**The University of Saskatchewan**

# CURRICULUM IMPLEMENTATION IN THE MINISTRY OF HEALTH TRAINING INSTITUTIONS IN MOZAMBIQUE

**By**
**Lídia justino Monjane**

**A Thesis**
**Submitted to the College of Graduate Studies and Research**
**In Partial Fulfillment of the Requirements**
**For the Degree of Master of Education**
**In the Department of Curriculum Studies**
**University of Saskatchewan**
**Saskatoon, Saskatchewan**

**Fall 2002**

# PRMISSION TO USE

In presenting this thesis in partial fulfilment of the requirements for a Postgraduate degree from the University of Saskatchewan, I agree that the Libraries of this University may make this thesis freely available for inspection. I further agree that permission for copying of this thesis for scholarly purposes maybe granted by the professor who supervised the work or, in this absence, by the head of the Department or the Dean of the College of Education. However, due recognition shall be given to me, Lídia Monjane, and to the University of Saskatchewan should any of the materials in this thesis be used. Copying or publication or any other use of the thesis or parts there for financial gain without approval by the University of Saskatchewan or without my permission is prohibited.

Requests for permission to copy or to make any other use of the material in this thesis in whole or in part should be addressed to:

Head of the Department of Curriculum Studies

College of Education

University of Saskatchewan

Saskatoon, Saskatchewan

S7N0X1

# Abstract

This study explores the teachers' and administrators' experiences when implementing the Mother and Child Health Curriculm in Mozambique. One question guided my research: What is the nature of teachers' and administrators' experiences, with curriculum implementation in the Mother and Child Health Program, Ministry of Health Institutions in Mozambique? The study was conducted at three institutes in Mozambique: Maputo, Beira and Nampula.

This study used qualitative methodology. Individual and group interviews were the two principal forms of data collection. As well, document consultaion was another form used to gather information which reinforced my data collected from the interviews.

From the interviews I understood that teachers and administrators were serious about doing their best in their chosen careers to make a success of implementing the Mother and Child Health curriculum. They had increased the student success and overcame difficulties in implementing curriculum through discussion they had had in the institutes among teachers and administrators. In addition the Department of Training had provided periodically supervision to the institutes.

The interviews revealed problems with the curriculum and its implementation: problems with content organization; insufficient time for practise in some disciplines; and duplication of contents among disciplines. In addition, the institutes had inadequate time to discuss or to train teachers before the curriculum was to be implemented. As well, the Department of Training did not provide new or revised curriculum to the institutes,

sometimes they provide it after the semester began, and the teachers were expected to immediatly adopt the new curriculum without time to assistance for proper integration.

The field work conditions were a problem to the teachers and administrators implementing the Mother and Child curriculum, as well the personnel in the field. Workers in full-time supervision positions did not have enough training to follow the students effectively. In addition, the part-time instructors did not take their task seriously in the institutes, so the result was that the schedule was delayed.

The interviews revealed that the Department of Training had used the hierachy or centralized approach to develop the curriculum, and the desire of institutes was to adopt a collaborotive model which would permit discussion with those who implemented the curriculum. Also, when changes are made, the institutes need time to introduce the new revisions to acquire or adopt the material and equipment needed for it.

In this study, I discuss the implications of my research for curriculum development and implementation for the Department of Training in the Ministry of Health in Mozambique. The Depatment of Training shoul consider changing the curriculum development model from a top-down approach to a morre collaborative approach. The Depatment of Training should also develop a program to increase training for teachers.

# AKNOWLEDGEMENTS

I would like to express my sincere thanks to the following individuals for their contributions:

Sam Robison, my thesis supervisor, Department of Curriculum Studies, for providing significant patience, and for guiding me through the process and providing me with an honest, supportive environment to learn about curriculum development research.

Joan Feather, my co-supervisor, Department of Community Health and Epidemiology, for providing significant patience and guidance along the way to helpme accmplish my study.

Alan Ryan, Department of Curriculum Studies, for your imput on my committee.

Gerri Dickson, Department of Nursing, for your encouragment, which was a valuable motivation throughout the study.

Angela Ward, Department of Curriculum Studies, for your friendship and input on my committee.

My husband, Gilberto Massingue, whose constan support and encouragment kept me going when I most needed it. His patience, practical advice, and listening ear were most helpful.

To my parents, Adelina and Justino, and my children, Alberto, Gamaliel, and Adérito, whose constant support and encouragment kept me going.

My host family, Pear, Andrea, and Kioko, for your Help and support.

My friends Vivian Ramsden, José Davuca, Maria José Langa, and António Tanda.

Good friends my not always be together.

It is the feeling of oneness when distant that proves a lasting friendship.

I must also thank the participants in the study, who dedicated many hours of conversation and energy, permitting me to learn about their courage and dedication to their careers.

Finally, I am gratefuul to the Government of Mozambique Ministry of Health, and to CIDA, for sponsorship that provided me an opportunity to earn a Master´s degree in curriculum studies in Canada.

**TABLE OF CONTENTS**

LIST OF FIGURES

# CHAPTER ONE: THE RESEARCH PERSPECTIVE

## Introduction

In 1975, the Ministry of Health in Mozambique implemented a curriculum in the health training schools to solve health problems, but there were still problems with curriculum implementation, such as delay of school schedule, teachers missing class because they were working in hospitals, teachers not giving priority to training programs, school beginning without a curriculum update, and so on. When I came to Canada, I was confident that I would find a blueprint for how to implement a curriculum, and guidelines to help me understand good curriculum implementation, which I could carry back home to Mozambique as a model of curriculum implementation. After taking some classes at the University of Saskatchewan in the College of Education, I realize that no one has a curriculum blueprint, but planning has to be considered according to the each country's situation, each political condition, as well as the type of education system in place in each country.

In the first chapter of my thesis, I give a brief background of the government of Mozambique's policy related to the system of health training; the government's goal for social development; and how the Ministry of Health functions to train workers for the health system. Along with this, I have explained my purpose in conducting this study, the need, and the significance of this study, the research question, as well as the definition of terms.

My research is a qualitative study of one of the Ministry of Health's programs: The Mother and Child Health Program. This program is one of the Nursing branch, and it is particularly concerned to give attention to women in their productive life stage,

children, and adolescents. The training has been done at three national levels: basic, medium, and medium-specialized. The primary target group of this Nursing program is women with two levels of preparation: women with grade 10 general education for the basic level; and women with grade 12 general education for the medium and medium specialized level, or the equivalent in Mozambique. Women for the latter program have successfully passed the special selective exam. This program lasts two and one half years.

# Background

## Mozambique Health System

I would like to provide the readers with a history of education programs in health so that they will become familiar with the Mozambican Health System. During the colonial Portuguese regime, the Ministry of Health's Education System trained health professionals. At that time, they provided only a small number of programs. These programs occurred in the former Miguel Bombard Hospital in Maputo. The kind of training programs taught at that time were:

- Assistant Nursing, Assistant Midwife, and Laboratory programs for indigenous people, for which the entrance level was grade 4;
- Nursing medium level, Pharmacy, Laboratory, and Radiology, for white people and the assimilated indigenous people, for which admission level was grade 9.

In the 1960s, with the abolition of the Portuguese assimilationist regime, the health training programs became open to everybody who had the prerequisites required. In September, 1968, the Technical Health School, Callouste Gulbenkian, was inaugurated. In 1975, after independence, the network of health care was extended and

many health workers or professionals left the country for political reasons. The need for qualified professionals increased in all sectors, including health. Many of the economic sectors needed qualified and competent staff to reconstruct and develop the country. To overcome the crisis, a new strategy in professional training was set, prioritizing the training at basic and elementary levels, not only because of the need, but also because it was easy to put these courses in place in a short time in order to have huge numbers of employees attend the country's needs, and it was easy to recruit people with grade four education, which was accessible to many students. Grade four then was the prerequisite for all levels.

In July, 1976, the Medical and Paramedical Science Institutes of Health were created through a government decree: 25/26 Decree (Vaz, Bila, Langa, & Matsinhe, 1998). These institutions are now called the Institutes of Health Professional Training and the Centers of Health Training. In Mozambique, there are now four institutes and seven centers. The institutes are located in four cities: Maputo, Beira, Quelimane, and Nampula. These institutes provide training at the medium and medium-specialized level. There are seven centers in the provinces: Gaza, Inhambane, Manica, Zambezia, Tete, Niassa, and Cabo Delgado. These centers provide training programs at the elementary and basic levels. These training programs provide a number of levels of ability: elementary, basic, medium and medium specialized. The levels of entrance in these programs are grade 7, 10, 12 or equivalent respectively. To change their level, health workers have to attend an institute for two years, except that students at the elementary level with grade 7 have to attend secondary school in order to obtain grade 10, then attend an institute for two years.

One of the goals of the Ministry of Health is to provide health care for all Mozambican people. This model of providing institutes and centers has greatly increased the number of health career workers in Mozambique, attending to the needs of the people. One of the problems of the Mozambique health care system is to increase the qualifications and abilities of the instructors, in order to assist the different levels of training, as well as the diversity of programs taught in the health institutes. Because of a lack of qualified professionals or experts in the curriculum design area, Mozambique continues to contract outsiders as consultants in this area, to work with Mozambican professionals. But Mozambique is still having problems in developing its programs in order to respond to its goals in the health area.

Education is a basic right of the people of Mozambique. Educational policy for Mozambique is to improve the technical and scientific knowledge of all people. This is one of the basic and comprehensive interventions related to social development to achieve reconciliation and national peace.

The government's goal for Mozambique in social development is to address the fundamental needs of all Mozambican people, especially the vulnerable social groups.

The needs are greater than the available capacity. The government of Mozambique has defined a strategy that concentrates on human resources and the defined priorities of the more sensitive sectors such as health and education.

The government supports the concept of development based on knowledge, science, and technology, where scientific research is seen as a determinant for improving the country. In addition to this, the government has given priority to actions that motivate the development of professional consciousness.

Since the independence of Mozambique in 1975, this country has had a shortage of human resources at all levels, and this problem has had a stranglehold on economic and social development. Many economic sectors need qualified workers and capacity to construct and develop the country.

The professional training programs struggle to satisfy the needs of health services in which health workers practice. The number of graduates from the system does not meet the market need, in terms of quality and quantity. Usually professional training has been done through three year programs that constitute part of the whole education system in order to provide skills and opportunities for employment (Ministerio da Educacao e de Trabalho, 1998).

The system of health in Mozambique has priorized the expansion of health services to ensure that these services would reach the majority of the Mozambican population. Priority is to be given to groups at risk, such as women in the reproductive life stages, children and adolescents, and those in unfavorable geographical areas. The government has chosen the main strategy, Primary Health Care Reform, which has the potential for good quality services and sustainability. This strategy is related to the implementation of "Health For All", a recommendation from the World Health Organization (World Health Report, 1995). The Ministry of Health's goal is to provide health care to the population and this activity will result in consumption of resources both economic and human. The Ministry of Health is one of the systems that requires large numbers of employees, and it trains its own employees especially at the elementary, basic, medium, and medium-specialized levels.

The Ministry of Health has a Department of Training, which is divided into two sections: Curriculum Planning and Development, and Continuing Education. As a result of my experience working with curricula in the Ministry of Health, curriculum has become my area of interest.

## My Research Plan

I carried out a qualitative study to obtain information about the administrators' and teachers' experiences with curriculum implementation. The following discussion outlines the need for my research and my purpose for doing it.

### Need for the Study

Health science schools face the reality of curriculum development and implemention: many probles. When I worked as a curriculum coordinator, I noticed that the curriculum as planed was not same as the curriculum that was implemented in the schools. My research, then, was a jouney to examine and understand problems with curriculum development and implemenation.

### Purpose of the Study

The purpose of the study was to explore the experiences of administrators and teachers implementing a Mother and Child Health Curriculum. I considered what was happening with the curriculum implementation process in the Mozambican Ministry of Health institutions/schools: their successes, problems, barriers, and recommendations.

### Research Question

My research question was focused on one specific training program:

*What is the nature of the experiences of teachers and administrators with curriculum implementation in the Mother and Child Program, Ministry of Health institutions in Mozambique?*

## Significance of the Study

This study may have important implications for health professional training and teachers' behaviour related to curriculum implementation, if the results of the study will have a positive impact on the curriculum implementation process. In addition to this, the study may eventually contribute to a reduction in training costs if we understand and reduce implementation problems. I also hope that this study will stimulate additional research in this area.

## Ethical Approval

I received ethical approval from both the Advisory Committee on Ethics in Behavioral Science Research in the University of Saskatchewan in Saskatoon, (See Appendix A) as well from the Ministry of Health in Mozambique.

## Definitions of Terms

**Teachers:** In this study, teachers are defined as persons who teach in schools of health sciences. They have different backgrounds in terms of professional expertise such as nursing, medicine, pharmacy, etc.

**Administrators:** In this study, I considered administrators the pedagogical director and the principal of the health training institutions. They coordinat the implemention of the Mother and Child Health Curriculum in the school level.

**Principal**: is a "head" of the institution and is responsible for the administrative aspects. It is his or her responsibility to send to the Ministry of Health periodic reports about

school functions. A principal is the administrative director; he or she is a person in charge of a school, and has to guarantee the planning, organization, direction, management, discipline and control, and all the execution of the institution's objectives and functions, as well as the fulfillment of the plans and programs of the institution. Both principal and pedagogical director are key players in curriculum planning and implementation.

**Pedagogical director:** is a person whose job involves helping to organize and supervise the pedagogical aspects of an organization or school. In this study, a pedagogical director is a person who, in collaboration with teachers, organizes and coordinates the teachers' schedules, plans formative and summative student evaluations, and supervises curriculum implementation. In sum, he or she is responsible for all pedagogical aspects.

Also the director promotes the linkages between school and hospitals, and school and communities. The pedagogical director analyzes the school and training achievements as well as the methodologies suggested by teachers involved in the process. Finally, he or she guarantees that regulations are.

**Ministry of Health Training Institutions:** refers to institutes and centers of health sciences training. Institutes are institutions of health science offering the medium level courses. Students are grade 12 graduates from general education or the equivalent in Mozambique who successfully pass the special selective exam, which results in their admission into the program. Centers are institutions of health sciences training offering the basic level courses. Here the students have grade 10 from general education or its equivalent in Mozambique, and have successfully passed the special selective exam, which results in their admission into the program.

**Mother and Child Program** (M&CH) is one of the branches of Nursing Core Curriculum. Figure 1 outined the classes that make up the M&CH curriculum.

**Curriculum:** In my study, curriculum is viewed as an interaction between students and teachers that is designed to achieve specific educational goals. This contains the disciplines planned to train nurses to take care  women, children, and adolescents.

## Structure of the Thesis

In Chapter One, I described the background to the research problem, along with the need, purpose, and significance of the study.

Chapter Two of the thesis comprises the relevant literature that contributes to a broader understanding of the research question.

Chapter Three outline the health program in Mozambique and describes the research methodology used to collect and analyze data.

In Chapter Four, I present the data from the interviews and document analysis..

In chapter Five I discuss the findings, made recommendations for application of findings and recommendations further research, and end with personal thoughts about my graduate studies experience. This chapter also includes appropriate literature to deepen understanding of the analysis.

# CHAPTER TWO: REVIEW OF THE LITERATURE

## Introduction

In this chapter, I discuss the literature related to the process of curriculum development (sources and orientations) and implementation in schools, as well as the literature on the importance of involving more people in the curriculum process.

## The Curriculum Process

Development, implementation, and evaluation of curriculum are parts of one dynamic and complex process that is rooted in meaning and in dialogue about what schools and others educational institutions should do. This process requires interaction among different people involved with schooling as a continuous dynamic within a changing and pluralistic society.

Curriculum has been defined in different ways according to its end objectives. We might define curriculum broadly as everything that occurs under the control of the school. In my study, curriculum is viewed as an interaction between students and teachers that is designed to achieve specific educational goals. According to Saylor and Alexander (1974), curriculum is “a plan for providing sets of learning opportunities to achieve broad goals and related specific objectives for an identifiable population served by a single school center” (p. 6). Also, curriculum is seen as “the reconstruction of knowledge and experience systematically developed under the auspices of the school, to enable the learner to increase his or her control of knowledge and experience” (Tanner, 1980, p.38). Therefore, curriculum can be everything that transpires in planning, teaching, and learning in an educational institution.

# Curriculum Development

Persons charged with the development and delivery of curriculum must have a concept of what curriculum is and what parts comprise it. They need, too, to have a notion of how the parts are arranged and how they interrelate.

According to Ornstein and Hunkins (1998), curriculum development can be referred to as the arrangement of the elements or certain components of curriculum. Pratt (1994) in turn defines curriculum design as:

> The art and science of planning the conditions of learning. These conditions include such considerations as identification of the learning needs to be met, selection of the modes of evaluation to be used, determination of the entry characteristics of learners, selection of instruction content and methods, equipment, facilities, personnel, time, and cost. (p.28)

Many philosophical or theoretical issues, as well as practical issues, are involved in curriculum design/development. A person's philosophical stance can affect his or her design. A person's philosophical orientation can affect his or her interpretation or selection of objectives, which can influence the content selected, and how it will be organized. This can affect decisions about how to carry out and implement the curriculum content, and guide judgments about how to evaluate the success of the developed curriculum.

## Orientations

I will give a brief review of the principal sources of ideas that support curriculum development: science or knowledge, society, and learners (Dewey, 1938). The selection of one of these sources guides the development, implementation, and evaluation ideology

of the curriculum process. It is crucial, however, for curriculum planners to define their philosophical and social orientations because curriculum is not an abstract concept that exists outside the human experience, but is rather a cultural construction and a way of organizing a set of human educational practices. Curriculum planners must clarify their philosophical and social views to determine their influence on curriculum design, and to be aware of how such views influence their approach to education (Ornstein & Hunkins, 1998). The development of curriculum is an ingoing process; it forms a cycle with its components. Orientations that are part of the curriculum cycle affect individual perceptions, and shape each educator's personal belief structure about the purposes and methodologies of education. I will describe the three orientations, which I think have a crucial impact on the curriculum implementation process.

As Miller (1983) has pointed out, educators generally adhere to one of three orientations to curriculum that form major positions in curriculum programs. Each orientation has certain basic goals that define its overall direction, and each orientation offers a particular view of the learner. In some, the learner is viewed as an active agent; in others, he or she is seen as functioning in a more passive mode. Each orientation includes a particular view of how the learner's environment should be structured and what learning materials are appropriate, and the teacher's role differs with the various orientations Finally, each orientation includes a particular approach to evaluation procedures.

I believe that orientations have an important function in the implementation process, allowing curriculum planners to identify particular areas of difficulty in

implementation and to develop strategies. The three major positions are: the transmission, transaction, and transformation positions.

Transmission Position – In this position, the function of education is to transmit facts, skills, and values to students. Specifically, this orientation stresses mastery of traditional school subjects through traditional teaching methodologies, particularly textbook learning; and acquisition by students of basic skills and certain cultural values and mores that are part of a mechanistic view of human behaviour. In this position, there is primarily one-way movement to transmit to students certain skills, knowledge, and values. In this orientation, nature or reality is seen in terms of separate, isolated building blocks (Miller & Seller, 1990).

Transaction Position - In this position, the individual is seen as rational and capable of intelligent problem solving. Education is viewed as a dialogue between the student and the curriculum in which the student reconstructs knowledge through the dialogue process. The central element in the transaction position is an emphasis on curriculum strategies that facilitate problem solving (cognitive process orientation). The subject orientation is in the center of this position, which emphasizes student mastery of subject content. The philosophical-scientific paradigm for this position is the scientific method (Miller & Seller, 1990).

Transformation Position – This orientation focuses on personal and social change. It encompasses three specific elements: teaching students skills that promote personal and social transformation (humanistic and social change orientations); a vision of social change as movement toward harmony with the environment rather than as an effort to exert control over it; and the attribution of a spiritual dimension to the

environment, in which the ecological system is viewed with respect and reverence – a transpersonal orientation. This position emphasizes the interrelatedness of phenomena. The curriculum and students are seen to interpenetrate each other in a holistic manner. This model focuses on the needs and concerns of learners (Miller & Seller, 1990).

## Orientations as a Tool for Curriculum Development, Implementation, and Evaluation

Miller and Seller (1990) argue that familiarity with the major curriculum positions can help teachers clarify their own approach to teaching and learning. As teachers explore these positions and also the more specific orientations within them, they can identify the aspects of the positions that most closely parallel their own thinking, although certainly most teachers will find they do not subscribe to any one position in totality. However, the positions can be helpful in analyzing specific curriculum materials to determine whether they are appropriate to a particular learning context. The transactional position seems to me to be one that fits with the area that I am studying because it is related to problem solving and dialogue between student and curriculum. The transactional position promotes intellectual skills that cultivate the analytic thinking process.

In my study about listening to the experiences of the participants, this part of the literature review has helped me to appreciate the teacher's role and orientation in implementing a program, and this will be helpful in understanding the type of teaching processes they are using to implement the Mother and Child Health curriculum.

## Implementation

Curriculum implementation is the focus of my study, but the effectiveness of any implementation process depends upon a number of different factors.

Miller and Seller (1990) argue that implementation has been identified with instruction, but this view ignores the multidimensional and complex impact of change as a factor in curriculum implementation. There are three levels on which curriculum change can occur: in the use of new materials or revised instructional materials/technology; teaching approaches, new strategies, activities, and practices, engaged in by teachers; and in beliefs, pedagogical assumptions and theories underlying new politics or programs (Fullan, 1982).

The ultimate goal of any curriculum implementation process is to improve student learning. To be effective it must also involve changes in what teachers do and how they think. Curriculum implementation requires the commitment and involvement of stakeholders: members of the Department of Training, and school staffs and other knowledgeable people. The more people involved, the more likelihood there is for successful implementation. It is important to recognize certain qualities inherent in the change as it relates to curriculum implementation (Miller & Seller, 1990).

Implementation is a process, not an event, which occurs over a long period of time. All factors must be continuously addressed. This process includes stages such as identification of the current practices and consideration of what might be done to facilitate a positive attitude toward changes; encouraging stakeholders to study goals, philosophy, rationale, and support materials, considering involvement of key participants, scheduling, guidelines, budgeting for resources, in-service, and reporting. Phasing-in begins by selecting portions of the curriculum, identifying training needs, and in-depth in servicing. It is also important to share strategies and resources to keep up to date and fresh in approach, matching planning and outcomes, and continual observation and

collection of data reflecting growth, success, and weakness. It is also important to continue to monitor the implementation process, student progress, and curriculum program strengths and weakness, refining to better meet the needs.

Curriculum plans, to be successfully implemented, should meet people's perceived needs. These needs must be identified before the curriculum can be effectively implemented in order to avoid problems during the process. I understand implementation as a process of professional development and growth. Fullan and Park (1981) summarize these qualities of change as follows:

- Change is a process not an event.
- Change happens to individuals.
- Change involves an individual and social process of learning new things with all that entails (or change is development in which people develop new meanings, skills, attitudes).
- The meaning of change varies for people in different roles.
- Innovations are complex.
- Adaptation and variation in implementation frequently occurs.
- Implementation is influenced by many factors that operate as a system of variables in any given situation.
- Implementation can be facilitated.
- Implementation involves questions of values, ethics, and professional responsibility.
- The ultimate goal of implementation is not to implement any one particular innovation, but to develop the capacity in school systems,

individual schools, and individuals to process all innovation and revisions. (pp. 24-26)

Miller and Seller, supporting Fullan and Park, say that effective implementation is often difficult because it occurs within a complex environment, where patterns and structures have been developed over long periods of time, and often run counter to the thrust of new programs (Miller & Seller, 1990).

**Models of Curriculum Implementation**

Miller and Seller (1990) enumerate some models of curriculum implementation and they argue "these models allow curriculum planners to identify particular areas of difficulty in implementation and to develop strategies to deal with these difficulties" (p. 249). I will describe these models because I think they are related to the reality faced in the health science schools in Mozambique. This information was useful as I analyzed my interview data.

Concerns-based Adoption Model. - This model was developed by Hall and Loucks (1978). It focuses on teacher problems or concerns with implementation. It considers teachers' feelings toward the changes and their thoughts about its impact on their classroom. The nature of the concerns will depend on an individual's personality and on his or her knowledge and experiences relative to the specific change. Depending on the nature of their concerns, different teachers will approach a new program in different ways, to determine ways of using it, and to identify the benefits or risks connected to its use.

The intensity of a teacher's concern can vary. Thus, if a new program is scheduled for a year in the future, concerns are likely to be less intense. The perceived impact on an

individual's situation and his or her past experiences with similar changes is an additional factor that affects the intensity and type of concerns expressed. The type and intensity of these concerns will vary and change as the implementation progresses. During this process, teachers will demonstrate various uses of a new program. The different levels of use will develop as the teachers' skill level increases (Miller & Seller, 1990).

The Innovation Profile Model.- This model was developed by Lightfoot (1983). It also focuses on the teacher. This model allows teachers and curriculum planners to develop a profile of the obstacles for change, so that teachers can overcome implementation obstacles.

In this model, implementation is seen as a process of reducing the gap between images and outcomes. The word images refer to the image held by society of an educated person. In this model, teachers are supposed to change their practice in accordance with the new program. A gap is assumed to exist between societal goals and the achievement of the students. The purpose of introducing new programs into the schools is to provide the means of reducing the gap. Here implementation is understood as a process of mutual adaptation; both the developer and the classroom teachers are free to make adjustments to the new program. This means that teachers have some autonomy during the implementation period to make decisions about the use of a new program. Understanding what stimulates or inhibits growth is the key to successful implementation.

The Tori Model - Gibb's (1990) Tori Model is rooted in the transformation position and is most appropriate to addressing the implementation programs from that orientation. It provides a scale that helps teachers identify how receptive the school environment is toward implementing a particular innovation and provides some

guidelines for facilitating change. This model focuses on social change. The teachers or curriculum planners using this model would identify where they are on the environmental quality scale and where they would like to go as a class, school, or system. The strength of this model matches with the orientations previously described, and the environmental scale allows the curriculum planners to match the program and its orientation to the local environment (Miller & Seller, 1990).

## Barriers to Implementation

Implementation has been classified as a major component in the curriculum process. Pratt (1994), argues, “Implementation has been referred to as the Great Barrier Reef” Why is this so? It is simple he said, because when we enter the field of implementation we leave the green pastures of educational planning and enter the hard arena of politics. (p.321) When it is considered to be an event, rather than a process, it is assumed the presence of a new program results in its use. Miller and Seller (1990) and Berman and McLaughlin (1975) report that between the development of a new program and its use in classrooms, there are complex interactions between people and the innovation. When teachers, administrators, and curriculum workers are first introduced to the new program, potential obstacles usually begin to appear. These authors identified a number of concerns people might have with regard to a new program, such as: beliefs rooted in a particular position about the purpose and impact of the curriculum, role expectations, responsibilities, skills required, and the implementation process. These concerns can become barriers on which implementation flounders.

Fullan and Park (1981) present twelve factors that affect implementation. They say that these factors stop or facilitate the use of a new program:

Characteristics of Innovation

- Need for the change
- Clarity, complexity of the change
- Quality and availability of materials

Characteristics at the School System Level

- History of innovation attempts
- Expectations and training for principals
- Teachers' input and professional development
- In-service technical assistance
- Board and community support
- Time line and monitoring
- Over load.

Characteristics at the School Level

- Principal's actions
- Teachers /teacher relations and actions

Factors External to the School System

- Role of the Ministry of Education and other educational agencies. (Fullan & Park, 1981, p.14)

In my understanding this means that careful planning of implementation is necessary to avoid potential barriers. Discussions between teachers, administrators, and curriculum planners during the planning sessions might help to clarify the issues and identify solutions.

The important approach is the needs assessment that is conducted before curriculum planning begins, so that the existence of significant local needs is established and the potential political support and opposition identified. The inclusion of significant individuals and groups in discussions of the change helps to ensure smooth implementation. Failure to consult from the beginning with key players, such as academics in the discipline or individuals in the community, can make a curriculum unpleasant before it even reaches the implementation stage (Pratt, 1994).

Fowler (1989) and Kenney (1984) consider the key players in curriculum implementation to be superintendents, principals, and teachers. Superintendents and other central office personnel provide the framework within which schools operate, but success is much more likely if the district and the schools share and implement a common philosophy (Fowler, 1989; Kenney, 1984). On the other hand, Schubert (1988) argues that superintendents who do not use their office to lead will create a school system incapable of leadership in the community. In one study, Duigman (cited in Pratt 1994) found that superintendents have many discussion sessions a day, but only seven percent of that time is with teachers, and less than one percent is with students. They have a lot more activities outside the schools.

Principals, as program leaders, are considered key players in the coordination of curriculum implementation. They have the power of veto over any significant curriculum innovation in their schools, and their support is necessary for successful innovation to take place. Principals should have a clear vision that focuses primarily on the learning and well-being of students and goes beyond implementation of specific innovations. They work continuously to establish a professional and collaborative ethos in their schools.

They facilitate professional development, visits, and interactions in a responsible way, and they attend in-service sessions with teachers. They work to prevent interruptions and disruptions in instruction. They provide feedback to teachers on their classroom performance. They mobilize community resources and central office administration support of school programs, ensuring teachers have the resources they need (Corcoran & Wilson, 1987). According to Lightfoot (1982), the leadership style of principals is based on relationships and affiliations as central dimensions of the exercise of power.

Whatever the talents of superintendents and principals, curriculum improvement can stand or fall by the actions of individual teachers in their classrooms. Implementation strategies that attempt to change or manipulate teachers against their will almost inevitably fail (Lightfoot, 1982). The curriculum innovation that is not initiated by teachers at least must be understood, supported, and internalized by them. School-based curriculum development depends mostly on the implementation conducted by teachers who are most involved in, and affected by the process (Holt, 1987; Walker, 1988). These authors argue that there are many reasons invoked by teachers for not implementing curriculum changes: For example because the changes contained an unrealistic amount of materials to be covered; or teachers had been given too little opportunity to make input into the guidelines. They had not been allowed sufficient time as individuals or teams to plan the implementation. There was also little support or communication from the central office, and principals were not knowledgeable, supportive, or clear about their role in implementation, or the program is too long related to the weight given in the curriculum. To avoid these kinds of problems during the curriculum implementation, it is better and necessary to involve teachers in the whole process because they are the people who will

implement the changes or innovations (Holt, 1987; Walker, 1985, also cited by Miller & Seller, 1990).

Stakeholders must be well informed about the curriculum and the process of implementation, and be prepared to work together as a team to put the curriculum into action with the purpose of benefiting students.

Using collaboration as a process, which involves joint decision-making among key stakeholders of a problem domain about the future of that domain, will enable stakeholders to assume collective responsibility for future directions of the domain. The process of collaboration itself restructures the socially accepted rules for dealing with agreements adjusted in discussions. Collaboration induced by shared visions is intended to advance the collective good of the stakeholders involved, and successful implementation requires this commitment and involvement of all stakeholders working in advancing a shared vision. To be successful, coordination must be accomplished laterally without the hierarchical authority to which most managers are accustomed. Thus, different people will likely have different responsibilities and roles at different times. What is important is that the participants agree on how the major discussions are to be made and that they actively contribute to decisions regarding what actions and steps are to be taken and how (Louis & Miles, 1990). Successful implementation requires a supportive atmosphere in which there is trust and open communication between educators, and where risk-taking is encouraged. Also, a problem solving approach facilitates staff involvement and experimentation.

Demands by the central office that curriculum or changes be implemented exactly as stipulated indicate a lack of trust in the professionalism of local schools and teachers.

Centrally designed curriculum may be effective, provided that the local school people who will implement it are empowered to make significant choices about the details of design and action, and get central office support as they proceed (Louis & Miles, 1990). To overcome the conservative tendencies within and outside the innovating institution, a climate needs to be established in which risk-taking is actively encouraged and rewarded. Therefore, we must understand that it is not an effective strategy for leaders unilaterally to announce firm curriculum decisions. School goals and mission statements and curriculum policies are most effectively developed in collaboration.

An implementation process with collaboration and involvement of all stakeholders provides opportunity for innovation, giving space to better reach the student needs and school goals. This is a reason to say that curriculum should never be considered a final product. Rather, it is an interim document waiting further improvement. The task of curriculum and program evaluation, therefore, does not end when a curriculum is implemented. Rather, a dialogue should continue between users of the curriculum, both teachers and students, and the sponsors or founders of the curriculum (Pratt, 1994).

An implementation plan should facilitate interactions between teachers, so that mutual adaptation of a program and successful implementation can occur. According to Miller and Seller (1990), it is unrealistic to expect that a program will be implemented exactly as the developers intended. Teachers in classrooms might confirm their perspectives with curriculum planners using bridges that a sound implementation plan should provide, so that teachers involved in program implementation do not work in

isolation. Such a bridge has to be built by people in curriculum leadership positions, but in such way that teachers can feel free to respond to an implementation program.

In summary, this chapter contributes to a broader understanding of the research question by providing a basis of general knowledge concerned with curriculum implementation. In addition, I have discussed some models of curriculum implementation that allow curriculum planners to identify particular areas of difficulty in implementing curriculum and develop strategies to deal with these difficulties, as well as some orientations that form major positions in curriculum programs.

Examining both the theoretical and practical issues has helped me to understand my interview data, and with my analysis and discussion of implications, to make some recommendations to improve curriculum implementation in the Mother and Child Health program.

# CHAPTER THREE: RESEARCH METHOD

This study arose out of my own experience while I was working in the Ministry of Health in Mozambique, and also in Canada in some of my first readings about curriculum in graduate studies. I recall a passage that was discussing Saskatchewan Education. The document suggested, “Actualization can be achieved through a combination of planning and supports at the [national], provincial, [district] level, and professional decision-making at the school and school division level. Because actualization is a shared responsibility, collaboration among school, parents, and community is essential” (Saskatchewan Education, 1999, p. 2). The more I became excited and read about my research topic, the more I was reminded of one the province’s first directors of curriculum, Dr. Henry Janzen (Lyons, 1997). Lyons made this point about Janzen’s work, “To assist in the process, based on the model that Janzen had honed over the years, the Department of Education creates a number of curriculum committees drawing on the expertise of teachers, civil servants, university professors, and at times, other knowledgeable individuals” (p.12). Saskatchewan Education (1999) gave support to Janzen’s work affirming that “actualization will happen only through the participation and involvement of many different people: students, teachers, parents, and caregivers, elders, administrators, trustees, and community members” (p. 5). Janzen emphasized that teachers make the difference in the success of an implementation undertaking. All actualization activity should be based on the recognition that curriculum documents and initiatives become meaningful only when they become part of a school community.

Reviewing the time when I worked in the Department of Training in the Ministry of Health in Mozambique, I think that it is necessary for Mozambican schools of health

sciences training, especially for those who work in the Department of Training, to understand that broad-based consultation with all of those involved in educational change is not only a diplomatic political practice, it is also a requirement of democracy, and it is an effective strategy to involve people in situations that concern their daily life. For this reason, I have chosen to study the involvement of teachers and administrators in curriculum implementation.

## Context: Understanding the Environment of Ministry of Health Institutes

My description of the context for this study will help readers understand the Mother and Child Health Program in the Ministry of Health Training institutions, as well as the Human Resources Management, and the Ministry of Health Department of Training (DF). This description provides a framework for the teachers' and administrators' experiences implementing curriculum in the Mother and Child Health program.

In the Mozambique context, the concept of "Health Training Program" extends to include twelve years of primary and secondary schooling together with two and one half years in the health training program. This constitutes compulsory education in the Ministry of Education system plus time in a health training program in the Ministry of Health Institutions.

The heart of this system is that there are ten to twelve years of elementary and secondary schooling. This is a base for the professional training for the basic and medium levels in the Mother and Child Health Program, a standard defined by the Ministry of Health in Mozambique for employees in the human resources system. The health training programs develop employees who are prepared to work in the district, provincial, and

national hospitals in both urban and rural sites. These health care workers are also prepared to work in communities, providing health assistance and health education.

The official document General Regulations of Entrance and Evaluation of the Institutes of Health Sciences and Centers of Training, (March 2000) which regulates the process of entrance into the health training process, I found that:

> *For entrance into the health training programs, open to public competition, candidates would be required to have certain educational standards:*
>
> - *To have completed grade 12 including the science section, for the medium level courses*
> - *To have grade 10 for the basic level*
> - *Be 17 years of age, for the initial training and 30 years of age for the promotional courses*
> - *To complete successfully the admission exam.*

The Mother and Child Health Program is developed for two levels, basic and medium. The curriculum of this program covers basic courses and courses of specialty. Basic courses are in disciplines such as Anthropology, Psychology, Anatomy, Physiology, Microbiology, Pathology, Pharmacology, and Research. These courses help students to obtain a better understanding of the factors that influence health, as well as giving the students a basic knowledge of general principles to interpret cultural and scientific aspects connected with health. Specialty courses considered to be fundamental in the program are Obstetrics, Pediatrics and Nursing Pediatrics, Gynecology, Family Planning, Ethics, Nursing Foundation, Community Health, Administration, and Health Education. The teachers in the Ministry of Health Institutes teach these courses. Two

parts comprise the program: theory that is taken in the classroom of the institutes, and nursing practice taken in the hospitals and communities. (See Figure 1)

The regular school training comprises two and one half years, divided into four semesters of twenty-two weeks each. Twenty weeks are for instruction, and two are for evaluation and teacher preparation. The final exams (theory and practice) for the specialty courses are done during the twenty-first week.

The Mother and Child Health program is one of the priorized health training programs in Mozambique because the target group is a population who are considered at the high risk because morbidity and mortality are high. This is the reason I chose to work with this program**.**

## The School Schedule

Usually, the health training programs are scheduled to start in February or August. The weekly schedule from Monday through Friday consists of six to seven forty-five minute classes, four classes in the morning and two or three classes in the afternoon with an hour and half lunch break, providing time to relax. The school day commences at 7:00 am and ends at 5:00 pm. This schedule refers to the first semester. The schedule for semesters II and III runs from 7:00 am to 12:00 am, to facilitate students going to the practical settings in the hospital or community with a lunch break until 2:00 pm. From 2:00 pm to 5:00 pm they have classes in the classroom. Finally, semester IV is the integrated practice; students spend all their time in the clinical settings.

## Figure 1 – An Illustration of the M&CH Program Curriculum

### Mother and Child Health Program

**Target Populations**: The grade 10 students of general education or grade equivalent in Mozambique who successfully pass the special selective exam for admission into the program.

**Program Components (**2720 hours in total)

| **School Based Education** | **Clinical Settings** |
|---|---|
| 31% theory and practice acquisition<br>14% basic specific training | 55% skill acquisition (professional) |

| **Discipline Basic Specific** | **Practice** |
|---|---|
| • Anatomy and Physiology<br>• Anthropology<br>• Microbiology and Parasitology<br>• Pathology<br>• Pharmacology<br>• Psychology<br>• Scientific Research introduction | - Develop nursing skills<br>-Develop appropriate attitudes<br>-Practice of technical skills<br>-Understanding of why they do what they do.<br>-Active participation in community-based maternal and child nursing<br>-Application of knowledge and skill |

**Disciplines of Specialty**

- Ethics in Health
- Nursing Foundations
- Obstetrics I, II, III
- Pediatrics I, II, III
- Nutrition & Diet
- Community Health
- Gynecology and Family Planning I, II
- Adolescent Health
- Health Education
- Administration
- Public health

## The Institutes

There are many other different programs provided by the Ministry of Health Institutes, such as Pharmacy, Lab Technology, X-Ray Technology, and so on. When I was there each of the selected institutes - Maputo, Beira, and Nampula - had at least two classrooms running, apart from others, for the Mother and Child Health Program at both the basic and medium levels. The Institute of Maputo had even more: two classes at the medium level, one class at the initial level, and another class in the promotion program. Promotion level means the students have completed the basic level and have worked two years in the health system. They are now back at school to upgrade by taking the medium level training. Initial level training means the student comes from secondary school to take a health training program.

## The Teachers

Two of the institutes have eight teachers each in full-time positions working in the Mother and Child Health Program (M&CHP), and one has six teachers in the same position working in the M&CHP. These teachers spend the whole workday at school. They usually teach only one subject and they take students to the clinical settings. If one teacher misses a class, another teacher has to substitute for her or him.

# Research Design

Much research done in Mozambique has employed statistical analysis, emphasizing quantitative research about what kind of curriculum designs have to be chosen in health schools. By contrast, my study is based on qualitative research to describe the implementation of the Mother and Child Health Program taught in the health science schools in Mozambique. I believe that qualitative research methodology gives me

a real life understanding of the participants' insights while implementing the curriculum. As McCamley-Finney and McFadden (1999) state, different individuals or groups may experience the world in a particular way that may be influenced by many kinds of social experiences. They also state that there may be different social realities arising from the way in which people and groups actively construct the world and their identities (McCamley-Finney & McFadden, 1999). Examining my research question using qualitative data allows me to study these varying experiences.

Qualitative research is useful because it is like an umbrella of more than one method, and almost all of these methods could provide insights into the way in which a group's ideas and experiences might be dynamic, and how issues of agreement and individual differences might be negotiated. It also provides insight into a concrete experience or a recurrent experience in homogeneous groups. This method will, then, help me answer my research question.

I have chosen the qualitative research methodology for my study of the implementation of curriculum in the Mother and Child Health Program in Mozambique's Health Institutes. In my study I interviewed participants who were employed in full-time positions from three different institutions: Maputo Institute located in the south of Mozambique, Beira Institute located in the middle, and Nampula Institute located in the north. I did individual interviews with administrators, and personnel from the Ministry of Health in the Department of Training. For the teachers, I used both individual and group interviews. (See Appendix F for my interview protocol) An additional component of my study was document analysis; I examined course reports and annual reports sent from the institutes and centers to the Department of Training in the Ministry of Health. I also

developed a background questionnarie to collect basic information from my participants. This questionnarie provided information about who they were and outlined their involvement with the curriculum implementation. (See Appendix G)

From the interviews and document analysis, I was able to develop a picture of teachers' and administrators' experiences implementing the Mother and Child Health curriculum and to describe the implementation process in each of these institutes.

## Participants

I selected participants from three schools: Maputo, Beira, and Nampula. These participants were administrators and teachers in full-time positions. I decided to choose these participants because I expected them to have expert knowledge about the research problem I was investigating and to be the population who could reflect best the experiences that affect the process of curriculum implementation in this area in the Ministry of Health institutions. These participants also had a wide range of experiences to relate to, in terms of their own experience in classroom and school. Thus, I believe that these participants suited the purpose of my study. I also believe that keeping the number of participants low facilitated greater depth and richness in the amount of data I was able to collect and analyze.

## Procedures

The guiding question for this research was*:*

*What is the nature of experiences of teachers and administrators with curriculum implementation in the Mother and Child Health Program, Ministry of Health institutions in Mozambique?*

In Appendix F, I have outlined my interview protocol. I used a conversational technique, asking for the participants' stories of their experiences. In my protocol, I have listed the broad questions used to prompt these stories.

I had some specific questions in mind, and they are also listed in the protocol. I listened to our interview conversations, and if I did not hear answers to these specific questions, I was able to ask participants directly for answers.

Pilot Test - The need to test the clarity and framing of the questions to be used during individual and group interviews was important. To test the semi-strutured interviews, I contacted some of my colleagues in Mozambique who work in Center of Continuing Education in Massinga and one of the directors in the Ministry of Health.

Both the director and my colleagues indicated that they did not feel influenced in any way to provide answers that they thought I might want to hear. I felt confident that I was ready to begin the formal interviewing process.

This confidence did not extend to the facilitation of a focus group. Careful reading of the kit authored by Morgan and Scannell (1998) and discussions with some members of my committee who had previously facilitated focus groups provided me with an initial understanding. A strategy I considered was to separate the testing of questions of the individual interviews from the testing of the focus group plan. I put the questions through two different pilot tests. Firstly, I presented the questions to my colleagues in Massinga to solicit their comments on the framing of the questions and the type of responses the questions might elicit. Secondly, I asked the Director to respond to the questions and to offer his advice. The teachers' comments and the Director's response assured me that the questions were clearly framed.

The focus group plan was also reviewed. After I, as facilitator, carefuly reviewed the overall process, I shared the plan with a friend who had previously prepared and facilitated focus groups. My advisor, Dr Sam Robinson, also reviewed the plan.

The sources of data included in this research are outlined in the following discussion.

Interviews with Administrators - Interviews were used in my study as one technique to gather information. The purpose of in-depth interviewing was not to get answers to questions, nor to test hypothesis, nor to evaluate. The purpose was to get an understanding of the experiences and feelings of the participants and the meaning they made of that experience in their daily life dealing with curriculum implementation (Seidman, 1998).

I interviewed each school administrator because I expected him or her to have expert knowledge about my research problem. Our conversations were tape-recorded for the purpose of creating transcripts. I used a set of guiding questions, but these were open-ended questions, giving the opportunity to lead to areas not within the guiding questions.

Interviews with Teachers - I used individual interviews for the teachers. In this interview, I explored with them their feelings about work, their experiences, and their general reaction to curriculum implementation. This approach gave the teachers the opportunity to talk about issues that were not appropriate in a focus group situation.

Focus Group with the Teachers - Focus group was used in my study as another technique to gather information. This technique gave the participants the opportunity to share their experiences, identify needs, and profit from the comments of others. Krueger and King argue that the stories that emerge from focus groups are credible to

communities, and the resulting study is also believable to the researcher (Krueger & King, 1993, p. 20). For the focus group discussion, I tape-recorded the discussion to create transcripts.

The main purpose of focus group research was to draw upon respondents' attitudes, feelings, beliefs, experiences, and reactions in a way that would not be feasible using other methods. These attitudes, feelings, and beliefs may be independent of a group or its social setting, but are more likely to be revealed via the social gathering and the interaction, since being in a focus group elicits a multiplicity of views and emotional processes within a group context. A focus group enables the research to gain a large amount of information in a shorter period of time.

Background Questionnaire - To be more efficient with my interviews, I developed a background questionnaire. This short questionnaire asked for factual information about the participants in my study, as well as basic information about their involvement in curriculum implementation of the Mother and Child Health curriculum.

I asked the participants to complete the questionnaire at the end of the individual interviews. It took about ten minutes to complete. (See Appendix G)

Document Consultation - According to Glesne (1999), to understand a phenomenon you need to know its history. Glesne notes that documents corroborate observations and interviews and thus make findings trustworthy.

I read the annual reports evaluating programs and activities running in the Department of Training in Ministry of Health. I was particularly interested in the kinds of problems that teachers and institutions found during the implementation process to complement my data from the interviews.

Ministry reports are semi-annual and annual documents presented by the health science institutions to the Department of Training (DF) in the Ministry of Health. These documents are a requirement according to the General Regulations of Health Science Schools to keep the central organizations informed about the academic and administrative activities occurring in the institutes and centers of training. From these reports, the administrators in the Department of Training keep the statistical information updated for the use of the Minister of Health, as well as other directorates, in particular the National Health management and the Human Resources management who are responsible for the health services and human resources distribution at the national level. I used the following reports in my document analysis:

- Analysis and Academic Progress of the II Semester, Beira 1999.
- Report of Activities, Nampula 1999.
- Annual Report, Nampula 2001.
- Quarterly Report, Niassa 2000
- Activity Report, Beira 2001
- General Regulations of Entrance and Evaluation of Health Science and Centers of Training, March 2000.

The Mother and Child Health curriculum was developed in 1982, and over the years it has been revised several times. The most recent revision was in 1998 for the basic level, and 1999 for the medium level. The co-coordinators of this program in the Department of Training are currently revising the curriculum based on the recommendation coming from the meeting held in September 2001, about the Mother and Child Health curriculum for the basic and medium level. The new version, which is in

process, is a module format. It is expected to give more responsibility to teachers and students to organize their work.

I used the final version of Mother and Child Health curricula (August, 1998, medium level initial; November, 1999, basic level) to be updated in the studies plan of this curriculum. These are new curriculum for this program, showing the course outlines. The total hours for lectures for the medium level is 3500 hours: 1700 hours for theory, and 1800 hours for practice including the integrated practice. For the basic level, the time allotment is 2720 hours: 1320 hours for theory, and 1400 hours for practice including the integrated practice.

## Data Collection

Before I started to collect the data, I was concerned about interviewing my colleagues some of whom I had taught as students before they became teachers. Others had been my subordinates in terms of professional positions when I was working at the Ministry of Health in the Department of Training, before I came to Canada. This situation was a concern for me because I thought that it would impact negatively on my work with them. I was aware of this concern and always asked myself how to deal with this situation**.**

In the second week of February, I sent letters from the Minister of Health to the three institutes announcing that I would be with them soon, as well as letting them know the objectives, methodology, expected participants, and all the procedures to be followed. I waited anxiously and with excitement for the responses from the institutes. I was astonished when I got positive responses to my request; they were happy to have me there to talk about problems implementing curriculum. So, I relaxed and became excited

to see and work with them without constraint. When I got to each institutions the reception was wonderful and we started to work together.

I spent about five weeks gathering data, beginning in February 2002 and ending in April 2002. When I was collecting my data I was based in Maputo where I live, and I was also working part-time as a requirement of the Department of Training director. I interviewed twenty-five (25) participants in total: twenty-two (22) from the institutes, and three (3) from Department of Training (DF) and Human Resource Management in the Ministry of Health.

I completed my work in Maputo where I did the transcription. The data collected were transcribed in Portuguese to permit the participants to verify their authenticity, and only the parts needed for reporting in my thesis were later translated into English. I sent back the transcripts to the participants. They made corrections particularly related to spelling error, and not so much in term of content.

When I finished the interviews, I started to consult documents coming from the institutes to the Department of Training in the Ministry of Health. When I consulted Ministry documents, it was my intention to find or to identify interesting fundamental information to reinforce my data found from the interviews.

To start my work I met with the administrators and teachers working with selected programs where I had an opportunity to introduce myself as a student taking a Master's degree in Canada, as well to introduce and clarify once more my purpose in doing this study. I also scheduled the interviews with those who agreed to participate in my study. This was the hard part because they were really busy teaching classes and

taking students to the clinical settings. But, because they were interested in working with me, it was possible to meet and do the interviews.

It was my plan to do the individual and group interviews with participants. In the Ministry of Health, and two of the institutes, I did the individual interviews with teachers and administrators because it was hard to meet with all the participants at the same time. In the third Institute, I did the group interview with teachers and I did not interview the administrators in this institute because they did not have time to work with me.

One focus group with teachers was used in my study.. From the focus group discussion, I tape-recorded the discussion to create a transcript.

## Data Analysis

Data analysis involves organizing your experience, what you have heard and read, so that you can make sense of what you have learned (Yi, 2001). To analyze my qualitative data, I undertook the following steps:

- I did transcriptions which I sent back to the participants to correct or to add something they needed to say, and to make sure that it was what they wanted to share.
- I read the transcripts four times to better understand what they told me.
- I looked for data categories as I analyzed the interviews; I searched for patterns.
- When I read the transcripts for the last time, four themes and several sub-themes emerged from data.
- I selected the data that illustrated the themes and sub-themes and translated only the quotations that were part of this thesis document.

## Ethics

For several reasons, protecting the participants is always a key objective in any research. One objective is to protect the rights and freedom of the participants. Another is maintaining a high ethical standard approved by the College of Education and the University of Saskatchewan.

An application for ethics approval was submitted to the University Advisory Committee on Ethics before the beginning of my research. Approval was granted to carry out the research project from the Committee on Ethics in Behavioral Science Research from the University of Saskatchewan in Saskatoon. I asked for a letter from the Ministry of Health where I worked before I came to Canada to support my research, and another letter as a credential to allow me to go to the institutes to do my study.

Letters were sent to the Ministry of Health's Department of Training, school administrators, and teachers participating in the research. The letters explained the intent of the research, the procedures that would be followed during and after the participation, and with whom, where, and when the information would be used. All this communication was in Portuguese.

Before data collection, each participant signed the participation release agreement. Confidentiality and anonymity would be maintained throughout the inquiry. All field notes were shared only with thesis committee members and will be stored for five years in the Department of Curriculum Studies in accordance with the University of Saskatchewan guidelines. During the process of study from the transcript information, participants had an opportunity in which they were free to add or delete or change anything they wished, so that the transcript reflected whatever they wanted to share.

There were no perceived risks in this study, but I understand that, as I am an employee in the Minister of Health going to the institutions asking questions about implementation, fear could be a problem on the participants' side. They could be afraid that I would see discrepancies between what they have to do and what they are doing. They could be afraid, also, to be punished or to receive censure from a higher level in the Ministry of Health hierachy because of saying, for example, that the Mother and Child Health curriculum was not well designed. I believe that these kinds of fear were present in the participants' mind. But I tried to make sure that participation was based on mutual respect, I did not want to force them either physically or psychologically. I made clear to the participants that the findings reported in my study would be generalized in order to guarantee confidentiality; any characteristics of participants would not be given in the report to guarantee confidentiality. Because of my position in the Ministry of Health I took extra care to protect the participants. The letter from the Ministry of Health encouraged them to cooperate with my study. They were not required to take part; their participation was voluntary. They knew that they could refuse to take part in my study without any penalty. I introduced myself at each school as a University student doing research. I did not take on the role of Ministry of Health personnel. I guaranteed confidentiality for the participants by letting them know that I would not use their names in my report I would also disguise details to prevent anyone identifying them.

The group interview presented a different ethical problem – I could guarantee anonymity but not confidentiality. I made sure that group interview participants were aware of this fact. As the leader of a focus group, I listened carefully to the conversation to protect individual participants from disclosing personal information. In practice, this

was not a problem. I told participants that I was recording the conversation. I also reminded them not to use names of others in their conversation.

In this chapter, I outlined the Health Education System in Mozambique and its curriculum. In addition, I described the method I used to conducte my qualitative study. My research was based on interviews with administrators and teachers in three institutions. In the following chapter, I present findings from these interviews.

# CHAPTER FOUR: FINDIGS

## Introduction

In this chapter, I present the data collected in the Ministry of Health Training Institutes: Maputo, Beira, and Nampula, including the Department of Training (DF) and Human Resources Management (DRH), in the three regions of Mozambique (south, center, and north). My objective is to answer my research question about the experiences of teachers and administrators with curriculum implementation in the Mother and Child Health Program in Mozambique. In addition, I will discuss several related but unanticipated findings that emerged as I spoke with these participants.

## Characteristics of the Participants

About 80% of the participants were female and 20% were male. These percentages correspond to a profile the overall population of teachers and administrators in the three institutes including the three Ministry of Health employees. The participants were typically an energetic group.

The majority of the teachers (60%) had five or more years' experience working with health programs relating to maternity and pediatrics; 12% of them had one to five years' experience; 16% had one year's experience; and 12% had less than a year's experience. Twenty-eight percent of teachers were new in the institutes and to the Mother and Child Health curriculum.

This chapter begins with description of the characteristics of the participants in my study. I proceed with presentation of the main themes and sub-themes that emerged from the data.

## Thematic Analysis

In this section, I have presented the main themes that occurred during interviews with administrators and teachers. I transcribed all interviews in Portuguese, and received consent for the participant to use them. For this thesis, I translated relevant quotations into English.

I asked the participants what their experiences were with the Mother and Child Health curriculum. Most of the participants' answers to this question are similar: they named problems and constraints in implementing the Mother and Child curriculum. The main themes I found are: curriculum development problems; the fieldwork conditions; institute teaching staff; and characteristics of students.

I have used quotations from the interviews and from the document analysis, to illustrate the findings.

### Theme # 1: Curriculum Development

Participants said that they enjoyed implementing the Mother and Child Health curriculum, but they experienced frustrations because they were overwhelmed with the difficulties of the task as well as the amount of work they had to do. The participants underlined that the Mother and Child Health curriculum is good, and to change this curriculum will not solve the problems they found implementing it. In this theme, they experienced difficulties as follow:

<u>Curriculum Relevance</u>

The Mother and Child Health curriculum was generally relevant to the context in which it is implemented, but some aspects of this curriculum need to be adjusted to the context to be effective.

*To teach the theory is not so complicated, but we observe that some aspects do not correspond to the reality. . Some courses or disciplines have more time than others. Some disciplines when time to practice is needed, it was not included. So, time is tightly distributed. This becomes a constraint in implementing this curriculum.* (Teachers)

Repetition in Curriculum

It was observed that in organizing the courses/ disciplines into the curriculum, some of the content is repeated. That led to delay in compliance with the curriculum implementation schedule.

*I delayed finishing the semester on the scheduled date because it had some content repeated in some disciplines, for example, Public Health, Pediatric, Nutrition, and caused us to be delayed by talking about the same content.* (Teacher)

Sequencing of Addition of Courses

The sequence of contents is another problem that the participants identified. Some courses/ disciplines were added during the process of implementation in the main curriculum and this caused difficulty for the teachers.

*For example, they introduced the AID (Diarrheic and Acute Breathing Problems), which makes it difficult to teach the initial students until they understand how to diagnose and how to classify…also introduced recently in this curriculum is Adolescent Health.* (Teachers and Administrators)

Hours of Teaching

The participants felt that the time allotted for the Mother and Child Health curriculum does not cover all the pedagogic activities they have to do related to the teaching process.

> *We feel that we need more hours in some disciplines considered fundamental such as Anthropology, Psychology, and Didactics. The time for exam in these disciplines was not covered in the curriculum.* (Teachers and Administrators)

Support They Experienced in Curriculum Implementation

The participants said they have support from the school director and from the Department of Training, but the support they have is not enough to overcome the problems they had.

> *This support is given according to our appeal and also from supervision they have done in the institutes, helping through discussions to make decisions in the identified problems. But I think the support we have it is not enough.* (Teachers)

Teachers Role in Curriculum Development

The participants were unanimous that teachers are important in the process of curriculum development because they are the people who are directly involved in the process of curriculum development.

> *I feel and I know that in the curriculum development, teachers are the keys of the process because they are the personnel who implement the curriculum in the field. The teachers play the predominant role in this process.* (Teachers and Administrators)

Lack of Involvement in Curriculum Development

The participants felt that teachers' involvement in the curriculum development is insufficient. They argue that the Department of Training should involve some teachers in the key areas in the process, not only the principal and pedagogic director. As they said, it would reduce the problems they found implementing curriculum.

> *Now we are indirectly involved in the process of curriculum development but we still experience difficulties implementing this curriculum.* (Teachers)

> *I feel that many of the problems we found implementing the curriculum are caused by the limitation of participation or insufficient involvement of teachers in the curriculum design or revision.* (Teachers)

Institutes' Autonomy Implementing Curriculum

The participants felt that curriculum development is not an open process in the Ministry of Health. They felt that the Mother and Child Health curriculum is centrally developed or designed and that they only have the role of implementing the curriculum as it is. They argue that their voice has to be heard because they are the people who make the difference in the process of curriculum implementation.

> *From the centralized standard, the institutions do not have the autonomy to change curriculum, and do not receive the financial sustainability for that change. We understand this curriculum as a standard centrally defined and the schools as simple executors. We do not have power or autonomy to make any changes in order to match reality. What we have to do is to make some*

*observations and assessments of the curriculum and submit a report to the Department of Training…*(Teachers and Administrators)

What Teachers Do to Overcome These Difficulties

The participants had contributed to improve the curriculum: 32% of the participants had participated in school discussions about some problem identified in the curriculum; 24% of them contributed by making adaptations as they implemented the curriculum in the classroom, trying to match the reality; 24% of them did not specify what they did, 8% of them participated in the Ministry of Health discussion concerning curriculum revision, 12% of them taught the curriculum without making any changes, and finally 4% become silent.

In the health training institutions, the participants have discussions among the teachers and advise each other, under direction of the director of the program in the school who has the responsibility to follow the class development during the semester. Also they report the identified problem to the Department of Training, and ask for help if it is needed.

*What we have done to overcome these problems, many times we discuss as a group of teachers, the problems immediately when one of us presents one situation related to the curriculum implementation, and we make a report to the Department of Training.* (Teachers and Administrators)

*For some of the problems, we do not get solutions, we ask external support from the Department of Training in the Ministry of Health.* (Teachers and Administrators)

How the curriculum was introduced in the Institute

Participants were asked about their knowledge of how the curriculum was introduced in their institute. 56% of participants said the program was introduced by coordinator of the Mother and Child Health Program; 12% said was introduced by the director pedagogic discussing it with teachers; another 12% said the curriculum was not introduced, rather they received it from the post office delivered by the Department of Training; and 20% did not know who introduced the curriculum in the institute.

## Theme # 2: Fieldwork Conditions

Participants mentioned that they found difficulties taking students to do the fieldwork. In the report one institute sent to the Ministry of Health, they affirmed that practice is one of the very important components of the teaching and learning process. The existing clinic setting does not have good conditions to receive 30 students at once coming for practice. Also the space is not big enough and the personnel to supervise students are insufficient and sometimes do not exist. As one of the documents reported:

> *Because of non-existence of the Gynecologist-obstetrics doctor, the practice of Obstetrics emergency and Birth with problems was interrupted for four weeks. It was resumed when the doctor of obstetrics arrived sent by the Ministry of Health.* (Teachers)

> *The existing health services in Beira city such as Central Hospital, the health centers in the periphery and at the rural hospital of Buzi have inadequate conditions or none for the students' fieldwork practice.* (Administrators and Teachers)

Fieldwork Supervisor

The employees working in the fieldwork sites have difficulties supervising the students because of lack of academic preparation, and they do not have good conditions to work in. One nurse in the health service sometimes has 50 to 60 patients to take care of, and many times most of these patients are bedridden. They need total care from the nurse and demand her complete attention. These nurses are fixed in their routines and many times their routines contradict with the students' practice objectives.

> *Many of the personnel who integrate the students in the fieldwork, they are people who are fixed in the routine without doing any innovation. The doctors in the hospitals had made claims that we cannot send students there for long…the students had suffered rejection from the doctors who lead the clinics.* (Teachers)

Conditions in the Fieldwork Setting for Students' Practice

The health services where students take their practice training are faced with serious problems of limited hospital resources. The informants emphasized that to implement the Mother and Child Health curriculum effectively, it would be necessary to improve the conditions of the fieldwork sites where the students have an opportunity to match the theory they learned in the classroom to the practice reality. The teachers had difficulties to teach practice because of the fieldwork conditions.

> *In the theory classes we teach students how to prepare an open bed. We tell them how many sheets, pillows and pillowcases they need. Also, we teach them that when they assist in the delivery of a baby, what kind of material they need, such as delivery table, gloves, mask and so on. But when they go to the real situation*

*sometimes they find one sheet or none. They become confused, because what they had learned in the theory class does not match with what they find in the fieldwork for practice.* (Teachers)

What Teachers Do to Overcome These Problems

Teachers have used the technical classroom in the institute to do the demonstrations, although they felt that it does not help enough to transmit the reality students will face.

*To solve the problem slightly we used to do the practice with students in the technical classroom in the institute. But we know that this it is not enough to transmit the adequate knowledge to the students in this area.* (Teachers)

## Theme # 3: Institute Teaching Staff

Number of teachers

The administrators and teachers occupying the post of class director stated that the number of teachers in full-time positions is not enough, and they have difficulties to find teachers who are able to teach specific disciplines and to take students to the practice sites.

*There are an insufficient number of teachers in full-time positions who dedicate to curriculum activities full-time. We have difficulties finding teachers who are able to teach and conduct the practice in this matter.* (Administrators)

Qualification of Teachers

Reports coming from the Institutes to the Ministry of Health emphasized that the teachers lack training. The Institutes lack qualified teachers in full-time positions to cover the broad scope of work they are required to do, because they are required to teach one

subject in the Institute and also to take students to the field for practice. Almost all teachers in full-time positions are graduated of the medium level, ideal to teach the basic level.

> *Beyond the shortage of teachers, the actual teachers we have lack additional training to be full effective.* (Administrators –Report)

> *We must remind that many of the teachers in full-time position do not have pedagogical training.* (Administrators)

> *This is related to the methodology used. Many times the curriculum is not well implemented because of the methodologies used by teachers that are outmoded or they do not adequately teach the procedures required by the curriculum.* (Teachers and Administrators)

Part-time Teachers

The Mother and Child Health curriculum is comprised of basic specific disciplines, and specialty disciplines that usually are taught by teachers in part-time positions because they graduated from other areas that are part of this curriculum. These are employees from the hospital, the university, the Ministry of Health, or other important sectors for this program. They have responsibilities in their regular jobs, but they also work as part-time teachers because the Institutes need their help to cover their courses. For these teachers the Institutes work comes in second place. The participants said that it is difficult and stressful to work with teachers in part-time positions. To carry out the

program is always delayed because of their constant absences. So, they are considered the principal cause of schedule delay.

> *Another important cause of schedule delay is the part-time teachers working with the Mother and Child Health Program. They missed the class without any previous notice and this caused difficulties for us because we had to duplicate classes or delay the schedule.* (Administrators)

The health program was often delayed because of part-time teachers' absences. Also this breaks the sequence in which the disciplines are planned to be taught. Many reports from the Institutes relate to these problems as a barrier to curriculum implementation. The national health plan was delayed, and also the government plan was affected.

> *The Anatomy, and Biology courses had delays because of constant teachers' absences and it had moved to the fourth week in the third semester…constant absences of these teachers create difficulties in compliance with the programs.* (Administrators and Teachers)

The teachers in full-time positions felt it is stressful to work with teachers in part-time positions because these teachers did not dedicate enough time to this work and did not take the school activities seriously.

> *It is stressful to work with many teachers in part-time position at school because they do not give enough time to school activities.* (Teachers)

<u>What Teachers Do to Overcome These Problems</u>

Faced with the on-going problem of absence of teachers in part-time positions, the institutions had addressed the problem by duplicating the activities of the teachers in full-

time positions, and sometimes delaying the schedule or appointing some employees who had graduated in the health program and trained in the identified areas to take care to these courses.

> *To overcome this problem we have appointed one nurse with experience and trained in this area of Community Health to take care to this course.* (Administrators)

## Theme # 4: Characteristics of Students

One of the problems encountered in implementing curriculum, is the doubtful academic level of the some students. Participants wondered if the students have done the required level that is expected to give them the abilities to learn the contents in this curriculum. This suspicion arises because of the number of failures observed during the period that the curriculum is implemented.

> *Actually students use to buy certificates. What we see is that their knowledge do not correspond to the level that they present in their certificates.* (Teachers)

> *The five students who did not complete the program were accounted for as follow: one simply gave up, two had unsatisfactory marks and two were expelled for academic cheating during the exams.* (Administrator)

## Summary

In this chapter, I have presented the data from interviews and document analysis. I ordered the data according to the themes that emerged in that analysis, such as issues related to problems in curriculum development, issues related to the teachers working in the institutes, the problems related to the clinical setting, and the students' qualifications.

In my research, I found that teachers and administrators had difficulties implementing the Mother and Child Health curriculum, and they faced major problems with the fieldwork placements. They had difficulties implementing the curriculum because of the shortage of teachers. But, the teachers said that the curriculum is good because it gives students the knowledge to work in the Mother and Child Health Program.

In the next chapter, I talk about this curriculum implementation in the context of the historical, political, and economic situation of Mozambique. I did an interpretation of the situation in terms of the impact it has on curriculum implementation. In addition, I make recommendation for the applications of these findings, and for further research, and end with personal thoughts about my graduate studies experiences.

# CHAPTER FIVE: DISCUSSION, RECOMMENDATIONS AND PERSONAL REFLECTIONS

In this chapter I interpret and discuss the four themes on the light of Mozambique's history, economic and political context, because that context helps me to understand the participants' difficulties implementing the Mother and Child Health curriculum. I believe that it would help the readers of this study to understand the other factors that contribute to the constraints that the participants faced.

## Developing Curriculum

I understand that curriculum development includes various aspects such as the arrangement of the elements that comprise the curriculum, how to carry out and implement the curriculum content, and guidelines about how to evaluate the success of the developed curriculum. Also when changes can occur, such as the revision of instructional materials, teaching approaches, new strategies, and activities and practices engaged in by teachers. Teachers need time to prepare to face these changes. We know that some of the barriers they face are related to individual concerns with implementation, and depend on the nature of their concerns. Each one approaches changes differently. If all the needs related to the plan are identified before the curriculum is implemented, it would help to avoid problems during the process.

Curriculum development is a complex process. It requires definition of philosophical positions in order to define the rationale for the training process. To consider the underlying thinking that girds the teaching methods and to consider

expectations of others identifying the orientations in terms of context makes it easier to arrange the basic parts of curriculum, as well as to choose the curriculum´s basic design.

## Implementing Curriculum

In the Ministry of Health, teachers are supposed to implement the curriculum and to send in reports about the problems they found while they were implementing it. The curriculum is designed and revised centrally with participation of some teachers such as a director of the course, a principal, a director of pedagogy, and other knowledgeable people. But the Department of Training sends the curriculum to the health training institutions to be implemented, without previous discussion with the people who implement it. The Department of Training does not provide curriculum to the teachers for consideration before implementation or to pilot test the curriculum. During the process of implementation, the health training institutions have received additional changes to be implemented. Sometimes the semester started before the curriculum arrived at the school, and teachers had to use the old/plan curriculum. When the new curriculum arrived they had to move right away to the new plan and adjust to the changes. On the other hand, some of the teachers/institutes did not feel it was part of their responsibility, as the personnel who implemented the curriculum, to send reports to the Ministry of Health about the problems they found implementing curriculum. This was my experience when I worked in the Department of Training.

I understand that persons charged with development of curriculum must have a conception of what curriculum is and what are the aspects to consider to carry out this process. Direct communication between the planners and the personnel who are

committed to implement that curriculum is required, and must be permanent and constant, considering that curriculum development is not an event, but a process.

The participants in this study mentioned a variety of difficulties and problems related to curriculum organization, teaching problems, fieldwork conditions and the students' qualifications. Several times when I worked in the Department of Training, we got calls or letters from the training institutions, asking how to solve the problem of hours not allocated in the program for examination in certain disciplines. Also during the supervision visits to the health training institutions, we were faced with problems related to curriculum organization.

Curriculum development should be based on the recognition that curriculum documents and initiatives become meaningful only when the persons involved become part of the process. Also, demands coming from the "head" office that curriculum or changes must be implemented as they design it demonstrate the lack of trust in the professionals who execute the curriculum.

For curriculum development to be effective, it is necessary to have commitment of all the people involved in the process. Stakeholders must be well informed and be prepared to work together as a team to put curriculum into action with the purpose of benefiting students. With the process of collaboration it is possible to bring together the key persons involved in the process, and engage in joint decision-making. To be successful, coordination must be accomplished without the hierarchical authority which often centralizes the process.

According to Louis and Miles (1990), centrally designed curriculum may be effective when the local school people who implement the curriculum are empowered to

make significant choices about details of design and action, and if they get support from the central office as they proceed. No central authority can possibly be aware of the specific training needs of a particular community. It is essential that teachers fulfill a leadership function in many aspects of their work. Dr. Janzen (Lyons, 1997) asserts that through the participation and involvement of different people in the process the actualization will happen. Teachers are the persons who make the difference for the success of an implementation. In this case, the Department of Training must create a number of curriculum committees in different health training institutions, drawing on the expertise of teachers and other knowledgeable individuals, to be able to assist in the process. Many teachers are not adequately prepared through academic background or professional preparation to undertake the leadership role required. Inservice or professional development should be undertaken to provide teachers with ability to respond to whatever problems eventually occur in this area.

## Implementing Curriculum in the Classroom

It is in the classroom where most of the theories are introduced and discussed between teachers and students. It is in the dialogue that the student reconstructs knowledge. Teachers play a vital role in the development of students what they learn and experience during their process of learning shapes their views of themselves and the world, and affects later success or failure in work and in their personal lives.

Teachers design classroom presentations to meet student's needs and abilities. They also work with students individually. They plan, evaluate, and assign lessons; prepare, administer, and grade tests; and listen to oral presentations. They observe and

evaluate a student's performance and potential, and increasingly are asked to use new methods. All these issues are related to the commitment of teachers as professionals.

Miller and Seller (1990) have enumerated a variety of models of curriculum implementation, which are supposed to allow curriculum planners to identify particular areas of difficulties in implementation and to develop strategies to deal with these difficulties. To be aware of the new methods, strategies, and orientations to guide the process of implementation, teachers need additional preparation which will allow them to being knowledgeable in (for example) the ability to communicate, motivate students, inspire trust and confidence, and understand their educational and emotional needs.

In many schools teachers are increasingly involved in making decisions regarding the curriculum, design, teaching methods and teaching conditions. But in the Ministry of Health Training institutions, teachers continue to say that their participation in making decisions in curriculum development is still not enough; they are only indirectly involved in the process. This may be function as a barrier to implementing curriculum. The Adoption Model developed by Hall and Loucks (1978) focuses on teachers' problems or concerns with implementation. It considers that the teachers' feelings toward the changes and thought about its impact on their classroom vary, dependent on an individual's personality and on his or her knowledge and experience relative to the specific change. Depending on the nature of concerns, teachers approach a program in different ways, to determine ways of using it, and to identify the benefits or risks connected to its use.

When teachers understand the basic positions and the specific orientations within the curriculum, they can more readily and easily adopt and adapt their own approach to

curriculum presentation. Although they may not agree with any one position in its entirety, they can better clarify their own approach to match the curriculum (Miller and Seller, 1990).

In the health training institutions we find two different groups of teachers in full-time positions and teachers in part-time positions. The professional relationship between the two groups of teachers does not provide a healthy work environment. The responsibility they have toward the success of curriculum implementation and as well to the accomplishment of the programs, in the light of the school schedule, is different. The part-time teachers have other priorities as professionals beyond the responsibility they have as teachers in the institutes. The point of view of implementing curriculum, this situation could be a barrier for the full-time teachers who dedicate all their time to the school activities to benefit the students, and to accomplish the school programs. Teachers in full-time positions will demonstrate various uses of a program to overcome the difficulty they are faced with and the teachers' skill level will increase in terms of problem solving.

## Implementing Curriculum in the Field

In the process of teaching and learning, practice is considered as a basic or fundamental instrument to consolidate theory. In professional health training in Mozambique, as discussed in this study, about 50% of planned curriculum is comprised of practice (See figure 1). It is in the fieldwork where students have opportunities to match what they have learned in theory to the practice reality in order to become good future health workers. Participants described difficulties they found when they sent students to the fieldwork. For example, difficulties are related to the shortage of teachers

to take students to the fieldwork and supervise them, and they do not have enough space in the fieldwork to congregate 30 students at the same time. These are difficulties that affect the whole country because the government does not have enough health services to satisfy the population's needs. Also all the problems that Mozambique presents are related to the historic, economic, and political situation that the country has experienced over hundreds of years. It is one of the reasons that the government of Mozambique is investing in people to study in order to upgrade the standards of the health system.

It is my understanding that a spirit of collaboration has to be developed between the health training institutions and the fieldwork practice sites in order to accomplish the defined goals. Collaboration and joint decision-making among key stakeholders will make it possible to harmonize the situation between the health institutions and the fieldwork where students practice.

## Revising Curriculum

I understand curriculum revision as part of curriculum development. I see curriculum as a dynamic process that needs to be actualized repeatedly to be adjusted to the real context. Here is the fundamental place where the Department of Training should involve the persons who are directly involved in the curriculum implementation. We should listen to the teachers in the Ministry of Health they are committed to teach students in the classroom, and taking students to the fieldwork. They are the persons who know more about the reality within the process. Also the fieldwork supervisors should be heard because they are part of the teaching staff, and they know more about the constraints found in the fieldwork.

The time given to make changes should be planned taking into account the time needed to start the implementation of those changes. This will enable the Department of Training to give time to the teachers to pilot test the curriculum before the effective implementation. Also it will give time to the teachers to be familiar with the new curriculum.

## Mozambique Historical, Economic and Political Context

In this section, I have interpreted the prevailing themes as a consequence of the historical, economic, and political realities of Mozambique.

Some of these growing pains are evident in four themes that emerged from data collected for this study. It has been useful to me as a researcher, and hopefully to you as a reader, to have an overall concept of the situation of health care in Mozambique and an awareness of its causes. The themes become more comprehensible when you understand where they come from.

This is a country of great diversity of language, culture, geography, and expectation. To develop and implement curriculum has to be considered in light of this diversity. It will require interaction with all players in the health field to develop a continuos dinamic with the changing and pluralistic society.

Within this diversity, the Governiment strategy is to develop human resources. To facilitate this it must discover the needs of care providers on a local level and then to design a learning curriculum that incorporates the science and technology of modern methods of teaching and learning process, while meeting the pratical needs of the local hand-on providers. I am conscious that the universal problem in public health care is thephenominal cost. Mozambique is doubly disadvantaged in this area of development.

The country is highly dependent on external funding and sponsorship, and dollars must be wisely or reasonably spent.

It is my understanding that careful planning of curriculum implementation is needed to avoid pontetial barriers; as well, discussion between teachers, administrators, and curriculum planners during the planning sessions is essential. This might help to clarify the issues and identify solutions. My employment, and myexperience during the time I worked in the Department of Training, entailed a great deal of studying of this topic. I believe that the knowledge I gained in my graduate studies will in future help to improve the curriculum implementation process. Finally, I approached this study with the hope that it would be helpful in the Ministry of Health to increase the envolvement of teachers and stakeholders in curriculum decision-making. Such involvement should lead to teachers´and administrators´ empowerment if they take part in decision-making about this program. My research focus was to find out what teachers and administrators thought or experienced. I focused on teachers´and administrators´experiences. I expect that an outcome of my reaserch will be improvement in the curriculum development and implementation in the Department of Training.

Mozambique has an economic and political history. In the past, health care system focussed on quantity of trainers: getting enough teachers to meet the needs of the country. My thesis has pointed out the need to refocus – to consider the quality of teachers in the system. This re-focussing also means more concern with curriculum development and implementation.

As the Department of training moves forward with curriculum development, the Department of Training needs to have these historical factors in mind. Our country is just

beginning curriculum reform in health cara training. The plans for reform need to be grounded in the reality of the present situations: the education level of teachers, the reality of training hospitals/insitutions. Above all, curriculum reform needs to consider the economic situation of Mozambique.

Curriculum development reform cannot move beyond the economic reality. Curriculum reform can go only so far without changes to the economic reality.

## Recommendations

The recommendations resulting from this study may be of interest to teachers who implement the Mother and Child curriculum, those involved in the curriculum development in the Ministry of Health Department of Training, and administrators who are concerned with supporting teachers implementing curriculum.

To improve curriculum implementation, the Ministry of Health / Department of Training in Mozambique should consider the following recommendations:

- When a teachers need to be introduced to the process of curriculum development and implementation, and when a teacher is new at school or implementing curriculum he or she could be supported and introduced to the process a minimum of three months while assisting other teachers' classes.
- New teachers should have increased opportunities to participate in seminars and workshops. They could also be provided with opportunities to participate in the group discussions in different courses, and allowed time to practice.
- Teachers who have had several years of experience should be urged to take advantage of the opportunity for workshops regardless of the subject. This would

create consistency in curriculum implementation and provide more experience with curriculum development.

- Steps could be taken to increase the spirit of action research study at school between and among all school members, those who are and will continue to be involved in curriculum implementation. The Department of Health should plan time to spend with teachers in their activities helping to research problems and solving them in the process of their work. This could become an action research project.
- The Ministry of Health Department of Training could offer undergraduate programs or at least provide and require special classes in teacher training at the undergraduate level to train health professors. This would equip the teachers to more adequately meet student needs.
- The Ministry of Health Department. of Training could discuss with the health schools formulate and outline the rules that guide the institutes and centers to introduce new teachers into the process
- The Ministry of Health could discuss with the health training schools the opportunity for teachers to participate in seminars and workshops regardless to the subject area. This would create consistency in curriculum implementation and provide more experience in that area.
- The Ministry of Health could discuss with the health training schools and hospitals how to create minimal conditions in the clinical setting to provide meaningful field practice for the students to the level that they are trained in

health science schools. The schools would include in their budget funds to provide the minimum material that students can use in the initial practice.

- 5-Department of Training should:
- The Ministry of Health could discuss with the health training schools discuss with schools and create minimal conditions in the clinical setting to provide meaningful field practice to the students to the level that they are trained in the health science schools. The schools would include in their budget funds to provide the minimum material that students can use in the initial practice.
- The Ministry of Health could develop a strategy to involve teachers in decision making concerned curriculum design or revision. If a concerted effort is needed on the provincial and local level, the Ministry of Health could act as a catalyst in bringing together teachers, administrators, and Ministry representatives.
- Creating of a number of curriculum committees drawing on the expertise of teachers and other knowledgeable individuals would help to overcome the problems involved in developing, implementing, and revising curriculum.
- The Department of Training should discuss with the schools rules to contract teachers in part-time position.

## Implications

During my studies in graduate studies, I felt that it is important for those of us who have some overseas experiences to do some research on curriculum processes to find better ways to involve people in the curriculum process in Mozambique.

The hope for this study is to see some positive effects happening in the curriculum area in the Ministry of Health in Mozambique. Some of positive effects I expect to see are:

- The use of the recommendations coming from this study to improve the curriculum implementation process in the Ministry of Health institutions
- The use of this research as fundamental information to stimulate future research in curriculum in the Ministry of Health in Mozambique.

## Recommendations for Further Research

Further research could consider the problems and issues from the perspective of the students. Do they find that the training they have received adequately equips them for the work experience? Do they find the classes interesting and easy to understand? These are questions that cannot be answered by research directed to teachers and administrators.

I would address a research study to the part-time teachers to explore their experiences implementing curriculum. Do they find the same difficulties as the full-time teachers? What are their experiences working as part-time teachers?

I would explore experiences of the fieldwork supervisers, working with students in the fieldwork. What are their experiences dealing with students in the field?

There are other programs taught at the health institutions, and some of those might benefit from research into curriculum effectiveness.

## Personal Thoughts

My own career in the health system has spanned twenty-five years, including teaching experience from clinical settings to health schools, and planning curriculum in the Department of Training in the Ministry of Health in Mozambique. My preservice

major was nursing predominantly at the basic level working in the emergency area for seven years, and then after nine years at the medium level. In eleven years as an administrator, six were in the position of chief nurse in the Department of Orthopedics. Experience as a teacher in health science schools came later in my career when I finished an undergraduate degree in Psychology and Pedagogy in 1997, and I used this experience in my current position as teacher and curriculum planner.

The position as teacher and curriculum planner has proven unique with respect to this study. I found problems that I was not previously aware of. As this study evolved, I recognized the value of relating it to my current work situation in the Department of Training.

My own trepidations began to materialize as the project unfolded. I recognized the fact that I was an administrator in a position of authority over some of my participants because I was working in the central office. My experience with curriculum implementation was broader and more theoretically based than theirs.

I experienced more professional growth when I came to Canada under the sponsorship of CIDA Canada. In Canada I experienced discussing issues related to the health system with my colleagues without having hierarchical differences, and from the pasantia experience, working in Community Health with the Training For Health Renewal Program, learned how to communicate with people at different levels. This helped me to deal with the situation I had when doing my research.

Also I experienced more professional growth as I read an article that was discussing Saskatchewan education. The document, “Actualization can be achieved through a combination of planning and supports at the provincial level, and professional

decision-making at the school and school division level. Because actualization is a shared responsibility, collaboration among school, parents, and community is essential" (Saskatchewan Education, 1999, p.2). The more I became excited about and read about my research topic, the more I was reminded of one the province's first directors of curriculum, Dr Henry Janzen, where Lyons makes this point: "To assist in the process, the Department of Education creates a number of curriculum committees drawing on the expertise of teachers, civil servants, university professors, and at times, other knowledgeable individuals" (Lyons 1997, p. 12).

Reviewing the time I worked in the Department of Training in the Ministry of Health in Mozambique, I realized that it is necessary for Mozambique's health science schools, especially for those who work in the Department of Training, to take a broader and more comprehensive approach to curriculum planning. I felt that it is important for those who have the opportunity, to gain some experiences overseas to do research on curriculum processes to find better ways to involve people in the curriculum process in Mozambique.

It is my understanding that Mozambique´s institutes´teachng process is moving from the transmission to the transactional position. To become a reality, teachers should be involved in curricum development. Also it will be important to train them in pedagogy so they feel confident, and to introduce the ideia of reflective practice.

It is common, expected, and acceptable for men to go to other countries to study and / or work. The majority of workers in the health care field are women. However valuable overseas study would be, it is an extremely hard experience for a woman. Most, myself included, are married, have children and extended families, and are bound by

gender roles. To leave this situation for such extended periods of time, as required for study abroad, is not only a tremendous personal decision, but also requires the support and cooperation of many others. This is a major hurdle, but not the only one.

The Government of Mozambique supports the concept of development based on knowelodge, science, and technology, where scientific research is seen as a determinant for improving the country. Since 1975, many Mozambican workers are sent to study abroad in different contries to bring new theories and practice home to be implemented according to the reality of Mozambique in order to upgrate the health system.

In Mozambique, English is seen as the “global language”, but is not the working language. Anyone who chooses to study in English must first learn the language to an academic level. This is not only more difficult as an adult; it greatly extends the time that one must be away from home. Fluency in English is highly regarded in Mozambique and anyone with this capacity is considered privileged and much in demand in the work realm.

In summary, the entire research process was rewarding. Working in a qualitative manner gave me insight into areas I thought I already knew, and confirmed suspicions that I had. As I had suggested in my proposal, participation based on mutual respect and trust, and lack of deception, did create a positive environment for conducting interviews.

There is not enough research in the area of curriculum implementation. My hope is that this work has contributed some knowledge and will help to further the research into curriculum implementation and curriculum development in Mozambique.

# References


Berman, P., & McLaughlin, M. W. (1975). *Federal Programs Supporting Educational Change*: Vol. IV. Summary. Santa Monica, CA: Rand Corporation.

Corcoran, T.B., & Wilson, B.L. (1987). *Successful Secondary Schools.* Education Digest, pp. 22-24.

Dewey, J. (1938). *Experiences and education*. New York. Macmillan.

Fowler, R. H. (1989). *Curriculum Reform in Social Studies*: An Analysis of the Cases of Saskatchewan and British Columbia. Canadian Journal of Education, 14, 322-337.

Fullan, M. (1982). *The meaning of educational change*: A synopsis. Unpublished manuscript.

Fullan, M., & Park, P. (1981) *Curriculum implementation*: A resource booklet. Toronto: Ontario Ministry of Education.

Gall, Meredith D., Borg, & Gall, P. (1996). *Educational research: An introduction.* New York. Longman Publishers.

.Glesne, C., (1999). *Becoming qualitative researchers (2nd ed.).* New York: Longman Publishers.

Hall, G. E., & Loucks, S. (1978). *Teachers concerns as a basis for facilitating and personalizing staff development.* Teachers College Record, 80 (1), 36-53.

Holt, M. (1987*).* In N. Sabor. Ruddock and W.Reid (Eds). *Are schools capable of making critical decisions about their curriculum?* UK: University of Sheffield, Division of Education.

Kenney, A. M., 1984. *Sex education: An overview of current programs, policies, and research*. Delta kappon, 65,pp.491-496.

.Krueger, R.A. & King, J. A. (1993*). Involving Community Members in Focus Groups.* Thousand Oask Calif.. Sage Publications.

Lightfood, S.L. (1982). *The good high school*. New York: Basic Books.

Louis, K. S., & Miles, M. B. (1990). *Improving the urban high school: What works and why.* New York. Teachers College Press.

Lyons, J. E. (1997). *The people's curriculum*: Henry Janzen and curriculum reform in Saskatchewan. Unpublished paper. College of Education's. University of Saskatchewan.

Morgan, L. & Scannell, U. (1998). *Developing questions for focus groups*. California. Sage Publications.

Mendoza, A. (2002). *Analysis of changes of the entrance level in the health programs*: CC of Ministry of Health Presentation. Maputo-Mozambique

McCamley-Finney, Alison., & McFadden, Majella. (1999). *Qualitative Studies in Health Promotion.* London. John Willy and Sons Ltd.

Ministerio da Educacao/Ministerio do Trabalho. (1998). *Revisao da politica e estrategias do ensino tecnico e da formacao professional*. Mocambique

Miller, John P. & Seller Wayner. (1990). *Curriculum perspective and practice*. Toronto. Longman.

Miller, J. P. (1983*). The educational spectrum: Orientations to curriculum.* New York: Longman.

Ornstein, Alan C., & Hunkins, Francis P. (1998). *Curriculum: Foundations, principles, and issues.* Boston, ma: Allyn & Bacon.

Pratt, David. (1994). *Curriculum Planning: A handbook for professionals*. Toronto: Harcourt Brace Jovanovich.

Saskatchewan Education. (1999). *Core curriculum actualization*. Regina, SK: The Author.

Saylor, J. G., & Alexander, W. A. (1974). *Planning curriculum for schools.* New York: Holt, Rinchart and Winston.

Schratz, M. (1993). *Qualitative voices in educational research.* Washington, DC: Falmer Press.

Schubert, W. H. (1988). *On mentorship*: Examples from J. Harlan Shores and others through lenses provided by James B. Macdonald. Paper presented at the Annual Bergman Conference, Dayton, OH.

Seidman, Irving. (1998). *Interviewing as qualitative research: A guide for researchers in Education and the Social Sciences*. (Second edition). New York. Teachers College Press. Columbia University.

Tanner, D., & Tanner, L. (1980). *Curriculum development: Theory into practice.* New York: Macmillan.

Vaz, Fernandes., Bila, Ventura., Langa, Julio Correia., and Matsinhe, M. Manuel. (1998). *Proposta para a introducao de cursos de Nivel Superior no Intituto de Ciencias de Saude de Maputo*. Maputo. ICSM Press.

Wong, Theresa. (1979). *Gap between professional and bureaucratic.* Ontario Association for Curriculum Development, Twenty-Eight Annual Conference, November 8, 9 and 10, p.71.

Walker, R. (1985). *Doing research: A handbook for teachers*. London, Methuen.

World Health Report. (1995). *Bridging the gaps*. World Health Organization. Geneva.

Yi, D. (2001). *Conversation between East and West*: Stories of three EFL teachers in China. Unpublished Master's thesis: University of Saskatchewan Saskatoon, Saskatchewan.

**APPENDIX A**

# Ethics Approval

## APPENDIX B - SAMPLE SCRIPT To INTRODUCE the STUDY To MINISTRY of HEALTH

I am seeking permission to collect data for my Master's Thesis conducted at University of Saskatchewan in Canada as part of my course work in graduate studies, I have chosen to study curriculum implementation in the Institutes and Centers of Health Professional Training in Mozambique. The title of my thesis is "Curriculum Implementation in the Ministry of Health institutions in Mozambique".

Several theories suggest that involving people, giving them opportunity to participate, is one of the ways of empowering them, and to promote critical thinking in their work. For the purposes of my study I have selected three institutions as my research site: one in the south, center, and north of the country. I would like to interview the school principals, administrators, and teachers. I wish to gather participants' perspective regarding what is happening in curriculum implementation process, the success and barriers that the school members have faced during the curriculum implementation, as well as consultation of documents which will provide some background in that area.

The confidentiality and anonymity of the participants in my study will be protected through the use of pseudonyms, and my withholding any details that might identify participants. In the group interviews I can offer anonymity but not confidentiality because we will work in-group of six or seven people. Participation in this study is voluntary. Each participant is free to withdraw from the study at any time. The interviews will be tape-recorded for reference purposes. I will create transcripts from the interviews; I will review these transcripts with participants and get their approval to release the transcripts so that I can use this information in my research. A complete description of the study will be provided to the participants. All data collected from this study will be kept in a secure place for a minimum of five years at the University of Saskatchewan with my supervisor, Dr Sam Robinson, in accordance with the University of Saskatchewan guidelines.

To protect the well being of my participants, I guarantee that no-one at the Ministry of Health will know who has participated in my study, and who has not, and no-one at the Ministry will have access to my data.

In addition, I will present the data in aggregate form, and not identify individual school sites without permission. I will not use individual responses, or quotations, in my report/thesis without explicit permission of the participants

Questions concerning the research may be addressed to: the Office of Research Services at the University of Saskatchewan (1 306 966-4053), Lidia Monjane (Researcher): 1 306 374-7691, Dr Samuel Robinson (Supervisor): 1 306 966-7577 or Joan Feather (co-supervisor) 1 306 966-7932.In Mozambique, you may contact Mr. Antonio Tanda, Executive Coordinator, Training for Health Renewal Program – Mozambique: 258 1 308086.

Thank you for your cooperation and consideration.

---

I, ----------, have read the above description of the research inquiry and I grant permission for data to be collected at---------- Institute or Center of Health. Lidia Monjane has explained the procedure and its possible risks to me and I understand them. A copy of this form has been given to me to keep.

----------.
Date

----------. ----------.

Director’s Signature Researcher’s Signature

# APPENDIX C - LETTER of CONSENT and INTENT for ADMINISTRATORS

Dear----------.

This letter is to tell you about my research project and to secure your consent to take part in the project. I am working towards my Master's Degree in Education at the University of Saskatchewan. I am studying curriculum implementation in health programs. The title of my thesis is "Curriculum Implementation in the Ministry of Health institutions in Mozambique".

An important part of my research will be conversation, sharing experience and talking about successes and problems that teachers and administrators face daily implementing curriculum in school. I will be organizing individual and group interviews and the interviews will be tape-recorded.

Your participation is important for my study success because of your experience.. If you agree to participate you will be recorded during the interview. The group interview will last about 1 to 2 hours and the individual interview about 1 hour, and you can stop the tape record at any time. From these interviews, I shall prepare transcripts. I shall return the transcript to you so that you can make necessary changes on it. When you are satisfied with the transcript, you will approve it. I shall use this approved manuscript in my analysis of curriculum implementation.

Participation is strictly voluntary. You do not have to take part if you do not want to and there is not penalty for withdrawing. Names will not be registered to ensure anonymity. The confidentiality and anonymity of the participants in my study will be protected through the use of pseudonyms and disguising any details that might identify individuals. In the group interviews I can offer anonymity but not confidentiality because we will work in-group of six or seven people, although I shall ask participation in the group interviews to respect the confidentiality of the participants in the interview. Each participant is free to withdraw from the study at any time. study is. Each participant is free to withdraw from the study at any time. All data collected from this study will be kept in a secure place for a minimum of five years at the University of Saskatchewan with my supervisor, Dr Sam Robinson, in accordance with the University of Saskatchewan guidelines.

To protect the well being of my participants, I guarantee that no-one at the Ministry of Health will know who has participated in my study, and who has not, and no-one at the Ministry will have access to my data.

In addition, I will present the data in aggregate form, and not identify individual school sites without permission. I will not use individual responses, or quotations, in my report/thesis without explicit permission of the participants.

I am excited working with you on this study reflecting our professional life. I hope you are too. There is a space below for you to give me permission to use your experiences. I will give you a copy of this form to keep.

Questions concerning the research may be addressed to: The Lidia Monjane (Researcher): 1 306 374-7691, or Dr Samuel Robinson (Supervisor): 1 306 966 7577, or Joan Feather (co-supervisor): 1 306 966-7932 or the Office of Research Services at University of Saskatchewan: 1 306-966-4053. In Mozambique, you may contact Mr. Antonio Tanda, Executive Coordinator, Training for Health Renewal Program – Mozambique: 258 1 308086.

---

I have read the above information. I understand the role that I will play. I agree to take part in the process.

----------(Signature of Participant)

----------(Signature of Researcher)

----------(Date).

# APPENDIX D - LETTER Of CONSENT and INTENT for TEACHERS

Dear----------.

This letter is to tell you about my research project and to secure your consent to take part in the project. I am working towards my Master's Degree in Education at the University of Saskatchewan. I am studying about curriculum implementation. The title of my thesis is "Curriculum Implementation in the Ministry of Health institutions in Mozambique".

An important part of my research will be conversation, sharing experience and talking about success and problems that teachers face daily implementing curriculum in school. I shall be interviewing you individually. I will also be organizing group interviews and both interviews will be tape-recorded. From these interviews, I shall develop transcripts. I shall return the transcript to you to make necessary changes. Then you will be able to approve the release of this manuscript. I will use this approved transcript to analyze the data on curriculum implementation.

If you agree to participate, you will be recorded during your talking in the individual interview and in group. You can stop the tape record at any time. The discussion in groups will last about 1 to 2 hours, and the individual interview 1 hour, which will be followed by completing a short questionnaire for about ten minutes. In the group interviews, I cannot guarantee confidentiality, although I can guarantee anonymity. I ask you, too, to respect the confidentiality of what is said during our group interview. Participants will be strictly voluntary. You do not have to take part if you do not want to and you withdraw without penalty. Each participant is free to withdraw from the study at any time. All data collected from this study will be kept in a secure place for a minimum of five years at the University of Saskatchewan with my supervisor, Dr Sam Robinson, in accordance with the University of Saskatchewan guidelines.

To protect the well being of my participants, I guarantee that no-one at the Ministry of Health will know who has participated in my study, and who has not, and no-one at the Ministry will have access to my data.

In addition, I will present the data in aggregate form, and not identify individual school sites without permission. I will not use individual responses, or quotations, in my report/thesis without explicit permission of the participants.

I am excited working with you on this study reflecting our professional life. I hope you are too. There is a space below for you to give me permission to use your experiences. I will give you a copy of this form to keep.

---

Questions concerning the research may be addressed to: The Lidia Monjane (Researcher): 1 306 374-7691, or Dr Samuel Robinson (Supervisor): 1 306 966 7577, or Joan Feather (co-supervisor) 1 306 966-7932, or the Office of Research Services at University of Saskatchewan: 1 306-966-4053. In Mozambique you may contact Mr Antonio Tanda, Executive Coordinator, Training for Health Renewal Program – Mozambique 1 258 308086.

---

I have read the above information. I understand the role that I will play. I agree to take part in the process.

----------(Signature of Participant)
----------(Signature of Researcher)

----------(Date).

**APPENDIX E - LETTER of CONSENT for RELEASE of TRANSCRIPT**

Thank you for taking part in this study. I am returning to you the transcripts of your audiotaped interviews in order to verify the authenticity and the release of confidential information. I will adhere to the following guidelines, which are designed to protect your anonymity, confidentiality and interests in the study.

1. Please read and examine the transcripts for accuracy of information. You may add or clarify anything you wish in order to reflect your real meaning. I will use your approved transcript in my data analysis of curriculum implementation inthe Ministry of Health in Mozambique.

2. The data from this study and its interpretation will be used in a thesis, scholarly journal articles, Mozambican Nursing Association journal, or other publications and presentations in the Ministry of Health area. Most of my reports in this study will be written in English. However my report to the Ministry of Health will be written in Portuguese, and I shall share this report with you.

3. To protect the well being of my participants, I guarantee that no-one at the Ministry of Health will know who has participated in my study, and who has not, and no-one at the Ministry will have access to my data.

4. In addition, I will present the data in aggregate form, and not identify individual school sites without permission. I will not use individual responses, or quotations, in my report/thesis without explicit permission of the participants.

5. In accordance with the University of Saskatchewan guidelines on Behavioural Ethics, the audiotapes, written documents and transcriptions will be kept by my supervisor, Dr Sam Robinson, secure for five years at the University of Saskatchewan and then destroyed.

I, ----------, understand the guidelines above and agree to release the revised transcripts to the researcher. A copy of the transcript release form is provided to me to keep.

----------.
Date

----------. ----------.

Signature Researcher's Signature

## APPENDIX F - THE SAMPLE QUESTION INTERVIEW

The main question for this research is:

What is the nature of the curriculum implementation process in the Ministry of Health institutions?

Wide Questions

To respond to this question, I shall keep the following sub-questions in mind:

What was your experience with the Maternal and Child curriculum?

What are your thoughts about this curriculum?

What was it like when the Ministry introduced / implemented this curriculum?

What is happening with this curriculum right now?

Do you think as a teacher that you have any importance in curriculum process?

What other comments can you have to add?

Specific Questions

I will listen for answers about specific concerns about curriculum implementation.

If I don't hear them, then I will ask these specific questions:

How long you have been teaching in the Mother and Child Program?

Who introduced this curriculum to you?

When?

Where?

Where and how do you see the control for the implementation process?

Have you found any barriers or problems implementing this curriculum?

If yes could you tell me please what kind of barriers or problems you have found?

Have you done any action to overcome these barriers?

What is your participation in the curriculum design, innovation and actualization?

If you could change the way of organizing curriculum process in any way you wanted, what would you wish to change?

Do you think that the Maternal and Child Health program has been implemented on time according to the school schedule?

# APPENDIX G - BACKGROUND QUESTIONNAIRE

Participants will also complete this questionnaire of basic information.

How long you have been involved in this program?

- 1 year----------
- 1 to 2 years----------
- 1 to 5 years----------
- 5 or more years----------

Who designed the Mother and Child curriculum that you implemented in this school?

- Teachers----------
- Principal----------
- Pedagogical Director-----
- Ministry of Health (DF)----
- Others----------

How was the Maternal and Child curriculum introduced in the school implementation?

- It is mailed----------
- Imposed----------
- Discussed----------
- Others----------

Who introduced this curriculum in the school?

- Coordination of the Ministry of Health-------

- Principal----------
- Pedagogical Director----------
- Other Teachers----------
- Others----------

How did you make your contributions to develop or improve the Maternal and Child curriculum?

- Participating in curriculum design----------
- Participating in discussions----------
- Implementing changes during the curriculum implementation-----
- In silence----------

Others----------