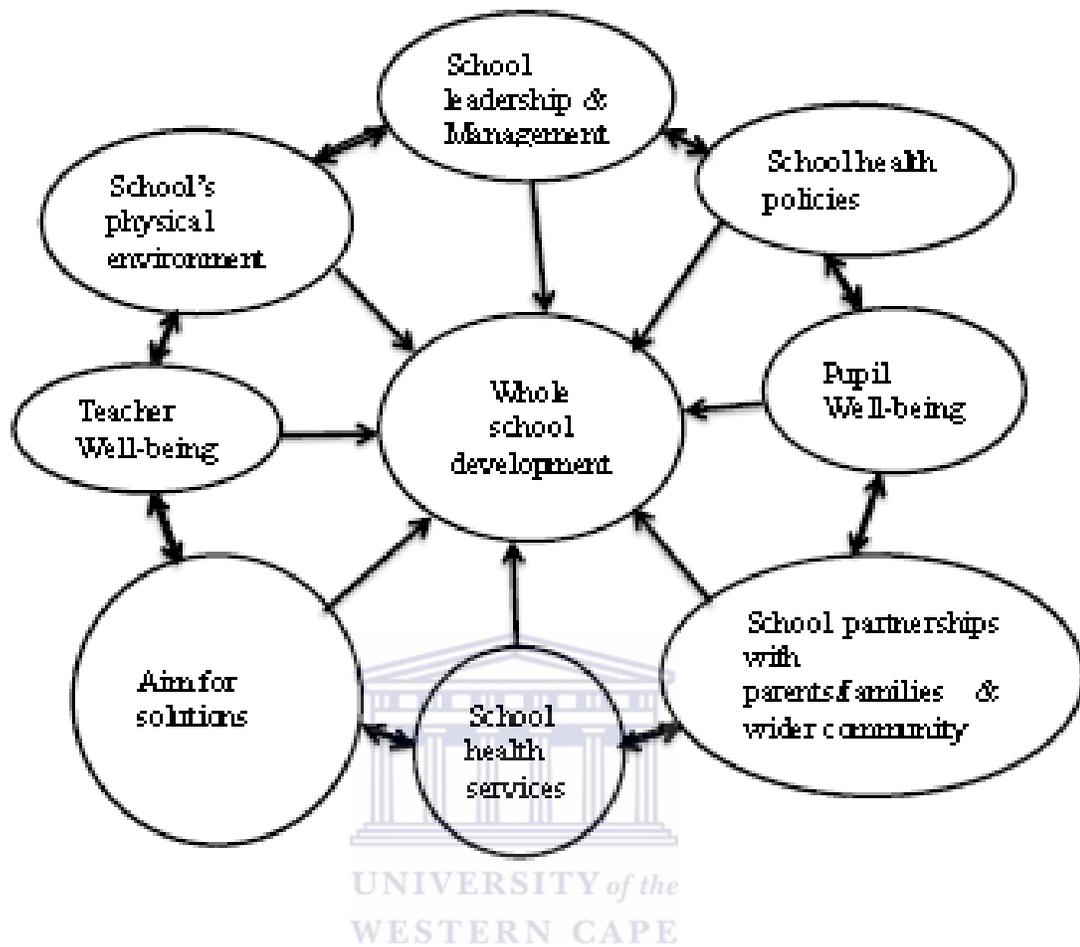
Figure 13. **The intermediate Rwandan health-promoting school model structure.**

However, after the survey feedback, the relationship between the model components became clearer in the sense that each component influences and is influenced by each other because of the interactive relationships between the components. In the new graphic representation (Figure 14), this relationship is illustrated by bi-directional arrows, but also it can be seen that the relationships between the components mutually support the sustainability of the whole school development. At this level, the core component changes from the health-promoting schools to whole-school development because this was the concept that frequently came out of the survey findings. Nevertheless, Figure 14 still could not be considered the final model structure because, from the participants' views and their understanding of the model, it became clear that some components were more influential than others were, although they were mutually supportive. It

can therefore be said that the structure of the model was decided on the basis of the relationships between components and how these relate to the core component of whole-school development.
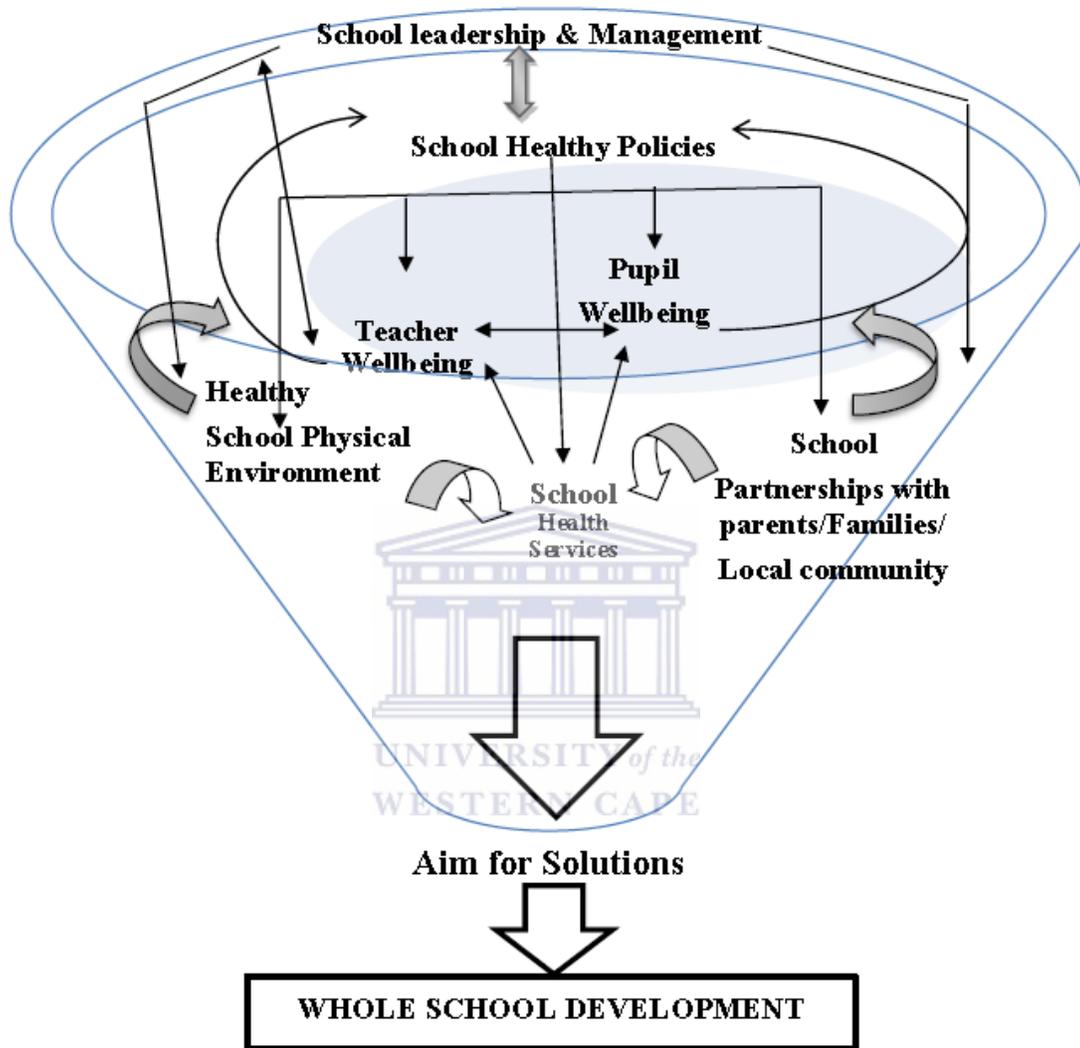
Figure 14. **The final structure of the health-promoting schools model for Rwanda.**

4.5 Reflections

The survey process and the use of the workshop strategy was a learning process. The process of conducting a nationwide survey involved the logistics of co-ordinating multiple activities and the technical work of data collection, which was a huge endeavour. The task of engaging with different socio-demographics of school communities became an interesting but complex and challenging exploration. To learn more from the participants demanded being welcoming, warm and simple, but also being careful not to lose the critical mind of a scientific inquirer. Unlike the key informants, each school in the study was unique, including its community, leadership and management styles, despite the commonalities. School participants and key informants alike actively participated in the workshops and openly shared their opinions and views about their understanding of the model and its components, despite constraints of time and busy school schedules. The data collection plan had to be flexible enough to accommodate participants' needs for convenience. Participants were co-operative and enthusiastic about taking part in the evaluation process and about a health-promoting schools concept. However, their excitement and interest in the model was a concern as they expressed high expectations for the model.

The whole process involved travelling long distances, carrying research materials, which I found exhausting. Nevertheless, every visit to and workshop in another school was a new experience and a learning opportunity. The exercise demanded my communication skills and a good rapport with the participants. The whole process changed my worldview of schools and their communities; their enthusiasm about the concept of HPS was a remarkable fieldwork experience. I am indebted to them all for their effort and participation in the survey. The 3 months experience in schools, interacting with school communities, has not only taught me what moral responsibility is all about but also the value of social justice for the protection and promotion of human rights, dignity, health, education and wellbeing, to enable school communities to flourish.

4.6 Limitations

The use of the workshop strategy in the data collection process was effective in bringing participants together to learn from them about their understanding of the model and its

components. It can also be said that the workshop strategy influenced the participants' understanding of the model in a way that would be different to a situation without the presentation.

The completion of the questionnaires using a group discussion contributed to the creation of knowledge, but at the same time, group members might have influenced each other's opinion, in contrast to when they answer individual questionnaires. The questionnaire used in the survey was developed because there was no standardised questionnaire in the field of the study on the current topic. This also entailed translation of the questionnaire from English, the source language, to Kinyarwanda, the target language, by the professional translators. It is acknowledged that these two aspects might have affected the quality of the questionnaire. However, all the necessary efforts were made to ensure the quality of the questionnaire.

4.7 Summary and Conclusion

This chapter presented an overview of Phase 2, the quantitative component of the study. A workshop survey strategy was used to evaluate the participants' understanding of the model and the components of the model. A response rate of 100% was achieved. The evaluation process was participant-oriented, so that the researcher could learn from them about their understanding of the model. Questionnaires were completed in a group discussion. Both quantitative and qualitative data were collected. Findings suggest that participants understood the model and components of the model and considered the model components to be appropriate for their schools. Participants decided to apply specific components of the model, based on their school's needs, priorities and available resources. Although all the components in the model were considered necessary for schools to develop, components most frequently mentioned as needing the greatest support were the physical environment of the school, school health services and the "aim for solutions" components. The ecosystemic theory provided an appropriate framework through which to discuss the findings as the integrated whole. The final model structure was presented.

CHAPTER 5 SUMMARY AND CONCLUSIONS

This chapter offers the overview and summary of the study. It presents specific recommendations in relation to themes that emerged from the study. The significance of the study as well as the limitations and the conclusion are presented.

5.1 Overview of the Study

Rwanda has made impressive progress, post-genocide, after suffering almost total collapse. Many children of school-going age are now attending school; however, only half complete primary school. Large numbers of orphans and disabled children and a growing number of children from child-headed households are living in poverty inherited from the past. Health problems, such as HIV/Aids, STIs, malaria, tuberculosis, enteric diseases, mental disability, hunger and malnutrition abound. Drug use and substance abuse, unwanted pregnancies, lack of support services, unavailability of teaching and learning materials, and an inflexible curriculum and poor teaching methodologies all lead to learning breakdown. It is against this background that this study was conducted to investigate the development of a health-promoting schools model to provide an appropriate strategy to address barriers to learning and to promote healthy development of school children in Rwanda. The following research questions were articulated for the study:

RQ1: How does a health-promoting schools model provide an appropriate strategy to address barriers to learning and promote healthy development of school-aged children in Rwanda?

RQ2: What is the participants' perceived understanding of the developed model and its potential use in their schools?

These questions were translated into the following two aims:

1. To develop a health-promoting schools model based on a health-promoting schools conceptual framework that is appropriate to address barriers to learning and to promote healthy development of school-aged children in Rwanda.

2. To evaluate the developed health-promoting schools model in public primary schools in order to describe the participants' perceived understanding of the model and its potential use in their schools.

The first six objectives, 1.1-1.6 below, were linked to the first aim, while the second aim was linked to objectives 2.1-2.5. To achieve the first aim of the study, the following objectives were set:

1.1. Identify the school health policies,

1.2. Explore the school's physical environment,

1.3. Explore the school's social environment,

1.4. Identify personal health skills,

1.5. Explore the integrated school-health services,

1.6. Explore the school and community links.
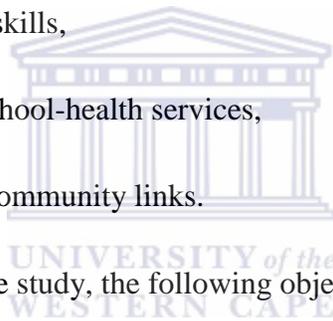
To achieve the second aim of the study, the following objectives were set:

2.1 To describe the participants' perceived understanding of the model and components of the model,

2.2 To describe the participants' perceived appropriateness of the model components for their schools,

2.3 To identify the component to which participants gave priority to start action on as entry points to becoming a health-promoting school,

2.4 To identify the participants' relative ranking of components in which they needed most support in developing to become a health-promoting school,

2.5 To identify the participants' suggested changes on the model components for its future use for their schools.

A mixed methods approach using both qualitative and quantitative methods was employed. The study was conducted in two phases.

Phase 1 of the study aimed at developing a health-promoting schools model based on a health-promoting schools conceptual framework that is appropriate to address barriers to learning and to promote healthy development of school-aged children in Rwanda. The qualitative component was conducted in four case-study schools, two rural and two urban. The study included a sample of 69 participants, 60 from the school community, who included principals, teachers, pupils and parents, and 9 key informants from the Ministries of Education and Health, local government and their line institutions and agencies working with schools, such as UNICEF. Data collection involved in-depth individual interviews, focus group discussions, a transect walk at schools and observations. Content analysis was used for qualitative data analysis.

The key findings from Phase 1 of the study were the eight themes that concerned the multiple realities of a school's health status and included the following:

1. school leadership and management,
2. school health policies, pupil wellbeing,
3. school partnership with parents,
4. families and the local communities, school health services,
5. teacher wellbeing,
6. the physical environment of schools, and
7. the factors affecting teaching and learning for all children.

The themes formed the components used to construct the health-promoting schools model that informed Phase 2, the quantitative component of the study.

Phase 2 was aimed at evaluating the developed health-promoting schools model in public primary schools in order to describe the participants' perceived understanding of the model and

its potential use in their schools. Phase 2 employed a cross-sectional survey using a workshop strategy to describe the participants' understanding of the model and its components. This was a national survey and covered all the five provinces and the districts of the country. The study sample included 92 schools, with 1196 individual school participants (principals, teachers, pupils and parents) and 8 key informants from the Ministries of Education and Health, UNICEF, and the WHO. A self-administered group questionnaire was employed in a workshop format, with one questionnaire per group of four persons, for teachers, pupils and parents. Principals answered the questionnaire individually. The number of questionnaires completed was 376. The quantitative data were analysed using the SPSS 19 version. The analysis involved descriptive statistics, frequency tables and percentages to summarise the data. The qualitative data were analysed to identify recurrent themes.

The findings in Phase 2 revealed that all the participants understood the model and its components. The factors that facilitated their understanding of the model included the following:

➢ the explanation they received from the workshop presentation,
➢ the interactive group discussion they held while they completed the questionnaire,
➢ the relevance of the model's components to aspects of their school life
➢ ,the simplicity and clarity of the model,
➢ the use of the Kinyarwanda language, and
➢ the graphic depiction of the model.

All the participants (n=376) indicated that the model's components were appropriate for their schools. They said that the model components facilitated insight into understanding the school, identification and understanding of problems in schools, planning interventions for changes in schools, and whole-school development.

For the prioritisation of the component on which to start action in the schools,

➢ 38.6% selected school leadership and management,
➢ 20.7% selected physical environment of the school,
➢ 10.9% selected pupil wellbeing,

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> ➤ 8.8% selected aim for solutions,
>
> ➤ 7.2% selected teacher wellbeing,
>
> ➤ 5.1% selected school partnerships with parents, families and communities,
>
> ➤ 4.5% selected school health services, and
>
> ➤ 4.3% selected school health policies.

The reason for selecting *school leadership and management* was that it sets the vision and direction for the schools' development, improves school relationships and improves co-ordination and supervision of school programmes and activities and it promotes the democratic values of collaboration, participation and partnership.

The reasons for choosing to take action on the *physical environment of the school* included the need to improve hygiene and sanitary condition of schools and maintaining, repairing and upgrading school infrastructure.

The reasons for selecting *pupil wellbeing* were that healthy pupils learn well and adopt positive behaviours and relationships, to make pupils' health and wellbeing a priority, and to ensure that pupils feel supported.

The reason for selecting the *aim for solutions* component was in recognition that various factors that affected teaching and learning for all children in schools needed to be addressed.

The reasons for choosing to start action on *teacher wellbeing* were that teacher wellbeing is a pre-requisite for pupil wellbeing, healthy teachers are hardworking and productive, and healthy teachers assume responsibilities with ease.

The reasons for choosing to start action on *school partnerships with parents, families and the local wider community* was that schools worked in isolation without co-operation and collaboration with all the stakeholders in education, which hampered the schools' functioning.

The reasons for choosing *school health services* was in an effort to promote health and wellbeing of school children and staff to enable them fulfil their duties and responsibilities.

The reasons for taking action on *school health policies* were the absence of specific policies on the most pressing health and education issues faced by schools, which needed policies to guide and co-ordinate school activities and practices.

The component in which the participants indicated they required the greatest support in developing was school's physical environment, for all participant groups (except key informants), followed by school health services and aim for solutions. The key informants (see Table 10) indicated that school health services, pupil wellbeing, school leadership and management as well as school health policies needed the most support in developing.

In all, 99% of the participants found there were sufficient components for their schools and indicated that there was no need to add extra components. Only 1.1% of participants indicated the need to include extra components, such as child participation, dance and recreational activities, involvement of the local administration in school activities and school safety.

The survey findings allowed the adjustment and refinement of the model structure that evolved through a series of structures, the initial model structure (Figure 11), the intermediate model structure (Figure 14) and the final model structure (Figure 15), based on the feedback from the participants. The participants' feedback not only led to the adjustment and refinement of the structure but also to changes to components in the model. For example, the component "factors affecting teaching and learning for all children" was reworded as "aim for solution" at the request of participants.

5.2 Significance of the Study

No empirical evidence about the schools' health status in Rwanda has been published. This study provides evidence to the Ministries of Education and Health policymakers that may assist them in making decisions about where to base their school health policy development.

This study will, it is hoped, contribute to physiotherapy practices by shifting the physiotherapists' focus from the biomedical model of health, which focuses on treatment and remedial interventions, to health promotion and disease prevention services and strategies. As part of the

interdisciplinary collaborative primary healthcare team, physiotherapists can facilitate health promotion in settings such as schools, communities, health centres and clinics in order to promote the health and wellbeing of the individuals and communities and populations to offset the strain on the over-burdened healthcare systems in Rwanda and further afield.

The study not only contributes to the practice of physiotherapy by calling physiotherapists to engage with individuals and communities in health-promoting programmes but also provides suggestions regarding viable tools to add innovation in health research and health promotion. Such suggestions include the use of mixed methods to corroborate evidence, the use of workshops in collecting data, the use of group-administered questionnaires in surveys and the use of transect walks. These methods aid in gathering evidence when integrated with interviews and focus group discussions. They are community friendly approaches that encourage participation, collaboration, teamwork, and empowerment of individuals and communities and which facilitate health promotion (WHO, 1986).

This study will add to the evidence available from research on the process of developing empirical models for health-promoting schools. It also demonstrates how to seek participants' understanding of these models for their potential future use.

The model that has been developed provides the framework on which schools could base their needs assessments, planning and actions to bring about change in schools. The Ministries of Education and Health, as well as the others interested in health-promoting schools, could use the model to guide their plans and interventions.

The study findings reinforce the need for intersectoral collaboration, particularly between the Ministries of Education and Health in school health promotion and between schools and their communities and other stakeholders. During the course of the study, a new instrument to evaluate the participants' understanding of the health-promoting schools, which other studies could replicate, was developed.

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The involvement of all the stakeholders contributed to my understanding of the important voices in the schools, adding to the richness of the data for the model development, and empowered participants to take ownership with a sense of teamwork and a collaborative spirit.

5.3 Limitations of the Study

The following limitations to the study were identified:

1. Collection of data was only at public schools, so semi-private and private schools may have different characteristics.
2. The questionnaire was completed immediately after the workshop presentation by the researcher and this might have influenced the participants' understanding of the model. This might be different if the workshop and completion of the questionnaire were done on different days. Time and resources did not allow this type of prolonged fieldwork.
3. The completion of the questionnaire in groups of school participants, with discussions, encouraged and stimulated them into thinking and enriching their opinion. It is likely that the discussions led to them influencing each other's opinions.
4. The majority of the sample of schools and participants in Phase 2 were rural (86%). This may limit the generalisability for urban schools.

5.4 Recommendations

The recommendations are based on the study aim to develop a health-promoting schools model that provides an appropriate strategy to address barriers to learning and to promote healthy development of the school-aged children in Rwanda. The following recommendations can be offered:

1. The Ministries of Education and Health should embrace the health-promoting schools model that has been developed as a framework for schools to minimise barriers to learning and should promote the use of the model in all schools.
2. Schools are advised to embrace the health-promoting schools framework and utilise the model that has been developed in their schools to assess their needs and plan actions to transform

schools into health-promoting settings supportive of teaching and learning and inclusive of all school children, in an effort to achieve education and health for all.

3. Training of the district- level education and health personnel and the school community in the health-promoting schools framework should be encouraged through a collaboration between government and the higher education institutions.

4. A strong district–school collaboration and partnerships in terms of capacity building and ongoing training of principals, teachers and parents about the importance of their collaborative roles in using the health-promoting schools framework to minimise the barriers to learning needs to be developed.

5. Capacity development of physiotherapists in competencies linked to health promotion and disease prevention as part of the multidisciplinary healthcare team to enable them to promote health of schools and communities is recommended.

6. The physiotherapy undergraduate curriculum should expose students to the social determinants of health of individuals, communities and groups through health promotion, using experiential learning by engaging with communities, including school communities.

7. Support for physiotherapy students to engage with the school community, using the health-promoting schools model and participatory action research that empowers communities needs to be provided.

8. Physiotherapy training should be shifted from a biomedical model of health to the psychosocial model of health, which acknowledges that health is not only influenced by individual factors but also by broader social determinants of health such as socio-economic factors, environment, interpersonal relationships and the political context.

5.5 Conclusion

The process of gathering information that involved the whole school community, including the pupils, parents, teachers and principals, during both phases of the study enabled them to learn more about many areas of their school's life. It was an opportunity for them to learn about and understand their schools. The model can thus be used by a school to increase understanding of the school's needs, priorities, challenges and circumstances.

The World Health Organisation's health-promoting school framework is useful in Rwanda to address barriers to learning and to promote healthy development of school-aged children. It takes a holistic ecological approach to addressing barriers to learning at multiple systemic levels of influence. It has the potential to influence school children's competencies, such as knowledge, skills, attitudes and positive behaviours that nurture children holistically to live fulfilled lives and to realise their full potential. A health-promoting school model embodies a whole-school development approach to influence the entire school environment, school ethos and climate. It has the potential to influence policy development and structural changes in the school as an organisation, such that all aspects of school life are taken out of the hidden curriculum to make them part of school practice. It can therefore be concluded that the health-promoting school model for Rwanda that has been developed through this research could provide an appropriate framework to address barriers to learning and to promote healthy development of school-aged children in Rwanda.

The health-promoting schools framework has the potential to influence partnership and collaboration between schools and parents, families and the local community, and in so doing, reduce barriers to learning and promote healthy development of school-aged children. The health-promoting schools framework also has the potential to influence intersectoral collaboration between education and health sectors to work together to promote the education and health of children at school. This would have a significant impact on education in Rwanda.

5.6 Dissemination of the findings

Upon completion of the study, a one day workshop will be convened bringing together all the key informants from relevant departments, participant categories from the case study schools and the district school management staff to present to them the study findings.

To advance the health promoting schools activities in schools in the country, case study schools will be used as cohort schools in which the health promoting schools model that has been developed from the study findings will be implemented.

It is intended that a summary of the study findings will be given to the Ministry of Eduaction and district education directorates across the country in order for them to have a clearunderstanding of the study findings.

In order to advance the work of health promoting schools in the country, a health promoting schools association for Rwanda will be initiated in collaboration with all the relevant stakeholders such that the association will oversee the health promoting schools activities and facilitate registration of the interested schools that wish to become health promoting schools by committing themselves to the work of health promoting schools in their schools.

It is intended also that upon the completetion of the study a health promoting schools newsletter will be published as a mechanism of disseminating the study findings.

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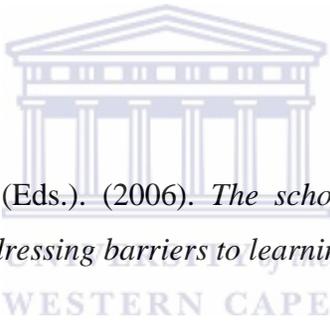
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APPENDICES

APPENDIX A (1): Rwandan Ministry of Education Permission to Conduct Study (English)

REPUBLIC OF RWANDA　　　　　　　　Kigali, the 44ᵗʰ.40./2007

MINISTRY OF EDUCATION
B.P. 622 KIGALI.

TO WHOM IT MAY CONCERN

Mr. **Egide KAYONGA NTAGUNGIRA** is a Rwandan student at University of the WESTERN CAPE in SOUTH AFRICA for the PhD program in Department of Physiotherapy , and he is carrying out a research on *"Health promoting schools educational support services: a model to address barriers to learning and development in Rwanda"*
The Ministry of Education has no objection to this and appreciate that new initiative to Rwandan Education system, and wish to request whoever may be concerned to assist him get any information relevant to this research.

Thank you.

Joseph MUREKERAHO
Minister of State in charge
of Primary and Secondary Education

Cc:
- Minister of Education
- Secretary General/MINEDUC
- Dr Patricia Struthers/Physiotherapy Department (UWC)
- Prof. Geert van Hove/Ghent University, Belgium

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APPENDIX A (2): Rwandan Ministry of Education Permission to Conduct Study (Kinyarwanda

REPUBULIKA Y'U RWANDA

Kigali, 09 JUL 2008

N° 9284/12.00/2008

MINISITERI Y'UBUREZI
P.O. Box 622 KIGALI

Madamu/ Bwana Umuyobozi w'Akarere (Bose)

Impamvu: Korohereza umushakashatsi

Madamu/Bwana Muyobozi,

Nejejwe no kubasaba korohereza no gufasha **Bwana Egide KAYONGA NTAGUNGIRA**, umunyeshuri wiga muri Kaminuza ya *Western Cape* muri Afurika y'Efpo mu cyiciro cya gatatu (PhD), mw'Ishami rya *Physiotherapy*, ushaka gukorera ubushakashatsi mu mashuri Abanza ya Leta ari mu Karere muyobora.

Mugire amahoro.

Théoneste MUTSINDASHYAKA
Umunyamabanga wa Leta Ushinzwe
Amashuri Abanza n'Ayisumbuye

Bimenyeshejwe:
- Madamu Minisitiri w'Uburezi
- Bwana Minisitiri w'Ubutegetsi bw'Igihugu
- Madamu Umuyobozi w'Umujyi wa Kigali
- Madamu/ Bwana Guverineri w'Intara (Bose)

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APPENDIX B: Consent Form for Individual Interviews (English)

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959

INDIVIDUAL CONSENT FORM

The study has been described to me in language that I understand and I freely and voluntarily agree to participate. My questions about the study have been answered. I understand that my identity will not be disclosed and that I may withdraw from the study without giving a reason at any time and this will not negatively affect me in any way.

Participant Name………………………..

Participant signature…………………………….

Date………………………

Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact the study co-ordinator:

Study Co-ordinator's Name: Egide KAYONGA NTAGUNGIRA

Kigali Health Institute

P.O BOX: 3286 Kigali

Telephone: (00250)572172/571968

Cell: (00250) O8649859

Fax: (002500) 571787

Email: kanegide@yahoo.fr

APPENDIX C: Consent Form for Individual Interviews (Kinyarwanda)

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959

KWEMERA KUGIRA URUHARE MUBUSHAKASHATSI

Ubu bushakashatsi nabusobanuriwe mururimi numva nkaba niyemereye kubugiramo uruhare ntagahato. Bansobanuriye ko ntamwirondoro wange uzakoreshwa murububushakashatsi habe n'amazina yajye, kandi nkaba igihe cyose nahagarika uruhare rwajye murububushakashatsi ntabisobanuro nsabwe kandi ntangaruka mbi byangiraho igihe icyaricyo cyose muburyo ubwaribwo bose.

Amazina yugize Uruhare………………………..

Umukono wugize uruhare…………………………….

Italiki………………………

Ugize ikibazo kubijyanye nububushakashatsi cyangwa ukeneye ibindi bisobanuro, usabwe kubaza uyoboye ububushakashatsi.

Amazina yuyoboye ubushakashatsi: Egide KAYONGA NTAGUNGIRA

Ishuli rikuru ry'Ubuzima rya Kigali

Agasanduku k'iposita: 3286 Kigali

Umurongo wa telephone: (00250)572172/571968

Cell: (00250) O8649859

Fax: (002500) 571787

Email: kanegide@yahoo.fr

APPENDIX D: Parental Consent and Pupil Assent Form (English)

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959

CONSENT FORM FOR PARENTS AND ASSENT FORM FOR PUPILS

The study has been described to me in language that I understand and I freely and voluntarily agree to allow my child to participate. My questions about the study have been answered. I understand that my child's identity will not be disclosed and that he/she may withdraw from the study without giving a reason at any time and this will not negatively affect him/her in any way.

Parent's name…………………….. Parent's signature……………………………….

Child's signature…………………………………… Date………………………

Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact the study co-ordinator:

Study Co-ordinator's Name: Egide KAYONGA NTAGUNGIRA

Kigali Health Institute

P.O BOX: 3286 Kigali

Telephone: (00250)572172/571968

Cell: (00250) O8649859

Fax: (002500) 571787

Email: kanegide@yahoo.fr

APPENDIX E: Parental Consent and Pupil Assent Form (Kinyarwanda)

Uɴɪᴠᴇʀsɪᴛʏ ᴏғ ᴛʜᴇ Wᴇsᴛᴇʀɴ Cᴀᴘᴇ

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959

KWEMERERA KUGIRA URUHARE NO KWEMERERA UMWANA KUGIRA URUHARE MU BUSHAKASHATSI

Ubu bushakashatsi nabusobanuriwe mu rurimi numva, nemeye ntagahato ko umwana wajye abugiramo uruhare. Ibibazo nabajije bijyanye nubu bushakashatsi babinsobanuriye kandi nsobanukiwe ibyubushakashatsi. Ntamwirondoro wajye cyangwa wu mwana wajye uzakoreshwa muri ubu bushakashatsi kandi nshobora guhagarika kugira uruhare muri ubu bushakashatsi igihe cyose abishatse ntabisobanuro asabwe kandi ntangaruka nimwe byamugiraho.

Umubyeyi……………………….. Umukono we…………………………………………

Umukono W'Umwana…………………………………Date…………

Uramutse ugize ikibazo icyaricyo cyose kiyjanye n'ubu bushakshatsi wa kigeza k'uyoboye ubu bushakashatsi, cyangwa hari ikibazo ugize wakimenyesha ku murongo wa wa telephone ikirikira:

Study Co-ordinator's Name: Egide KAYONGA NTAGUNGIRA

Kigali Health Institute

P.O BOX: 3286 Kigali

Telephone: (00250)572172/571968

Cell: (00250) O8649859

Fax: (002500) 571787

APPENDIX F: Interview Guide (English)

Interview guide for teachers, parents, principals, pupils and policymakers

1. Tell me about health in (your) school(s)?

2. Explain to me how (your) school(s) support promotion of health?

3. What factors affect health in (your) school(s)?

4. Are there health policies in (your) school(s) that guide school health-related activities and procedures? Tell me about this.

5. Can you tell me about the school's physical environment?

6. Tell me about the relationships/behaviour/discipline expectations/encouraged in (your) school(s)?

7. Can you tell me about the school links with parents/families and the community?

8. Can you explain ways in which community members get involved in school life?

9. Tell me about the school's health curriculum?

10. What school health services do you have in (your) school?

Prepared by: Egide Kayonga NTAGUNGIRA
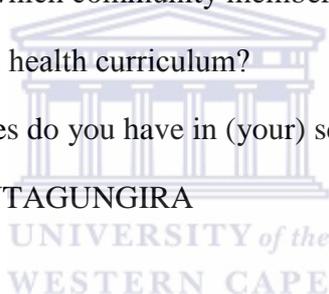
APPENDIX G: Interview Guide (Kinyarwanda)

Ingingo ziyoboye ikiganiro n'abarimu, ababyeyi, abayobozi b'amashuri, abanyeshuri

n'abayobozi mu nzego nkuru za leta.

1. Mbwira uburyo ishuri/amashuri (yanyu) ateza imbere ubuzima?
2. Mwansobanurira uko ishuri/amashuri (yanyu) riteza/ateza imbere ubuzima?
3. Tuganire ku byaba bibangamira ubuzima mu ishuri/mashuri (yanyu)?
4. Ese haba hari amabwiriza yerekeranye ni by'ubuzima mu ishuri/mashuri ayobora ibikorwa na gahunda by'ishuri?
5. Tuganire ku bidukikije mu ishuri?
6. Mwambwira ku bijyanye n'imibanire/imyifatire n'ikinyabupfura mu ishuri?
7. Tuganire ku bufatanye hagati y'ishuri n'ababyeyi n'imiryango n'abaturage?
8. Ni mu buhe buryo abaturage bagira uruhare mu buzima bw'ishuri?
9. Tuganire ku integanyanyigisho y'ubuzima?
10. Ni ibihe bikorwa by'ubuzima biri mu ishuri/mashuri?

Biteguwe na bwana: Egide Kayonga NTAGUNGIRA.

APPENDIX H: Phase One Data Collection Schedule 2008

Date/2008	Time	Activity	Venue	Methods	Person responsible
June	A month	Preparation: purchase of field-work materials developing the interview guide and translating it.	University of the Western Cape	Literature review Linguistic resource	Researcher Translator translate the interview guide
02/07	8h00	Granted permission	Ministry of Education	Follow-up	State Minister
03/07	9h00-12h00	Selection of schools at national level	Ministry of Education	Selection criteria	Ministry, Research
04/07	9h00-16h00	Recruitment and training of the research assistants	Kigali Health Institute	Workshop	Researcher
07-15/07	**GENOCIDE COMMEMORATION WEEK**				
16/07	9h00-12h00	Piloting interview guide	At a local school	Interview and group discussion	Researcher
17-18/07	2days	Follow-up with four district education directors	District office	Physical visit to districts to meet with education directors	Researcher
SCHOOL R1 DATA COLLECTION					
21/07	One day	Contact with principals	-	Phone calls	Researcher
22/07	9h00-10h00	1st visit to R1 to introduce Self and study, submit ethical documents, selection of participants, agree on data collection timetable and send out invitation for the transect walk and place request for the venue	R1 principal's office	Face-to-face meeting	Researcher and principal
23/07	14h00-15h00	2nd visit to R1 to finalize timetable and confirm the venue, availability of participants for the for transect walk.	At R1	Face-to-face meeting	Researcher, principal and deputy.
24/07	9h00-10h30		At R1	A tour around and within the school, observing and taking notes.	Participants and researcher
24/07	11-12h30	Presentation of transect walk findings. Participants summarise findings in their subgroups, each groups present to others to achieve consensus for use	At R1 in a classroom	Workshop presentation	Participants
25/07	9h00-10h30	R1 Interview with teachers	At R1 in a classroom	Focus group discussion	Researcher
28/07	9h00-16h00	Transcription of teacher's interview and observation field notes	Kigali Health Institute	Word processor	Researcher

29/07	9h00-10h30	R1 interview with pupils	R1	Group discussions	Researcher
29/07	14h00-15h30	R1 interview with parents	R1	Group discussion	Researcher
30/07	9h00-16h00	Transcribe pupils' interview	Kigali Health Institute	Word processor	Researcher
31/07	09h00-16h00	Transcribed parents interview	Kigali Health Institute	Word processor	Researcher
01/07	09h00-10h00	Individual interview with R1 principal	R1 Principal's office	Individual interview	Researcher
01/08	14h00-18h00	Transcribe principal's interview	Kigali Health Institute	Word processor	Researcher
SCHOOL R2 DATA COLLECTION					
04/08	9h00-10h00	1st visit to R2 followed same procedure as R1	R2	Face-to-face meeting with principal	Researcher and principal
05/08	14h00-15h00	2nd visit to R2 same procedure as R1	R2	Face-to-face meeting with principal	Researcher and principal
06/08	9h00-10h30	Transect walk with principal, teachers and pupils	R2	Hovered around and within school, observing and taking notes of whatever observed	Participants and researcher
06/08	11h00-12h30	Participants presented, discussed and consented findings for use	R2	Workshop presentation	Participants and researcher
07/08	9h00-10h30	Interview with teachers	R2	Group discussion	Researcher
08/08	9h00-14h00	Transcribe teacher's interview	Kigali Health Institute	Word processor	Researcher
11/08	9h00-10h00	Interview with pupils	R2	Group discussion	Researcher
11/08	14h00-15h00	Interview with principal	R2	Individual interview	Researcher
12/08	9h00-14h00	Transcribe pupils' interview	Kigali Health Institute	Word processor	Researcher
13/08	9h00-14h00	Transcribe R2 principal's interview	Kigali Health Institute	Word processor	Researcher
SCHOOL U1 DATA COLLECTION					
14/08	9h00-10h00	1st visit to U1 followed same procedure as R1	U1	Face-to-face meeting with principal	Researcher and principal
15/08	14h00-15h00	2nd visit to U1 same procedure as R1	U1	Face-to-face meeting with principal	Researcher and principal
16/08	9h00-10h30	Transect walk with principal, teachers and pupils	U1	Hover around and within school, observe and take notes	Participants and researcher
16/08	11h00-12h30	Participants presented, and consented findings for use	U1	Workshop presentation	Participants and researcher
17/08	9h00-10h30	Interview with teachers	U1	Group discussion	Researcher
17/08	14h00-18h00	Transcribe teachers' interview material	Kigali Health institute	Word processor	Researcher
18/08	09h00-10h30	Interview with pupils	U1	Group discussion	Researcher
18/08	14h00-18h00	Transcribe pupils' interview	KHI	Word processor	Researcher

19/08	09h00-10h30	Interview with parents	U1	Group discussion	Researcher
19/08	14h00-18h00	Transcribe parents' interview content	KHI	Word processor	Researcher
20/08	09h00-10h30	Interview with principal	U1	Individual interview	Researcher
20/08	14h00-18h00	Transcribe principal's interview content	KHI	Word processor	Researcher
SCHOOL U2 DATA COLLECTION					
21/08	9h00-10h	1st Visit to U2 as for other schools	U2	Face-to-face meeting with school principal	Researcher
22/08	14h-15h0	2nd visit to U2 as for other schools	U2	Face-to-face meeting with school principal	Researcher and principal
25/08	9h00-10h30	Transect walk with all the participants	U2	Hovered around and within the school, observing and took notes of whatever observed.	Participants and researcher.
25/08	11h00-12h30	Participants presented, discussed and consented findings for use	U2	Workshop presentation	Participants and researcher
26/08	9h00-10h30	Interview with teachers	U2	Group discussion	researcher
26/08	14h00-18h00	Transcribe teachers' interview material	KHI	Word processor	Researcher
27/08	09h00-10h30	Interview with pupils	U2	Group discussion	Researcher
27/08	14h00-18h00	Transcribe pupils' interview	KHI	Word processor	Researcher
28/08	09h00-10h30	Interview with parents	U2	Group discussion	Researcher
28/08	14h00-18h00	Transcribe parents' interview content	KHI	Word processor	Researcher
29/08	09h00-10h30	Interview with principal	U2	Individual interview	Researcher
29/08	14h00-18h00	Transcribe principal's interview content	KHI	Word processor	Researcher
Key informants' interviews					
01-05/09	5days	Preparation for interviews with key informants and agreeing on interviews schedules	Respective Ministries and agencies	Face-to-face meeting with lead Ministers and Heads of institutions and agencies	Researcher
08/09	09h00-10h00	Interview with education official 1	Ministry of Education	Individual interview	Researcher
08/09	12h00-16h00	Transcribed the of education official 1	Kigali Health Institute	Word processor	Researcher
09/09	9h00-10h00	Interview with Education official 2	Ministry of education	Individual interview	Researcher
09/09	14h00-18h00	Transcribe interview education official 2	KHI	Word processor	Researcher
10/09	9h00-10h00	Interview with education official 3	Ministry of Education	Individual interview	Researcher
10/09	12h00-16h00	Transcribe interview content of official 3	KHI	Word processor	Researcher
11/09	09h00-10h00	Interview with Education official 4	Ministry of Education	Individual interview	Researcher

11/09	12h00-16h00	Transcribe interview content with education official 4	KHI	Word processor	Researcher
12/09	11h00-12h00	Interview with UNICEF official	UNICEF Head Office	Individual interview	Researcher
12/09	14h00-15h00	Interview with Social welfare official	Ministry of Social Welfare	Individual interview	Researcher
13/09	09h00-16h00	Transcribe two interview contents	KHI	Word processor	Researcher
15/09	**Public Holiday**				
16/09	09h00-10h00	Interview with Health official I	Ministry of Health	Individual interview	Researcher
16/09	12h00-13h00	Interview with Ministry of Health official II	Ministry of Health	Individual interview	Researcher
17/09	09h00-17h00	Transcribe the data	KHI	Word processor	Researcher

UNIVERSITY *of the*

WESTERN CAPE

APPENDIX I: Sample of Interview Transcript Coding

Open coding	Axial coding	Selective coding

Researcher: Tell me about health in primary schools in Rwanda

Learning & teaching conditions

Participant: Well, health in schools is affected by various problems that schools have. We have the problem of overcrowding of many children per classroom 74:1 and obvious pupils will not get the individual attention and support and[pedagogy]] not enough teachers, but also the quality of teachers, teachers are not qualified and do not understand child centred methodology[Pedagogy]. there are issues in the curriculum. Curriculum is overloaded. Teaching does not involve children in their learning to feel empowered [Disengaging learning]. Teachers do not know the students by names [Weak teacher-pupil bond], or those frequently absent or not paying any attention, or the special needs of orphans and the vulnerable children and particularities of gender lots of issues. Rwanda has very high proportion orphans and vulnerable children and many schools are unable to cater for them and other priorities come to their families. For example this is a poor student who has to drop out of school for different reasons [Poverty] even though there is fee free education [policy] there still other cost to schools like textbooks and uniforms. We are concerned with are quality and quantity of latrines for boys and girls because this has been a problem especially when it comes to the issue of retaining girls [Toilets]. We have a very high dropout rate particularly girls, orphan and vulnerable children despite high national enrolment rates, many pupils drop out at key grades 3, 4 and 5 before they complete primary education as a result of schools failure to cater for their needs. Things beyond the school means such few textbooks and not enough buildings [Inadequate teaching and learning resources and materials] and few that are there are not child friendly [Inappropriate infrastructure]. Pupils walking long distances, but by and large the children in the school are from the local community but there is lack of collaboration among parent and the schools. The issue of poor pay for teachers has been the for a couple of years. The issue of school heads and manager's lack of skills in leading and managing schools and do not really believe in themselves and demotivated.[Unskilled and demotivated school heads and managers]

Overcrowded classrooms

Factors affecting teaching a

Unsupportive pedagogy

Disengaging pedagogy

High proportions orphans /vulnerab

Poverty at home

Insufficient toile

Fee free policy

Inadequate instructional

School

Inappropriate scho

School partnerships

Long distance betwee home and school

School leadership

Lack of collaborati between scho parents

Teacher

Unskilled demotivate

School physical

APPENDIX J(1): University Of The Western Cape Ethics Permission (2008)

FACULTY OF COMMUNITY AND HEALTH SCIENCES

Private Bag X17, Belville, 7535
South Africa
Tel: +27 (0) 21 959 2163
Fax: +27 (0) 21 959 2755
E-mail: csjohnson@uwc.ac.za

HIGHER DEGREES COMMITTEE

11 April 2008

TO WHOM IT MAY CONCERN

Dear Sir/Madam

Research Project of MR EGIDE KAYONGA NTAGUNGIRA (Student Number: 2465727)

This letter confirms that Mr Ntagungira is a registered student in the Faculty of Community and Health Sciences at the University of the Western Cape.

His research proposal entitled *"Building a health promoting schools conceptual framework as a strategy to address barriers to learning and to promote healthy development in Rwanda"* submitted in fulfilment of the requirements for his PhD degree in Physiotherapy has been examined by the Higher Degrees Committee and found to be of high scientific value, methodologically sound and ethical.

We fully support the research and kindly request that you allow him access to your organization.

Sincerely

DR GAVIN REAGON
Chairperson: Higher Degrees Committee

UNIVERSITY *of the* WESTERN CAPE

APPENDIX J(2): University of the Western Cape Ethics Permission (2010)

**OFFICE OF THE DEAN
DEPARTMENT OF RESEARCH
DEVELOPMENT**

11 February 2010

To Whom It May Concern

I hereby certify that the Senate Research Committee of the University of the Western Cape has approved the methodology and the ethics of the following research project by: Mr. EK Ntagungira (Physiotherapy)

Research Project: Building a health promoting schools conceptual framework as a strategy to address barriers to learning and to promote healthy development in Rwanda

Registration no: 08/2/20
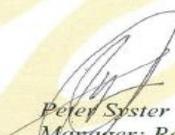
Peter Syster
Manager: Research Development Office
University of the Western Cape

UNIVERSITY *of the*
WESTERN CAPE
A place of quality, a place to grow, from hope to action through knowledge

APPENDIX K : Kigali Institute Review Board Ethics Clearance

KIGALI HEALTH INSTITUTE

B.P. 3286 Kigali, RWANDA
Tel: + (250) 572172; +250 571788
e-mail: deanehd@khi.ac.rw

Institutional Review Board

20th January 2012

Ref: KHI/IRB/9/2012

Mr. Egide KAYONGA NTAGUNGIRA
KHI

Dear Mr Egide KAYONGA

RE: ETHICS CLEARANCE

Reference is made to your application for ethics clearance for the study entitled *"Building Health Promoting Schools Conceptual Framework Model as a Strategy to Address Barriers to Learning and to Promote Healthy Development of School-Age Children in Rwanda"*.

You will be pleased to learn that the ethics clearance has been granted to your study by the KHI Institutional Review Board (IRB) on behalf of the National Ethics Committee (NEC) in accordance with the authority granted to the IRB by the NEC letter of 13th May 2010.

You shall, be required to submit the progress report and any other major changes made in the proposal during the implementation stage. Also, at the end of the study the Institutional Review Board shall also require to be given a final report of the study.

I wish you success in this important study.

Kigali   Health Institute
K.H.I
Faculty of Allied Health Sciences

Prof. Kato J. NJUNWA
Chairperson, KHI Institutional Review Board

CC:
- Rector, KHI
- Vice Rector, Academics and Research, KHI
- Chairperson, Rwanda National Ethics Committee
- Members of IRB

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APPENDIX L: Letter Requesting Permission to Conduct the Study in the Public Primary Schools in Rwanda

DEPARTMENT OF PHYSIOTHERAPY

Private Bag X17, Bellville 7535
South Africa
Telegraph: UNIBELL
Telephone: +27 21 959 2542/6
Fax: +27 21 959-1217
E-mail: jfrantz@uwc.ac.za
Website: www.uwc.ac.za

1st October 2007

The State Minister
In-charge of Primary and Secondary Education
Ministry of Education
Rwanda

Dear Minister

NTAGUNGIRA KAYONGA Egide: Student number 2465727

This letter serves to confirm that Mr Ntagungira is registered for his Doctorate in Physiotherapy at the University of the Western Cape, South Africa.

His two supervisors are myself, Dr Patricia Struthers, from the Physiotherapy Department at the University of the Western Cape, and Professor Geert van Hove, from the Education Faculty at Ghent University, Belgium.

The research topic that has been identified is: **Health promoting schools and education support services in Rwanda**

The development of health promoting schools has become increasingly acknowledged internationally as an effective way of working towards whole school development within an inclusive education system. The World Health Organisation defines a health promoting school as: *"A health promoting school is a school that is constantly strengthening its own capacity as a healthy setting for living, learning and working."*

Internationally, education support services, including physiotherapy (Mr Ntagungira's profession) help to identify and address barriers to learning and development to help learners learn and build an inclusive education system.

I trust that NTAGUNGIRA KAYONGA Egide will be able to work closely with the Ministry of Education in achieving his research objectives and to build an inclusive education system in Rwanda. I hope he will be given permission to work in the schools to achieve his goal.

Yours faithfully

Dr Patricia Struthers
Supervisor

cc   Minister of Health
      Ministry of Local Government, Good Governance, and Social Affairs

UNIVERSITY *of the*
WESTERN CAPE

A place of quality, a place to grow, from hope to action through knowledge

APPENDIX M: Model Validation Survey Questionnaire (English)

Part one: School profile

1. School name---------------------------------------Distric ---------------Sector-------------
Province

2. School setting: 1. Urban 2. Rural

3. Your responsibility in school? 1. Pupil 2. Teacher 3. Parent 4. Principal ------------------

4. How many pupils enrolled this year 2011:1. Male -------2. Female

5. The youngest pupil?----------yrs and oldest pupil -----------------------------

6. How many teachers does the school have? 1. Male--------------2. Female----------------

Part two: Participants understanding of the model

1.Do you understand this Model and its components?

   1. Yes   2. No

Please explain your answer

…………………………………………………………………………

2. Do you think that the model components are appropriate for your school?
   1. Yes   2. No

Please explain your answer…………………………………………………

3.If these model components are appropriate for your school which component (s) would it be best for your school to start action for your school?.
   Please explain why……………………………………………………………………………….

4. Indicate which model component you think needs the most support to the least in developing in your school on a scale of 1 to 8: 1 implying the greatest support needed and 8 least support needed.
Please explain your answer…………………………………………………………..

5. Is there any other component (s) of your school that you think should be included on this model?
1. Yes
2. No

6. If so, what is it?

7. Do you think that any of the model components need to be grouped together for your school?
1. Yes
2. No
Please explain your answer……………………………………………………

8. If so, which components 'fit' together? Please tell me the first member----------------and the second member--------------

Thanks for taking time to complete our survey

APPENDIX N: Model Validation Survey Questionnaire (Kinyarwanda)

URUTONDE RW'IBIBAZO BY'UBUSHAKASHATSI

Igice cya mbere : Umwirondoro w'ishuri utangwa n'ubuyobozi bw'Ishuri

1. Izina ry'ishuri--------------------akarere ----------Umurenge------ Intara-------------------------
------

2. Ishuri ribarizwa hehe? 1. Mu mujyi 2. icyaro

3. Ushinzwe iki mu ishuri? 1. Umunyeshuri, 2. Umwarimu, 3. Umubyeyi, 4. ikindi sobanura -
----

4. Ishuri rifite abanyeshuri bangahe uyu mwaka 2011?---------1.Abahubgu--------------2.
Abakobwa.........

5. Mubanyeshuri umuto cyane angana ate?-------------umukuru cyane anga ate?------------------
----

6. Ishuri rifite abarimu bangahe?----------------igitsina gabo--------------igitsina gore-------------
----

Igice cya Kabiri: Ibibabazo nyirizina by'ubushakashatsi

1.Ese musobanukiwe neza ururusobe n'inkingi zi rugize ? 1. Yego 2. Oya Sobanura impamvu
....
....

2. Ese musanga izi nkingi zigize uru rusobe zose uko ari umunani (8) muzikeneye mu ishuri ryanyu ?

1.Yego   2.Oya   Sobanura impamvu..

3. Ni iyihe nkingi mwifuza gutangira ku ishuri ryanyu kugirango ubuzima bw'abagize ishuri bwitabweho?   Sonabura   impamvu   ku   nkingi utanze..

4. .Erekana inkingi mwifuza ko mwafashwamo cyane ku gipimo◄——————► 8, 1 isobanura gufashwa   cyange,   8   ubufasha   busanzwe.   Sobanura impamvu..

5. Hari indi kingi cyangwa izindi nkingi by'umwihariko ku ishuri ryanyu itabonetse mu nkingi zigize ururusobe musanga ya kongerwaho ku rurusobe? 1.Yego   2.Oya

6. Niba ari yego ni iyihe ---
----

7. Muratekereza ko hari inkingi za shyirwa hamwe ebyiri ku ishuri ryanyu ? 1. Yego   2. Oya.
Sobanura
impamvu..

8. Niba mubona ko hari izashyirwa hamwe ebyiri kandi ni izihe? Iyambere -----------
Iyakabiri-----------

Murakoze cyane gusubiza ibibibazo, mugire amahoro na kazi keza

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959

INFORMATION SHEET

Project Title: Building a health promoting schools conceptual framework model as a strategy to address barriers to learning and to promote healthy development of school-aged children in Rwanda.

What is this study about?

This is a research project being conducted by Egide KAYONGA NTAGUNGIRA at the University of the Western Cape. We are inviting you to participate in this research project because you are a very important part of this study. The study aims to develop a health promoting school model for Rwanda as a useful framework at which schools would base their plans and actions as well as interventions to address barriers to learning and to promote healthy development of school-aged children and the entire school community in Rwanda. Your participation in this study is very important, the information you will give will help us to design a health promoting school model**.**

What will I be asked to do if I agree to participate?

You will be asked to participate in the interviews, discussions, workshops, transect walk exercises that are intended to provide the information for the model development. This will involve identifying factors that contribute or constrain health in (your) school that will help me to develop a the model The whole process of data collection will take two hour maximum and will take place at the school and at the offices of the key informants and Kigali Health Institute for the workshop for the Key informants. Some refreshments will be served.

Would my participation in this study be kept confidential?

We will do our best to keep your personal information confidential. To help protect your confidentiality, no individual names will be used when the information on the study is written up. There will be no information that may personally identify you.

In accordance with legal requirements and/or professional standards, we will disclose to the appropriate individuals and/or authorities information that comes to our attention concerning child abuse or neglect or potential harm to you or others.

What are the risks of this research?

There are no known risks associated with participating in this research project.

What are the benefits of this research?

This research is not designed to help you personally, but the results will help the school and investigator to learn more about the health status of the school community. We hope that, in the future, the pupils and teachers might benefit from this study through improved understanding of health promoting schools and inclusive education and of course schools will use the developed model to plan interventions and actions to address barriers to learning and health development of the school community.

Describe the anticipated benefits to science or society expected from the research, if any.
The study will benefit the Rwandese community by providing data on schools' health status. This information can be used for developing school policies. It can be used to initiate health promoting schools in Rwanda. This will make schools healthy environments for working, learning and living. The model that will be developed will provide a useful strategy to address barriers to learning and to promote health development of the school-aged children and the entire school community.

Do I have to be in this research and may I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify. Participation in this study is

voluntary and withdrawal from the study is permitted at any time if the participant wishes without any penalty.

What if I have questions?

This research is being conducted by Egide KAYONGA NTAGUNGIRA**,** Physiotherapy Department at Kigali Health Institute**.** If you have any questions about the research study itself, please contact Egide KAYONGA NTAGUNGIRA [Kigali Health Institute, P.o Box 3286 Kigali**,** Tel: (+250) 08649859**,** e-mail: kanegide @yahoo.fr

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please don't hesitate to contact Mr. Egide KAYONGA NTAGUNGIRA on the above address.

This research has been approved by the University of the Western Cape's Senate Research Committee and Ethics Committee.

APPENDIX P: Participant Information Sheet (Kinyarwanda)

UNIVERSITY OF THE WESTERN CAPE

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IBISOBANURO K'UBUSHAKASHATSI

Ese ubu bushakashatsi bugamije iki?

Ubu bushakashatsi burakorwa na Bwana Egide KAYONGA NTAGUNGIRA, Umunyeshuri muri Kaminuza ya Western Cape. Mutumiwe kugira uruhare muri ubu bushakashatsi kuko ibitekerezo byanyu ari ingira kamaro kugirango dushobora kugera kuntego y'ububushakashatsi. Ubu bushakashatsi bugamije gushakisha uburyo ibibazo by'ubuzima mu mashuri abanza bibangamira imyire n'imyigishirize bya kemurwa. Ubu bushakashatsi rero bugamije kugaragaza uburyo ki ibi byakorwa arinayo mpamvu mutumiwe kugirango ibi bigerweho, aruhare rwanyu n'ingenzi.

Ese ninemera kugira uruhare muri ubu bushakashatsi, ni iki nzakora?

Uzasabwa kugira uruhare mu biganiro utanga ibitekerezo kubijyanye n'ubuzima mu ishuri/mashuri. Hari ibikorwa byinshi biteganijwe haba kuganira mu matsinda. Haza korwa urugendo ku bari mu mashuri rugamije kumenya ishuri ryanyu cyane. Ibi bikadufasha gukusanya ibibazo bibangamiye imyigire n'imyigishirize n'imikurire myiza ku bana. Kuba babarizwa muri za Ministeri ibiganiro biza korerwa ku ma biro yabo mu rwego kuborohereza. Kugikorwa rusange cy'ikiciro cya kabiri cy'ubu bushakashatsi kizakorerwa ku ishuri rikuru ry'ubuzima rya Kigali KHI mu cyumba K'inama. Haza tangwa amafunguro kubateganijwe kugira uruhare muri ubu bushakashatsi.

Ese kugira uruhare muri ubu bushakashatsi byaba mu buryo ntamwirondoro wajye wagaragazwa?

Tubijeje ko tuza kora ibishoboka byose kugiranga ntihagire umwirondoro wanyu ugaragara. Kugirango ibi bigerweho nta mazina yanyu aza koreshwa ahariho hose ndetse no muri raporo y'ububushakashatsi. Kumpamvu zo kubahiriza amategeko birashoboka ko haramutse hari impamvu igaragaza ko hari ihohoterwa rikorerwa abana cyangwa n'abandi bantu bakuru, ubuyobozi n'abandi bireba babimenyeshwa.

Ese hari ingaruka byangiraho ndamutse ngize uruhare muri ubu bushakshatsi?

Nta ngaruka zizwi bijyanye no kugira uruhare muri ubu bushakashatsi.

Ese n'izihe nyungu ziteganijwe ngize uruhare muri ubu bushakshatsi?

Ubu bushakashatsi ntabwo buteganya inyungu bwite, ariko inkuru mutanga izafasha gushakisha uburyo ibibazo bibangamira imyigire n'imyigishirize bya kemurwa. Gutyo bigatuma amashuri aba meza agateza ubuzima bw'abana, abarimu, ababyeyi ndetse n'abaturage imbere.

Ese ubu bushakashatsi bufitiye izihe nyungu society Nyarwanda?

Ubu bushakashatsi buzafasha gushyira ahagaragara ibibazo by'ubuzima mu mashuri ndeste bunafashe buteganye n'uburyo byakemurwa. Bityo bifasha kutegura amabwiriza n'amategeko ajyanye n'ubuzima mu mashuri. Urusobe rutenganijwe, ruzafasha amashuri gutegura gahunda zateza imbere ubuzima mu mashuri, cyane cyane hitawe k'ubuzima bw'abana.

Ese nshobora guhagarika kugira uruhare muri ubu bushakashatsi?

Kugira uruhare muri ubu bushakashatsi ntagahato, ushobora kwemera kugiramo uruhare cyangwa kutarugira, cyangwa se ugahagarika kugira urugare igihe cyose ubishatse ntangaruka byakugiraho nagato.

Ese mfite ikibazo?

Uramutse ufite ikibazo wa bimenyesha bwana Egide KAYONGA NTAGUNGIRA*,* Ishami rya Physiotherapy Department at Kigali Health Institute, P.O Box 3286 Kigali*,* Tel: (+250) 08649859*,*

e-mail: kanegide @yahoo.fr

Ugize ikibazo kibangamiye uburenganzira bwawe bijyanye no kugira uruhare muri ubu bushakashatsi wa bimenyesha:

Umuyobozi:

Dean of the Faculty of Community and Health Sciences:

University of the Western Cape

Private Bag X17

Bellville 7535

Ubu bushakashatsi buraziguye kandi bwemewe n'amategeko agenga ubushakashatsi.

APPENDIX Q: Workshop Programme for Phase 2 (English)

9h00: Arrival of the participants and consensus of housekeeping rules

1. Each one of us must feel free to express his/her opinion.
2. There is no right or wrong answer; all ideas positive and negative are important to understand.
3. We shall respect each other's ideas and treat each other with respect.
4. While someone is talking, we should not interrupt him/her; whoever wants to contribute should indicate it by raising the hand.

9H30-10H30: Workshop presentation of the background information about the model development, the model and its components.

10H30-11H00 Feedback from the participants, questions and answers.

11H05-11H30: Tea Break

11H35-12H30: Presentation of the survey questionnaire.

12H35-13H30: Split into groups and questionnaire completion.

Prepared by: EGIDE KAYONGA NTAGINGIRA

Date……………../……………./ ……………….

Thank you
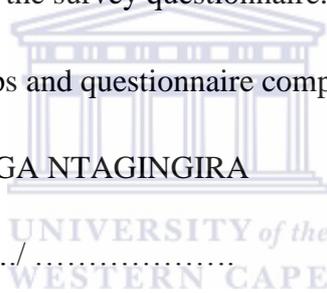
APPENDIX R: Workshop Programme for Phase 2 (Kinyarwanda)

WORKSHOP PROGRAMME

9h00: Kwakira abatumirwa no kubicaza kumvikana ku buryo turibukorane.

1. Buri wese asabwe kwisanzura agatanga ikitekerezo ke uko abyumva.
2. Igitekerezo cyose gifite akamaro ntagihejwe.
3. Igihe uhawe ijambo akivuga dusabwe gutuza, umuntu aka vuga aruko ahawe ijambo.
4. Kubahiriza uburenganzira bwa buri wese no kubahiriza igitekerezo gitanzwe n'ingenzi mu kudufasha kumva ibitekerezo bya buri wese.

9h30-10h30: Ikinaniro n'abatumirwa basobanurirwa ibijyanye n'ushakashatsi, uko urusobe rwibatwe.

10h30-11h00 Ikiganira no kubaza ibibazo ndetse no kunganirana kubyaganiriwe.

11h05-11h30: Ikiruhuko

11h35-12h30: Kuganirira abatumirwa urutonde rw'ibibazo by'ubushakashati.

12h35-13h30: Igikorwa kuzuza urutonde rw'ibibazo mu bushakashatsi.
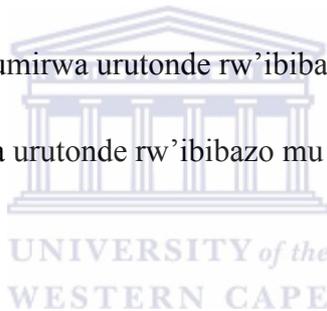
Biteguwe na: EGIDE KAYONGA NTAGINGIRA UMUSHAKASHATSI.

Taliki…………../……………./ ……………….

MURAKOZE.

APPENDIX S: Participant Information Sheet (Kinyarwanda)

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959

I am Egide KAYONGA NTAGUNGIRA a doctoral student from Physiotherapy Department, Community and Health Science Faculty, University of the Western Cape, South Africa.

In 2008 I visited four public primary schools; two rural and two urban schools to hold conversations with school directors, teachers, pupils, parents and the key informants from the national departments of education and health to find out their lived experiences and perceptions about their schools being healthy places conducive for learning and teaching.

After looking at all the information from directors, teachers, pupils, parents and the informants from the ministry of education and health, I came up with this picture to understand a health-promoting school in Rwanda.

The information picture
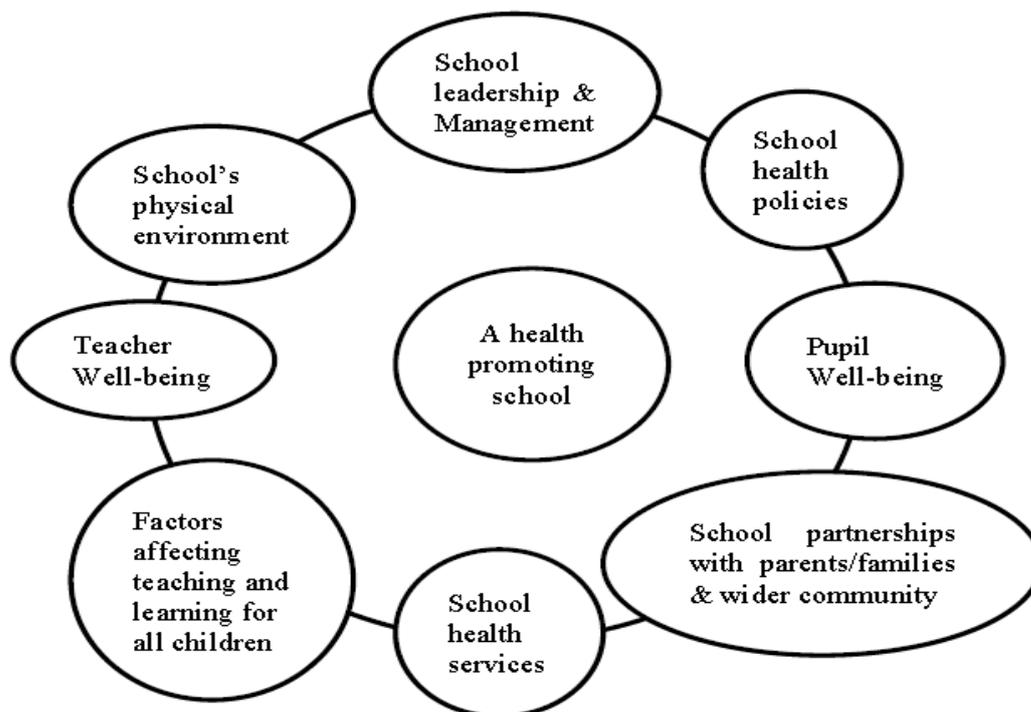
Positive relationship between principals and teachers as well as parents, trust and mutual respect among school community members, impartial treatment of school community as equals, openness and information sharing, acknowledge, recognize and reward teachers for efforts and the job well done, reward and recognition of pupils' achievements, sense of belonging and responsibility among teachers and pupils, positive interaction between teachers and school community members, listening and valuing school community ideas and opinions, collegiality among teachers, involvement of school community in decision-making, conducive and nurturing environment for teachers development

School land, Classrooms, Classroom resources and facilities, offices and staffrooms, library, Toilets, Water, playgrounds, recreational and sports facilities, school boundaries, fence, school sign-post & school gates and school safety.

School feeding, inclusive education, non-physical punishment, automatic promotion and girl child education.

Relationship among and between pupils, Pupil-teacher pupil's attitude towards learning and disciplinary procedures in school.

Conducive and nurturing working environment, teacher-salary, living conditions, teacher morale, motivation, commitment and devotion to job, teacher in-service training, upgrading opportunities, flexible work loads, professionalism, impartial treatment of teachers by community and the society, positive relationship among and between teachers, trust & mutual respect between teachers, collegiality & sense of cooperation and information sharing among teachers.

Parental involvement, parent communication with teachers, parents' educational background, parents support for learning at home, family size, parents' attitude towards children with disabilities access to education.

Pedagogy and pupil participation, language, teacher quality & quantity, curriculum content, health education, life skills education, sexuality education, class size, teenage pregnancy, pupils academic achievement, automatic promotion, school drop outs, poverty, school nutrition, domestic chores, distances to and from school, orphans & vulnerable children, health problems, illnesses and diseases, school safety & inclusive education.

Teachers training & health skills empowerment, School nurse, first aid equipment, basic medications, sickroom, immunization & de-worming programs, health care providers' partnership with schools, health promotion activities, injury prevention, health volunteers & health visitors.

School leadership & Management

School health policies

School's physical environment

A health promoting school

UNIVERSITY of the WESTERN CAPE

Pupil Well-being

Teacher wellbeing

Factors affecting teaching and learning for all children

School health services

School partnerships with parents/families & wider community

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APPENDIX T: Model Validation Workshop Presentations (Kinyarwanda)

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Egide KAYONGA NTAGUNGIRA , Umunyeshuri wiga Mu kiciro cya gatatu Cya Kaminuza muri Physiotherapy Department, Community and Health Science Faculty, University of the Western Cape, South Africa. Mu Mwaka wa 2008 nasuye amashuri abanza; abiri abarizwa mu cyaro nandi abiri abarizwa mu muyji ngirana ibiganiro n'abayobozi bayo, abarezi, abanyeshuri n'ababyeyi, ndetse abayobozi kurwego rw' Igihugu muri Minisiteri z'uburezi, ubuzima n'minisiteri y'imibereho myiza y'abaturage n'ubutegetsi bw'igihugu bose tuganira kubijyanye n'ubuzima mu mashuri abanza. Impamvu yari kugira ngo tumenye niba amashuri yacu ari amashuri abungabunga ubuzima bw'abanyeshuri, abarezi kugirango bashobore kwiga, ndetse no kwigisha kuruhare rw'abarimu. Nyuma yo y'ibiganiro twagiranye na bose bavuzwe hejuru, havuyemo uru rusobe rugizwe n'inkingi umunani zigaragaza ishuri riteza ubuzima bw'abarigize mu Rwanda.

URUSOBE
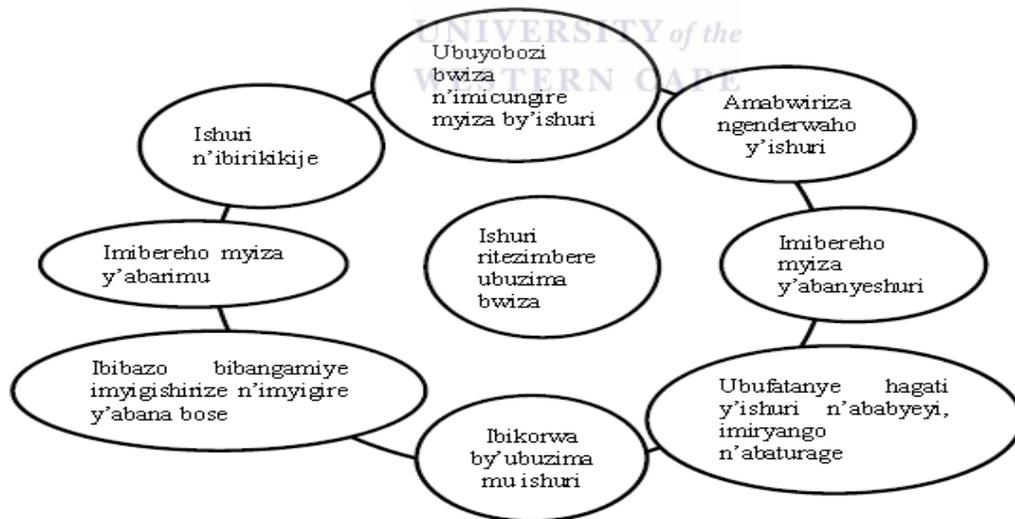
Imikoranire myiza, kwizerana, kubahana, kutabogama, kurangwa n'ukuri, ntamacakubiri hagati y'ubuyobozi bw'ishuri, abarimu, abanyeshuri, ababyeyi ndetse n'abandi bose bagana ishuri. Guha agaciro no gushimira abarimu kubwitange bagaragaza mu kazi kabo kaburi munsi cyane bashimirwa by'umwihariko kubyo babasha kugeraho bakabishimirwa kandi bakanabihemberwa Kwisanga no kwishyira ukizana hitawe kunshingano za buri wese yaba umuyobozi, umunyeshuri, umwarimu, umubyeyi ndetse n'abaturage bagana ishuri muri rusange. Umubano mwiza hagati ya bose bagize ishuri. Guha agaciro no gutega amatwi ibitekerezo n'ibyifuzo bya buri wese ku ishuri. Kurangwa n'ubusabane hagati y'ishuri

Ubutaka bwagutse butuma ishuri ryisanzura, inyubako zihagije nk'ibyumba by'amashuri bigagije bifite ibikoresho bihagije, biro zihagije ku buyobozi n'abarimu. Icyumba rusange cy'abarimu baruhukiramo, bateguriramo imyigisho ndetse kibafasha no gusabana hagati yabo. Icyumba k'inama rusange gihagije. Amasomero ahagije, ubwiherero guhagije ku bitsina byombi kubarimu n'abanyeshuri ndetse n'abashyitsi, amazi ahagije, ibibuga by'imikino naho kwidagadurira bihagije ku banyeshuri, abarimu ndetse n'abaturage.

Gukorera heza, umushara, ubwisanzure, kwishimira no gukunda no kwitanga. Amahugurwa, kongerwa ubumenyi n'ubushobozi, kuzamurwa muntera. Akazi kageranije, ubunyamwuga. Guha mwarimu agaciro. Imibanire myiza, kwizerana, kubahana, ubuvandimwe n'ubufatanye hagati y'abarimu.
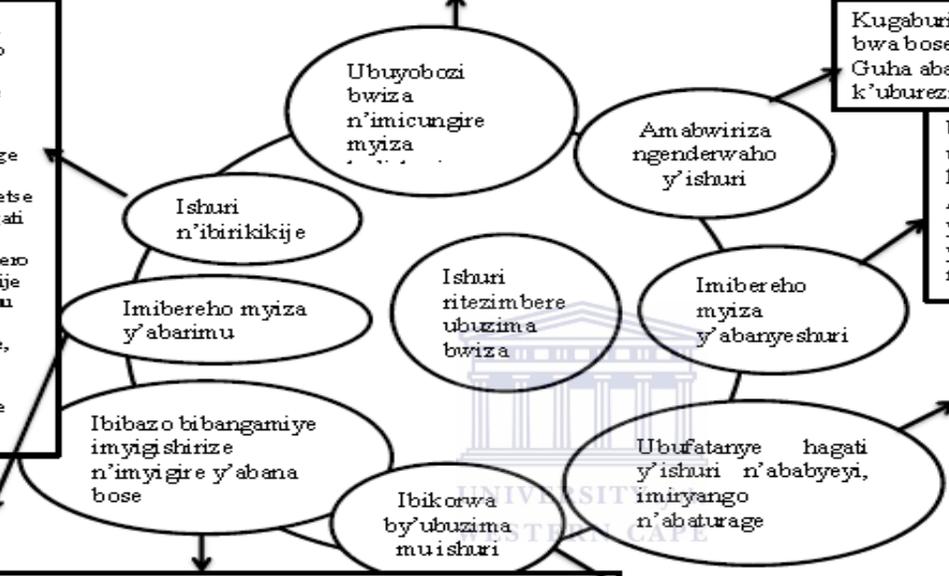
Kugaburira abana ku ishuri, kubahiriza uburezi bwa bose, guharanisha ibihano bitababaza umubiri Guha abana bose amahirwe yo kwimuka no kwit k'uburezi bw'umwana w'umukobwa.

Ubwumvikane hagati y'abanyeshuri ubwabo ndetse n'ubwumvikane hagati y'abanyeshuri n'abarimu. Abanyeshuri guha agaciro imyigire yabo, ndetse no gushyiraho gahunda yo gutoza abana umuco n'ikinyabupfura ku ishuri.

Kugirana ubufatanye hagati y'ababyeyi n'ishuri mu burezi bw'abana babo. Itumanaho riziguye hagati y'ababyeyi n'abarimu. Kujijura ababyeyi, ababyeyi gufasha abana kwigira mu rugo babafasha gukora imikoro batahanye. Kugira umubare ugereranije w'abagize umuryango. Ababyeyi guha agaciro uburezi bw'abana babo ndetse abana bamugaye.

Ubuyobozi bwiza n'imicungire myiza

Amabwiriza ngenderwaho y'ishuri

Ishuri n'ibirikikije

Ishuri ritezimbere ubuzima bwiza

Imibereho myiza y'abarimu

Imibereho myiza y'abanyeshuri

Ibibazo bibangamiye imyigishirize n'imyigire y'abana bose

Ubufatanye hagati y'ishuri n'ababyeyi, imiryango n'abaturage

Ibikorwa by'ubuzima mu ishuri

Ireme ry'imyigishirije, indimi, ubumenyi bwa mwarimu, Abarimu bahagije babifitiye ubumenyi, integanyanyigisho n'imfashanyigisho bijyanye Inyigisho z'ubuzima, umubare w'abana bumenyi ngiro k'ubuzima bwabo, kurinda umwana w'umukobwa gutwita adakwije imyaka, kwigisha, abana ubuzima bw'imyororokere, gutsinda ku bana bose, kurinda abana gucikiriza amashuri, ubukene, kwita ku mirire y'abana bose n'abarimu. imirimo ivunanye yo murugo iwabo, kugabanyiriza abana ingendo bava cyangwa bajya ku ishuri. Kwita ku bana b'imfubyi n'abandi bana batishoboye. Kurinda abana n'abarimu icyabatera uburwayi. Kubungabunga umutekano wa buri wese ku ishuri no kwita k'uburezi bwa bose.

Guhugura abarimu ku by'ubuzima, umuforomo ku ishuri, ibikoresho by'ubuvuzi bw'ibanze Icyumba cyo kwakiriramo abarwaye na gahunga yo kuboherza aho babonera ubuvuzi bwisumbuye igihe bibaye ngombwa. Gahunda y'ikingira ku bana bagikurikira inkingo z'ibanze. Gagunda yo gukingira no kuvura inzoka zo munda kubana bose. Kugirana ubufatanye n'impuguke muby'ubuzima. Guteza imbere ibikorwa byo kwirinda indwara mu ishuri. Gukumira imparuka no gukomereka mu ishuri. Gukorana n'abakorana bushake bu buzima ndetse n'abashyitsi bahugura abarimu n'ababyeyi mu by'ubuzima ku ishuri.

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