UNIVERSITY OF KWAZULU- NATAL

THE USE OF SYSTEMS THINKING FOR SCHOOL IMPROVEMENT:
REFLECTING ON THE IMPLEMENTATION OF THE INTEGRATED QUALITY MANAGEMENT SYSTEMS (IQMS) IN THE SWEETWATERS WARD

By

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"The use of systems thinking for school improvement: Reflections on the use of systems thinking in the implementation of the Integrated Quality Management Systems (IQMS) in the Sweetwaters Ward"

ABSTRACT

This study is an investigation into how systems thinking was used in a school improvement initiative, which involved the implementation of the Integrated Quality Management System (IQMS) in a ward with twenty- two schools. The Superintendent of Education Management (SEM), as the practitioner, initiated the study in the form of an action research, using the soft systems methodology (SSM). The preference of the SSM was justified for its suitability to explore problem contexts of a pluralist complex nature. The School Development Team (SDT) Chairpersons were the participants that went through the learning process and provided insights from their worldviews and experiences as the leaders tasked with bringing about the requisite transformation and guidance aimed at the professional development of educators, their performance measurement and whole school evaluation. The reflective study interrogates the worldviews, perspectives, attitudes and values of the participants, promotes the use of systems tools and techniques and leads to the development of conceptual models which might constructively enhance school reform. The findings of this study highlight educators' ability to engage in reflective activities and self- directed explorations, shared experience of educators learning to learn together and continuous professional development. The reflective educators learn to recall, consider and evaluate experiences in relation to a broader educational purpose. The study explores the possibility of using the IQMS systemically in action as leverage to enhance school improvement and bring about positive change in educator accountability.

Key words: Integrated Quality Management System (IQMS); systems thinking; reflections; professional development; school improvement

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LIST OF ABBREVIATIONS

Abbreviations	Full Text
CATWOE	Customers, Actors, Transformation, Worldview, Owners, Environment
DA	Developmental Appraisal
DAS	Development Appraisal System
DoE	Department of Education
DSG	Development Support Group
ELRC	Education Labour Relations Chamber
HOD	Head of Department
IQEA	Improving the Quality of Education for All
IQMS	Integrated Quality Management System
Ofsted	Office for Standards in Education
PGP	Professional Growth Plan
PM	Performance Measurement
PS	Performance Standard
PSNP	Primary School Nutrition Programme
RD	Root Definition
SADTU	South African Democratic Teachers Union
SDP	School Development Plan
SDT	Staff Development Team
SE	Systemic Evaluation
SEM	Superintendent of Education Management

SGB	School Governing Body
SIP	School Improvement Plan
SMT	School Management Team
SOSM	System of Systems Methodologies
SSM	Soft Systems Methodology
SST	Soft Systems Thinking
TESM	Towards Effective School Management
WSE	Whole School Evaluation

CHAPTER 1

INTRODUCTION

1.1 Background to the Study

Policy in South African education changed drastically after 1994, when the country as a whole became a hive of political and social transformation. The change of policy brought in the integration of bureaucracies, reclassification of schools and highlighted the need for restructuring and reculturing, i.e. 'working at developing new attitudes, principles, ethics and norms' (Fullan, 1996: 422) in the Department of Education. The new policy introduced a change in the socio-economic norming of schools into quintiles, which gives the highest allocation per learner to the most disadvantaged schools (quintile 1) and the lowest to schools with the best resources (quintile 5). The aim is to assist poverty stricken schools with funds to acquire resources and develop to a state that matches that of well-resourced schools. The practice, however, seems not bear the expected outcomes as many schools contest the allocated quintile rankings, some lack financial management skills and others struggle to access funds due to corrupt practices in procurement procedures.

In terms of policies for transforming education a number of policy initiatives were launched, many of them influenced by the political scene with many leaders who wanted to reposition South African education internationally. There were policies to bring about school reform in, *inter alia*: the curriculum, teaching, assessment, quality of teaching and learning, the training and retraining of educators, school evaluation and developmental planning, e.g. Outcomes-Based Education (OBE), Developmental Appraisal System (DAS), Whole School Evaluation (WSE), Systemic Evaluation (SE) and the Culture of Learning, Teaching and Services (COLTS). I understood the need for the broader socio-economic policy for improving schools, as it was a period of moving away from 'apartheid' education into a 'peoples' education. It seems, however, that many of the early initiatives based on international best practice

lacked success because they did not take into account all the things that go into educational change. The Integrated Quality Management Systems (IQMS), a compromise alleged to be a buy-in from stakeholders, has come out of that.

I am the Superintendent of Education Management (SEM) of the Sweetwaters Ward, which is made up of twenty-two schools. My work is governed by policies and guided by the vision, mission and strategic goals of the Department of Education (DoE) from National as well as the KwaZulu-Natal Province. One of my core responsibilities is to coordinate the implementation of the policies and programmes aimed at ensuring that the South African citizens receive public education of the highest possible standard. The main effort towards school improvement in the last four years has been through the implementation of the IQMS, and in this study I will be exploring and reflecting on the implementation of the IQMS in the ward that I manage. The focus of the study will be on how systems thinking can be used to facilitate school improvement in the ward.

The need for such an investigation emerged out of my participation in a leadership programme for selected SEMs and principals called "Towards Effective School Management (TESM)". This accreditation programme ran in 2003 and it exposed me to systems thinking and the importance of using and applying the knowledge and skills gained in the real day-to-day work environment. All modules promoted that we work as small groups towards exploring and gaining in depth knowledge on our work as SEMs. This led to a paradigm shift on how I looked at my work, thus motivating me to practice working as a reflective practitioner in what I do. This has been further enhanced by work conducted in subsequent studies towards the Master of Commerce degree from 2005 to date, i.e. 2009.

The implementation of the IQMS takes place in a complex environment and involves human activity. It thus tends to be a 'mess' that calls into question peoples' priorities, assumptions and involve aspects that are sometimes beyond their control (Lane, et al., 1999: 28). It comes during a period of

transformation when there are numerous changes brought about through legislation, policy reviews, restructuring of education, new programmes and initiatives and even the uniqueness of South African leadership, i.e. leadership oriented to African values (Moses, 2001: 8). In this study I thus strive to reflect on how the Sweetwaters Ward has grappled with such complexities and the attempts at using systems tools and techniques to get a better understanding of the situation.

1.2 Aim of the Study

The primary aim of the study is to explore the possible use of systems thinking in building capacity to facilitate the effective implementation of an educational reform or change, i.e. the IQMS. Schools are, most of the time, victims of 'innovation overload', (Fullan, 2001). They have to deal with too many disconnected, fragmented, uncoordinated policies, initiatives and innovations coming down on them from the Department's hierarchical bureaucracy as well from external partnerships. Some examples of current school improvement programmes are the IQMS, National Strategy for Learner Attainment (NSLA), National Curriculum Statement (NCS), Mathematics and Science Project, Winning Teams and the Matric Intervention Programme. This leads to confusion in schools and sometimes people just go through the motions, trying to act as if they have everything under control. The study intends to plot the course of change and organizational learning as a ward works at aligning itself to the ever-changing requirements of its schools to the changing policies of the Department.

A secondary aim is to reflect on the operational attributes of systems thinking as it guides the use of soft systems thinking when employed amongst professional educators who have some academic experience, but may never have been acquainted with soft systems thinking. As SEM I have to provide leadership, guidance and support to schools in the ward and I believe that school improvement should be in line with current government thinking and practice in the country, which emphasizes democratic values, transparency,

quality education and service delivery, poverty alleviation, skills development, public- private partnerships and community involvement. I therefore aim to help school managers and relevant stakeholders learn 'how to...' improve their own work and so improve the schools or school system, as opposed to learning 'about....', i.e. to know something good is possible but we don't know how to do it or we are too busy, it makes our life harder (Webb, et al., 2005).

1.3 Purpose Statement

The purpose of the study is to explore and reflect as SEM on my experiences in the implementation of the IQMS in the Sweetwaters Ward. The study goes on to explore how systems thinking could be used in the implementation as a way to facilitate school improvement. It thus involves taking a step back to interrogate my observations and dialogue at the initial stage of introducing the programme as well as the challenges, lessons learnt and successes as perceived by the educators involved. The exploratory and reflective study covers the implementation in the years 2005 up to 2007.

1.4 The Problem Statement

1.4.1 Analysis of the Problem

The Department of Education in South Africa aims at ensuring that its citizens get public education of good quality and strives to improve the standard of learning and teaching, in line with Section 29 of the Constitution of the Republic of South Africa, Act No. 108 of 1996. The National Education Policy Act No. 27 of 1996, s4 (l) emphasizes the need to enhance the quality of education, as well as putting systems in place to monitor and evaluate how well education is provided and its achievements. This necessitates amongst other things the appraisal, development and preparation of educators, school management team (SMT) members and officials of the DoE. The Employment of Educators Act No. 76 of 1998, in its Personnel Administrative Measures, Chapter A, furthermore states the duties and responsibilities of all school-

based managers, i.e. SMT members. It goes on to spell out the norms and standards for educators at all levels of their functionality. The emphasis on transforming service delivery in public education promotes that learners receive equal access to education. That differs drastically from the previous 'apartheid' education dispensation, which promoted racial inequalities and in a way provided a fertile ground for political bias, abuse and corruption.

Educator appraisal, professional development and whole school evaluation, are key pillars in the IQMS. Its implementation, however, does not occur in a vacuum, it is shaped by the political, organisational and the contextual needs of the environment in which it takes place. This is what necessitated a drastic change from a judgmental (inspection) system to a developmental appraisal system during the transition from apartheid to a new democratic dispensation in South African education (Jantjies, 1996: 50-57). Chetty (1993: 1) pointed out that educators are keen to engage in professional development activities but are totally against prescriptive control policies similar to the practices in the days of the traditional 'inspections'. It thus seems sensible to focus the attention and energies on, *inter alia*: effective educator appraisal and professional development, in striving towards school improvement. Steyn (1999: 206) looks at professional development as the key to effective school improvement. Hargreaves (2002) refers to the work of a school improvement advocate, Morrissey (2000), who suggests that schools do and should operate as 'professional learning communities'. In an attempt to understand the implementation of the IQMS, all these factors come into the picture and will be discussed later.

1.4.2 A Context for the Implementation of the IQMS

The IQMS implementation came with some reservations, *inter alia*: Schools had previously been engaged in the Developmental Appraisal System (DAS), which was introduced in 2000 and was quite disappointing. Time constraints, inadequate training and lack of monitoring were some of the major factors that seemed to hamper the DAS implementation. The DAS was also seen to be

burdensome and complicated, with a rating system that needed to be demystified (Motilal, 2004: 161). The advocacy of the IQMS in 2004 was marred by insufficient training for SEMs as well educators, e.g. SEMs received just one-and-a-half days of training and I only really got to learn about what the IQMS involved as we facilitated training in the ward.

The IQMS is further complicated by the fact that it is a system that aims at development, but at the same time evaluates performance for the purpose of rewarding educators. Such complexity calls for a special kind of leadership that requires 'common sense', (Chatterjee, 1998: 17-18), the need for double loop learning (Stacey, 2003:111-113) and systems thinking (Senge, 1990). Guiding and leading people as an SEM has thus involved changing my mental models, mindset or frame of reference and even destroying my old ways of viewing the world.

The Department of Education and Teacher Unions contribute a lot to the complexity of the IQMS, e.g. in SAFM News at 23h00 on 2005/06/22, the Director General, Duncan Hindle, insisted that educators will not automatically get the 1% pay progression without going through the process of performance evaluation. Thulasizwe Nxesi, the South African Democratic Teachers Union (SADTU) Secretary General, on the other hand put the blame squarely at the failure of the DoE to implement performance evaluation. In August 2006 the National Executive Committee of SADTU resolved to look at the differences in educator salary progression in different provinces and their dissatisfaction with the implementation of the IQMS. SADTU recommended that the DoE revisits the process and separate the appraisal for development from the salary progression incentives (Teacher licensing, 2006:17).

1.4.3 The Role of the Superintendent of Education Management (SEM)

My vision as SEM is to facilitate school improvement by encouraging each school in the ward to look at the IQMS in a holistic manner, as a conduit for all

interventions and activities taking place in the school. This necessitates keeping informed and actively involved, sharing experiences, learning from what happens in a school each day and striving to find ways to work together to improve on that. It also meant the promotion of teamwork and team learning, sharing achievements and challenges so that no school should be left behind.

As SEM, it is my task to coordinate the IQMS programme in the Sweetwaters Ward and to serve as the immediate senior in the Development Support Group (DSG) for each and every principal or acting principal. The Education Labour Relations Chamber (ELRC), Resolution 8 of 2003, spells out the key responsibilities of individuals and structures tasked with the implementation of the IQMS, viz. - the principal, the educator, School Management Team (SMT) and Staff Development Team (SDT). The policy makers on the 'high ground' have put this as a simple, straightforward process; whilst it gets increasingly poorly defined and muddled as it reaches the functionaries or implementers on the 'swampy lowlands' (McNiff, 2000: 45, citing Schon, 1983, 1987). Educators in schools face complex situations on daily basis and there are no clear-cut solutions. They end up working things out for themselves usually in difficult situations to try and implement the IQMS. Fullan (2001:5) seems to attest to this when he espouses that planned change attempts rarely succeed and states that in the last 30 years educators have come to realize that 'the proof is in the putting': the way in which change is put in practice determines to a large extent how well it fares. I experience this as well as I rush to attend to national or provincial priorities and sporadic school conflicts; in fact there is hardly a week when my itinerary does not end up deviating from plan.

When the IQMS was first introduced, my role involved making SMT members and educators aware of what they had to do through advocacy. The plan was that I had to give direction and guidance on how to initiate the programme in the ward. Implementation, however, refers to what really happens in practice as distinct from what was supposed to happen. I thus realized at an early stage the difficulty of managing such great change. There was a need to

engage educators from each school as a workplace and it dawned to me that I had to think differently and find creative ways to engage the schools, hence the motivation to consider a systems thinking approach.

1.4.4 Key Questions and Concerns

Some of the key questions and concerns that I want to explore and reflect on in view of the above general overview are:

1. What were the experiences of the SEM and educators (SDT and SMT) in the implementation of the IQMS from 2005 to 2007?
2. How did I (the SEM) use systems thinking and a soft systems methodology in the implementation of the IQMS?
3. What models seem relevant in the implementation of the IQMS in the ward?
4. What leverage possibilities can be explored if IQMS is implemented more systemically?
5. What school improvement possibilities were facilitated through the implementation of the IQMS in the ward?
6. What were the lessons learnt during the implementation of the IQMS?

1.5 Importance of the Study

As this study focuses on an existing challenge, the implementation of the IQMS for school improvement, I foresee its importance in that it might help:

1. To provide a learning experience for the schools in the Sweetwaters Ward, which will possibly help SDT members and SMT members develop the ability to engage in reflective practice at individual and team levels in the school.
2. To motivate school leaders to work out their role in school improvement initiatives and how they could learn as individuals and as teams.

3. To bring about a general awareness of using systems thinking and the soft systems methodology in the facilitation of school improvement.

4. To develop a record on using a systems approach in policy implementation working with schools. The record may be useful for guidance and to promote development in the schools and provide an 'alternative lens' to view, or an alternative 'tools and techniques' for use in future endeavours.

5. To provide an opportunity for the SEM as researcher, to extend knowledge and enhance service delivery skills in the workplace. It is a unique opportunity to share knowledge, skills and values gained in the TESM project and the degree registered for.

1.6 Research Design and Methodology

This study is best suited to a qualitative research paradigm as it will be exploratory in nature. It involves an inquiry process, which commenced with a literature review of systems thinking, appraisal systems, e.g. DAS; inspection systems, e.g. Office for Standards in Education (Ofsted); school improvement and definition of concepts. It falls in the category of applied action research, as it will be pursued by the SEM, who is the supervisor or manager exploring a specific challenge in her ward. The collection and analysis of data will take place simultaneously and will be coupled with activities that enable the discovery of important understandings that promote renewed efforts to gather additional data. The study is interpretive in nature in that it sets out to understand and interpret the experiences, occurrences and meanings that educators relate to a problem situation, viz. - the implementation of the IQMS, as it exists. This includes describing the attempts to introduce the use of systems thinking. There will be no manipulation or control of any elements involved in the situation or events under study.

The use of systems thinking was introduced in workshops and meeting sessions held with principals and SDT members of schools in the Sweetwaters Ward as the system-in-focus. The choice of the soft systems methodology (SSM) as a relevant methodology was based on the complex

pluralist nature of the problem situation studied and its 'messy' context. The methodology is known to be outstanding for investigating complex situations. Going through the methodology will hopefully lead to more insight and in depth reflection on how the implementation of the IQMS influences school improvement. As this is a reflective study reflecting action on the interventions that are currently taking place, it explores the experiences of some of the people for whom the IQMS is intended, i.e. educators. The study refers to various data collection activities that promote participatory learning and strengthen the validity of findings. Methods include group sessions, i.e. meetings, workshops, school visits for SDT and SMT members; as well as individual sessions, e.g. baseline and summative appraisal sessions for principals. It also explores the use of soft systems tools and techniques to get an in-depth understanding of what happens in the schools.

1.7   Layout of the Study

The study has been broken into defined chapters that interconnect to form a whole, in line with Checkland's (1981) view that a whole fuses the parts and ends up greater than the sum of the parts. Parts on their own have individual properties and functions, but when they combine and interact, the result is stronger interconnections and relationships.

Chapter 1 gives a brief overview of the situation in the Sweetwaters Ward. It gives background to a school improvement initiative from the National Education Department, whilst expressing the ward's involvement in the implementation of such policy. It attempts to bring out the complex nature of the IQMS and the role of the practitioner conducting the research.

Chapter 2 presents the reviewed literature on, *inter alia*: reflection, appraisal systems, school improvement, school inspection systems, professional development, communities of learning and collegiality. A variety of concepts are defined and explored as part of the theoretical framework or grounding of the research. The framework brings to light the complex ward situation in

which policies like the IQMS are to be implemented, which paves a way to introduce systems thinking as a relevant approach to be discussed in the next chapter.

Chapter 3 discusses the systems approach and its relevance to the problem context. It provides a review of systems thinking in general, and the soft systems approaches specifically, which informs the choice of the methodology used in the next chapter.

Chapter 4 expresses the situation from the perspective of the practitioner through an attempt at a systems view of the ward. It outlines a qualitative research approach, based on an interpretive paradigm and follows a descriptive enquiry that I find the most appropriate for this research. It provides examples of how the systems thinking approach generally, and specifically the soft systems methodology (SSM), may be introduced as the research is conducted. It leads to the seven-stage model that was proposed by Peter Checkland, as this will be related to the situation in the Sweetwaters Ward.

Chapter 5 reports on how the IQMS was implemented in the Sweetwaters Ward. It covers the period 2005 to 2007 and unpacks why I think the model discussed in the previous chapter will work. It is a reflection on the process and an evaluation of the study from its unity-in-diversity perspective. The chapter highlights possible areas of improvement of the methodologies and reviews the processes adopted in the study. The strengths and weaknesses (that provide opportunities) of the model are critically reflected on and possible alternatives and adaptations explored.

Chapter 6 analyses the general findings based on the work covered during the implementation of the IQMS in the period 2005 to 2007. The implementation applies specifically to the Sweetwaters Ward in uMgungundlovu District.

Chapter 7 outlines the recommendations, limitations of the study, proposals for further research and conclusions.

1.8 Summary

The background to the study introduces a researcher's journey to explore the implementation of the IQMS in a school improvement effort brought about by a new policy of the Education Department. It paints a brief but clear picture of the complex context in which such implementation is expected to take place and the questionable state of readiness or preparedness to the people who have to implement the change or reform. The researcher views a systems thinking approach as a suitable way to delve deeply so that there is a clear understanding and a sustainable development in any school improvement initiative.

The pillars on which IQMS stands are, *inter alia*: educator appraisal, professional development, performance management and whole school evaluation. However, they exist in a system that is shaped by politics, organizational and contextual needs of the environment in which they are implemented. The numerous concepts mentioned in this chapter, e.g. school improvement, reflection and appraisal systems, need to be defined and explored so that a theoretical grounding of the study can be developed. Chapter 2 will therefore present the reviewed literature.

CHAPTER 2
LITERATURE REVIEW

2.1 Introduction

This is a reflective study in which the SEM looks back at the implementation of the IQMS in her ward, as well as looking forward into how the implementation can be adapted to contribute more effectively towards school improvement. It includes perspectives shared with SMT members and SDT chairpersons, building on the idea that each person has an exclusive viewpoint and/or perception on reality as a whole. As SEM, I try to understand my point of view, but at the same time open myself to learning to 'look out' through the SMT and SDT members' standpoint, hoping that such interactions will lead to a deeper understanding than what I see alone (Senge, 1990: 248). This chapter presents an overview into what reflection entails, as it affects education institutions or schools in particular. It will review concepts that are crucial for the reader to understand the context in which the IQMS policy operates, *inter alia*: teacher appraisal, professional development, teacher leadership, school improvement and whole school evaluation.

2.2 The Meaning of Reflection

People attach different meanings to the term 'reflection' (Zeichner and Liston, 1996; Cordingley, 1999). Despite the different meanings and approaches to reflective thinking, its proponents agree that learning and teaching involves being critical, involves analysis, enquiry and reflection on the issues implicit in the social context (Schon, 1987). A reflective educator sets objectives and evaluates the impact of the results achieved (Zeichner and Liston, 1996: 11). Such an educator is aware of his/her worldviews, assumptions and norms that influence how he/she attends to the unique contexts be they cultural or institutional, in the work environment. He/she uses problem-solving skills to deal with the complexities of classroom practice, makes it his/her task to

develop as a professional and explores opportunities to augment school improvement (Zeichner and Liston, 1996: 6). This notion links to a school that has adopted the thinking of being a learning organization (Senge, 1990) where teachers operate as life-long learners and work collaboratively to reflect on the teaching and learning in their quest for school improvement.

Cordingley (1999: 183) looks at educators who engage in reflective practice through their involvement in research activities, where they gather evidence that contributes to continuous professional teacher development. This exposes the educator to wider knowledge and skills to deal with classroom-based teaching and learning challenges. Cordingley's views embrace Schon's (1987) description of practitioners who linger on 'a high hard ground overlooking a swamp'. Such practitioners have a choice to maintain the status quo by hanging about and attending to trivial problems, or they can venture into unfamiliar terrains and tackle real complex problems, which involve, *inter alia*: people and relationships in messy work contexts.

Hopkins, et al. (1998:72) strongly emphasize 'reflection and enquiry' as central   processes in school reform or development. It is a feature of highly skilled practitioners and an essential building block of professional competence and confidence. Schools that enquire and reflect on their core priorities have a better capability to evaluate their performance and ability to maintain their delivery standards in times of change. Hopkins (2002: 43) states that enquiry helps the teachers to spot important opportunities that come up, whilst reflection guides them towards appropriate action. He points out that within programmes like the Improving the Quality of Education for All (IQEA), the connection between teacher and school development is being deliberately made with reflective classroom practice explicitly being linked to whole school development, so that schools focus innovative efforts simultaneously on teacher and school development within the context of a clear and well-articulated improvement strategy (Hopkins, 2002: 34).

Hopkins (2001: 22- 24) citing Aoki (1979) talks of critical theory and states that in critical enquiry the researcher becomes part of the object of enquiry. "… the

researcher becomes involved with the subjects, enter into their world and engage them in mutually reflective activity". When the researcher thus questions the subjects and himself/herself, he/she facilitates that both become participants in an open dialogue. "This process of reflection is also oriented towards implications for action, guided by the newly gained consciousness and critical knowing" (ibid). This seems like a way to explore peoples' most hidden assumptions, intentions and mental models so that there is a paradigm shift, transformation and reorientation in the way they think and act. As he aptly puts it: "it seeks to liberate individuals from hidden assumptions and techniques, and promotes a theory of the individual and society that is grounded in the moral attitude of liberation" (ibid).

Barnett (1992: 124) citing Pratt (1983) sees 'critical dialogue' as a vehicle for both change and improvement. Barnett (1992: 123) talks of the value of entering into 'critical dialogue' with one's peers, even if judgments or decisions cannot be said to be definitive. Critical dialogue encourages reflection on one's own beliefs and actions, helps to examine the validity and soundness of those beliefs and actions and through dialogue new possibilities and actions are likely to arise. Senge (1990: 248) asserts that a visionary leader will share his/her dream with the team and special skills in reflection, investigation and discourse present the base for achieving a common vision and team learning.

Farell (1998) reviews approaches to reflective teaching and distinguishes three kinds, viz. –

1. 'Reflection-in-action' which involves insights that educators gain whilst engaged in their work in the classroom. This could result in a paradigm shift or a change in the educator's mental models, assumptions and perceptions. Hopkins (2002: 53) sees it as utilizing the teacher's own observations and inferences. Senge (1990: 303) citing Schon (1983) articulates that phrases like 'thinking on your feet' and 'keeping your wits about you', suggest that we have the ability to think about doing a particular activity while we are at that particular moment engaged in doing it, e.g. an educator will think and plan how to present a lesson the following

day and whilst actually engaged in the presentation will change and adapt it guided by the learners and circumstances in the class.

2. 'Reflection-on-action' includes reviewing, elucidation and taking stock of what reflections that happened during a lesson or activity. What makes reflection different from traditional approaches to teaching practice is that the practitioner is involved in the context where learning takes place, e.g. an educator taking time after presenting a lesson to think about how and why he/she adapted the lesson with the aim of learning from such reflection (Farell, 1998: 12).

3. 'Reflection-for-action' prepares the ground for future planning. It reflects proactive action based on ideas gleaned from the other kinds of reflection explained above (ibid), e.g. whilst educators are reflecting on the implementation of the IQMS, opportunities for enhancing practice and improving the very implementation might be explored and put into practice.

Some educationists raise an opinion that there are very few educators in South Africa that engage in the practice of working reflectively, the most common practice involves following what is prescribed by the education authorities without questioning the relevance thereof (Adler, 1997; Walker, 1993). This suggests a lack of 'reflective openness', i.e. the skill of examining our own ideas, but mutually examining others' thinking. The Norms and Standards for Educators (DoE, 2000 in Balfour, et al., 2004: 80), however, consider the professional development of educators as an ongoing activity, which includes both pre-service and in-service education. The educator is seen as a professional who is self-directed with knowledge, skills, and the ability to reflect on actions with a view to adapting and improving. It even stipulates that the educator needs to apply practical, foundational and reflexive competencies in carrying out the seven roles; one of which is that of the educator as a scholar, who is also a researcher and a life-long learner (DoE, 2000).

2.3 The Framework for the IQMS?

The IQMS is an agreement reached in the ELRC, named Resolution 8 of 2003. The agreement integrates three programmes:

1. The Developmental Appraisal (DA) System brought through Resolution 4 of 1998. DA aims at the fair assessment of how an individual educator performs. The assessment provides information on the educator's strong and weak areas, which leads to the developing of a programme for development to assist the individual.
2. The Performance Measurement (PM) System based on Resolution 1 of 2003. PM aims at the summative assessment of an individual educator to determine whether he/she qualifies for a salary reward or incentive.
3. Whole School Evaluation (WSE) assesses the overall effectiveness of a school. It takes the form of a school- based self-assessment each year and an external evaluation in a period of three to five years (KwaZulu-Natal DoE, 2003).

Schedule 1 of the Employment of Educators Act, No. 76 of 1998, provides an accountability clause for the Minister of Education. The Minister has to establish the performance standards to be used to assess and evaluate the performance of educators. This provision informs the IQMS, which is intended to enhance and monitor how the public education system performs.

As I go through the reflective study I intend to look into some of the important features of the IQMS in the hope that they would provide some answers on:

1. How important educators regard the IQMS and educator appraisal in their schools;
2. Whether the IQMS has been influential or not in helping educators and/or the school in being more effective, by enhancing target setting and quality review procedures;

3. The importance of having a peer and a senior as part of the DSG;
   The importance of having the IQMS as a system that has a linkage to salary progression;

4. Whether the IQMS in practice includes staff development and WSE in the school or not;

5. How the IQMS can be improved and changed in the light of their own experiences.

This builds up a need to unpack some of the concepts and orientate the reader with the relevant literature on the subject.

2.4 School Improvement and Related Concepts

Prior to 1994 schooling in South Africa was administered by nineteen distinct authorities, including the Department of Education and Training (Blacks in `white' areas, House of Delegates (Asians), House of Representatives (Coloureds), House of Assembly (Whites) and Homeland Departments. Anything and everything that had to do with schooling was fragmented and reduced to racial and ethnic divisions, e.g. allocation of funds per learner, staff merit system and professional development. There is no way one could refer to a holistic education for all in such circumstances. That on its own shows there was a dire need for school improvement when the democratically elected government took over. In the study I will look particularly into the post-1994 period of school improvement.

School improvement brings into mind concepts such as school development, school effectiveness and school reform. In the study I will be looking at the concepts and/or using them in a way that brings about or relates to the notion of universality, totality and completeness. I will strive not to use them as a checklist that reduces a school to being developed, improved, reformed or transformed if it satisfies certain specified criteria.

In Wijesundera (2002), Hopkins (1998) refers to the common sense meaning

of 'school improvement', which includes trying to make schools improved places for learners to learn, as well as 'school improvement' as a separate move towards education transformation which enhances learner performance and the competence of the school to managing the transformation. Lander and Ekholm view school improvement as:

> A process of deliberate change in structures, rules, norms, conceptions, habits and working patterns, which immediately, or, over a longer period, helps students to improve their learning and development according to the requirements of the school society (Lander and Ekholm, 1998).

This captures a description of the course of action and the likely results of school improvement. This study as well attempts to look at what emerges as schools engage in IQMS in the Sweetwaters Ward and how it contributes towards school improvement.

The International School Improvement Project's (ISIP) definition of school improvement brings the idea of an organised sustained endeavour with the objective of changing the learning setting in schools and realising educational goals with more success (Van Velzen, et al., 1985, cited in Harris, et al., 1996: 15). The focal point in school improvement programmes is the achievement of effectiveness, which Gray, et al. (1999) refer to as the 'how' of the school effectiveness. (Wijesundera, 2002: 169-187) also refers to school improvement as 'a systematic attempt to enhance teaching and learning which has its focus in the classroom as well as the school'. Systematic brings the notion of methodical, orderly, organized, logical, efficient and regular. This brings to light that school improvement involves planned change. Change, however, does not work out according to plan where people are involved. Education is a concept like love - its meaning lies in the relationship between people (McNiff and Whitehead, 2000: 51). Systems thinking seems to offer a fresh perspective, a specialized language and a set of tools to examine root causes to problems in a more insightful and informative manner and to create sustainable change.

Harris (2000) categorises school improvement ventures on the basis of approach or strategies. We can have an approach that is organic or mechanistic and strategies that are general or specific (Hopkins and West, 1994). Examples of school improvement initiatives encompassing an organic approach that seem to flourish are the ISIP (Van Velzen, et al., 1985) the IQEA (Hopkins and West, 1994) and the Halton Project (Stoll and Fink, 1996). School improvement ventures that are mechanistic with straight guidelines are, inter alia: the self-managing approach (Caldwell and Spinks, 1988) and 'Success for All' project (Slavin, et al., 1996).

Hopkins (2001: 18) looks at principles that highlight the enquiring nature of school improvement. He points out that the data gathered during the study provides information that further gives direction on action to be taken, which identifies with the beliefs and practices of reflective practitioners. It furthermore embraces the notion of valuing relationships, the cultural and political realities and the policy imperatives inherent in the system in order to realise optimal returns for school improvement.

2.4.1 School Development Planning

Xaba (2006: 15) relates that according Bell (1998: 453), school development planning (SDP) helps a school in bringing in changes effectively in pursuit of improving excellence in teaching and learning. In this regard, MalGilchrist and Mortimore (1995: 207) assert that SDP can be a school improvement strategy although not all SDPs lead to school improvement. In conceptualising SDP it is best understood within a framework of the school as a system in which change of any part affects all other parts (Haynes, et al., 1996: 123). SDP is therefore a systematic, collaborative and inclusive, ongoing and progressive process undertaken by a school to promote whole school effectiveness, school improvement, quality enhancement, staff development, partnerships, effective resource deployment, change management and seeks to prioritise the goals of the education system. The South African Schools Act, No. 84 of 1996, advocates participation of relevant stakeholders in school development,

e.g. the School Governing Body (SGB) develops a vision and mission statement for the school; as well as other different policies that guide the governance of a school.

2.4.2 School Improvement and Change

An assertion that one cannot expect change or new results if one is still doing what one has always been doing through the years, captures the essence of the need for change in any institution. De Gues (1997: 20) stresses that the learning ability enables an entity to manage and survive change. He views the fundamental nature of learning as based on a person's capability to change himself/herself - such ability facilitates development where people are involved in entities living through complex change situations. I relate the significance of his views to the need for schools as organizations to create strong interconnections and keep abreast of changes in the field of education and society at large.

Change in schools is complex as it involves people who view and perceive things or events differently. Complexity in this study mainly refers to relationships: relationships between individuals and amongst teams, relationships to other organizations, e.g. schools in their environment, relationships to the natural environment and relationships to the Education Department. This is the environment in which change aimed at school improvement through whole school development and/or individual educator development has to take place.

Fullan and Hargreaves (1992: 7) talk of the simultaneous bottom-up and top-down tension in bringing about reform as a symptom of fundamental dilemmas and problems in bringing about educational change, in which we see basic problems like overload, isolation, `groupthink', untapped competence, i.e. neglect of incompetence, narrowness in educator's

responsibility coupled with ineffective solutions and futile reform. This flashes a red flag for me to find out if the change brought about by the IQMS aligns itself to such dilemmas or not.

2.4.3 School Improvement and Action Research

There are worldwide examples of successful school improvement interventions resulting from action research undertaken in different countries. Such interventions/studies bring a paradigm shift that promotes a questioning attitude in people, which ultimately leads to people changing their usual practice in line with the findings of the study. This makes action research an ideal vehicle for an individual educator or a school to plan, act, observe and reflect on own practices. It can be viewed as an attempt to learn about strategies to improve schooling by careful monitoring of significant innovations. The action research model seems well suited to school improvement in that it connects with the teacher as researcher movement pioneered by Lawrence Stenhouse (1975) and the idea of a reflective practitioner (Schon, 1983).

Angelides, et al. (2005) refers to scholars that emphasise the need to prioritise local knowledge in any investigation aimed at school improvement (Fullan, 2000; Ainscow, 1999). This enhances understanding occurrences and trends in the school/organisation that might prove useful in facilitating school effectiveness. In this study I am exploring what is happening in my workplace with the aim of finding what is relevant and meaningful in my local school community in line with the views of such scholars.

Relevant to this study is the fact that action research has been used throughout the world to look into matters pertaining to the performance evaluation and professional development of educators. Hannay, et al. (2003: 121) indicated that action research adds value to the performance assessment process. Changes in perceptions, team collaboration and an improvement in practice usually result from such studies. This serves to

develop practitioners' knowledge and understanding of their practices and to involve participants in the research process (Carr and Kemmis, 1986: 165). The literature thus clearly expresses that the effectives of school improvement matures where educators take an active part and lead school development. Their contribution forms a community of practice which values team collaboration, a shared vision, promotion of leadership and joint accountability for the end result.

2.4.4 The School as a Learning Organisation

Plowright (2007: 378) states that the idea of the school as a learning organization has already drawn some interest from the academic community in the form of the learning-centred school (Dimmock, 2000), schools that learn (Senge, et al., 2000), organizational learning in schools (Leithwood and Louis, 1998) and an increased focus on pupils' learning processes underscoring achievement (Stoll, et al., 2003). This brings the notion that schools, like businesses, are expected to take effective action in response to persistent challenges of change that are characteristic to the current economic, social and political situation.

Hopkins, et al. (1998: 7) cite Fullan's 1995 critique that educators need more training in action enquiry skills for successfully establishing schools as learning organizations.

> These are organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of teaching are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together (Senge, 1990: 3).

People determine ways to construct their reality and ways to transform it to facilitate learning in a learning organization. In this way learning that mainly adapts to situations links up with learning that generates/improves people's competence in creating reality (Senge, 1990: 14). Senge identified personal

mastery, mental models, shared vision, team learning and systems thinking as key disciplines in a learning organisation. The disciplines will be discussed clearly at a later stage in this study.

Educators have to think in a clear and coherent manner in order to transform teaching practice. Hargreaves (1995:15) refers to a 'community of learners' that he characterises as "… an environment where collaborative cultures turn individual learning into shared learning". The learning across the entire organization is spread by setting up structures that improve relationships and create chances for capacity building and learning. The IQEA talks of 'pedagogic partnerships' (Hopkins, et al., 1997: 78; Hopkins, 2002: 53), which focus on creating a platform and sessions for educators to discuss their teaching with each other.

2.5 Teacher Appraisal

Studies on the appraisal process predominantly identify two approaches to (or models of) appraisal, viz. - the professional or developmental and accountability models (Quinn and McKellar, 2002: 74). The professional or staff development model has, as point of departure, the belief that teachers wish to improve their performance to enhance the learning of students. A key characteristic of the model is negotiation to support teaching and managerial development in the interest of optimal career development. The accountability model reflects the traditional approach to staff appraisal, with emphasis on inspection and control, and is usually unpopular with teachers and teacher unions.

Jennings and Lomas (2003: 370) quote the literature to indicate that a major conflict that bedevilled appraisal in (London) schools from its inception was the failure of stakeholders to agree whether the scheme was to be an accountability model of performance review, reward or sanction (Flecknoe and Sutcliffe, 1997; McMahon, 1991) or whether it was to be a professional development model (Davies, et al., 1990; Hellawell, 1997). Government had a

preference for the former, whilst the profession argued for the reliable latter. In a developmental model, appraisal seems to promote a confidential and reliable environment where the appraiser and appraisee engage in a constructive dialogue. An accountability model on the other hand usually leads to a situation where people try to conceal their weaknesses and adopt a defensive stance.

A definition of appraisal which fits the intended purpose of individual self-development is provided by Jaff (1994:1) in Van der Bank (2000: 3) "Appraisal is essentially a formative, developmental, negotiated, continuous and systematic process intended to help individual teachers with their professional development and career planning". The essence of an individual developmental model for institutional quality assurance lies in the assumption that as teachers improve themselves as individuals, greater effectiveness will be achieved for the school/institution (Jaff, 1994, and Middlewood, 1997, in Van der Bank, 2000).

Webb says:

> Appraisal offers the opportunity for you to step back from the immediacy of what you are doing now, and allows you to consider a wider range of possibilities that might normally occur in your day-to-day routine (Webb, 1994: 31-32).

If this is true, with the IQMS, educators would be reflecting on what they are doing and moving forward to chart a way/vision of what they aspire to improve on in future. A view shared by Bollington, et al. (1990: vii) is that appraisal can help teachers and school heads to order their priorities, improve their planning and contribute to professional development and school improvement. In this way appraisal can be used to identify areas of weakness to be addressed in upgrading professional development, as a tool to build capacity on leadership and management in schools and as a means to foster accountability in public education (Bollington, et al., 1990: 2).

A study conducted by Monyatsi (2006: 226) in Botswana confirmed that all parties involved in the teacher appraisal process should know and understand its purposes, and should interpret and apply these in a uniform, professional way, if the whole process is to be effective and beneficial for whole-school development. He pointed out that there is hardly a country in the world where teacher appraisal is not a contentious issue and thus views transparency, trust and honesty as the backbone of effective teacher appraisal regarding both purposes and process.

Bollington, et al., (1990: 9-10) concluded after taking findings from different Local Education Authorities (LEAs), projects and countries, e.g. North America and Britain, that the key principles in appraisal are:

1. The need for commitment to the process and credibility in those presenting and introducing the scheme;
2. The need to consult with all relevant parties when planning for appraisal;
3. The need for the scheme to be developmental, constructive and positive;
4. The need to provide adequate training for those involved in appraisal;
5. The need to actively involve teachers on how the process is designed, discussing criteria used and the areas chosen for appraisal; and
6. The need for the process to be two- way and related to the individual school context and the appraisee's own stage of development.

The IQMS guiding principles cover similar ground and even go beyond this scope by including, *inter alia*: learners' equal access to quality education; the need to provide for and encourage diversity in teaching styles and providing a clear protocol governing the interaction of parties. When it comes to practice however, one of the main concerns teachers have about appraisal is that it proves costly in terms of time but has little impact in terms of bringing about improvements, as in many cases appraisals are not followed up and produce little or nothing that is tangible. Appraisal thus remains a sensitive issue and it is argued whether appraisal 'is the carrot or the stick' (Goddard and Emerson 1992 in Van der Bank 2000: 5). This major conflict still bedevils appraisal in

our schools in South Africa in that IQMS serves as an accountability model of performance review, reward or sanction, as well as a professional development model. This raises a concern that a mechanistic view is held: that professional people perform better when exposed to a system of payment by results (Bush, 2003). I ventured to explore literature on professional or teacher development within the complex context described above.

2.6 Professional and/or Teacher Development

Webb, et al., (1994: 234) view professional development in education as having many facets and numerous terms used to describe it, *inter alia*: in-service training, professional growth, continuing education and staff development. Arguments can be raised on the need to differentiate between professional   development and in-service training, more so because they are frequently used interchangeably (Guthrie and Reed, 1991: 346). Professional development is much wider than in-service training because it embraces life-long learning and that captures knowledge, skills and attitudes needed for the effective education of learners (O'Neill, 1994: 285; Dunlap, 1995: 149). In-service training relates to the acquisition of knowledge or a particular skill and can therefore be a component of   professional development in a broader context (Guthrie and Reed, 1991: 346).

Many researchers seem to subscribe to the premise that teacher development is most effective when the culture of collaboration prevails, e.g. Hopkins, et al. (1997: 76) state that professional isolation is dispelled and practice is enhanced. Fullan (1991) as quoted in Kyriakides, et al. (2006: 9) asserts that the professional development of educators is a necessary precondition for any transformation or reform envisaged in educational systems. It is therefore prudent to have systems and procedures that facilitate continuous professional educator development in place. My general observations seem to highlight that such mechanisms should always provide for mentoring of new teachers and monitoring performance of all teachers for continuing professional development.

Steyn (1999: 206) looks at professional development in South Africa and points out that professional development is a key to school improvement. He further stresses, supported by the literature, e.g. (Ehrich, 1997: 12), that it is critical that principals take the responsibility for leadership in their schools for effective professional development of educators to be realised. Plans driving professional development must be developed in different levels of the school system, e.g. district level, in each school and for each individual educator. Provision for learner needs and learning outcomes must form the core of such plans (Steyn, 1999: 207). Professional development in South Africa broke down in the 1970s and 1980s, as schools became sites of struggle resisting the apartheid system. I view the IQMS as a possible attempt to revive, restore and even transform professional development experiences in a manner that incorporates a process of reflection.

The involvement of staff in professional development and their feeling of ownership are thus crucial to its success, irrespective of the approach preferred. Sarason (1990: 145) states that school improvement and improving learner outcomes cannot be achieved if work conditions are not conducive to ongoing learning for educators. In other words, productive learning and productive staff development work together towards effective school improvement. This is reiterated in the studies by Hopkins, et al. (1997) and Hopkins (2002), which took more than ten years working closely with schools in countries such as England and Wales, Puerto Rico, Iceland and South Africa, on a school improvement and development programme known as IQEA.

2.7 Teacher Leadership

Muijs and Harris (2003: 437) view good, firm leadership as the fundamental component to secure and maintain school improvement. It is difficult to pin teacher leadership to a specific meaning, as it is defined in different ways by various scholars, e.g. Wasley (1991: 23) looks at it from the side of leader that

is able to influence colleagues to be agents of change, i.e. go out of their way to make a difference in the school; Katzenmeyer and Moller (2001: 17) approach it from the stance that a teacher leader is a change facilitator in the classroom as well as in the wider community and in that way guides people to work towards effective educational practice. It is important to identify the progressive elements of teacher leadership and see it as team effort in leadership and gaining skills in collaborative work. What is, however, important is the irrefutable notion and worldview confirming that each person has leadership quality and is capable of demonstrating leadership (Goleman, 2002: 14), which opens a window to practice leadership based on democratic principles and collegiality.

Harris (2004: 11-22) brings in the idea of distributed leadership, which involves sharing objectives, valuing relationships and team learning, i.e. educators learning from each other. There is, however, a need for more clarity on what distributed leadership entails in the general functioning and the manner in which activities are done in a school.

Hargreaves (2002) encourages schools to be managed as professional learning communities and this implies committing themselves to collaborative learning, i.e. learning from each other and subscribing to a school culture that promotes teacher leadership. Such leadership has been shown to add value and effectiveness in the school and classroom enhancement (Muijs and Harris, 2003: 440).

Barber and Fullan (2005) suggest that we have leadership as leverage that we must put to good use. They emphasise the importance of working towards the development of individuals and the transformation of the system at the same time. In the case of the IQMS I therefore envisage that regular interactions with the principals and other teacher leaders, e.g. SDT chairpersons would enhance buy-in to the IQMS in the following ways, *inter alia*: building relationships, collaborating in envisaged reform work and increasing their knowledge of the IQMS.

2.8 Whole School Evaluation (WSE) or Whole School Development

Another strategy for preparing for appraisal is to start with a whole-school self-evaluation to fulfil the following purposes:

1. To provide a context for appraisal, i.e. by appraising the school first;
2. To assist in developing readiness;
3. To link the school self-evaluation to educator assessment as a more synergistic approach to school improvement (Bollington, et al., 1990: 15).

McNamara and Brown (2005) relate that in Ireland WSE was developed by the Department of Education and Science (DES) as a developmental model to inform the system on school improvement, school development and school effectiveness. The model enabled reporting on the standards of planning, teaching and learning; and the management of schools focusing on the school in totality rather than picking out individual educators. The South African framework includes key development areas such as basic functionality; learner achievement and assessment; curriculum provision and resources; governance and relationships; parents and community; school safety; security and discipline and school infrastructure. It involves school-based self-evaluation to be conducted annually as well as external evaluation every three to five years.

Collins (2004: 43-53) conducted a study on teacher performance evaluation in a private school in Turkey and concluded that centralized Ministry of Education inspection and school-based supervision can co-exist. The emphasis was, however, in that they should complement each other, not duplicate functions. Plowright (2007: 375) studied school self-evaluation and Ofsted inspection conducted in all schools in England. He questions whether the external inspection (Ofsted) and subsequent report actually contribute to the improvement of a school. He specifically notes the inherent tension built

into an inspection process that is aimed at assuring accountability, but also of ensuring development. Earley (1996: 22) raises similar concerns on viability of an evaluation process that links school development and public accountability. The observations of what the IQMS WSE self-evaluation and external-evaluation brings to the fore is of relevance in this study.

2.9 Summary

This chapter has briefly reviewed literature on reflection as the base of this research that explores the reflections of the SEM on the implementation of the IQMS in her ward from 2005 to 2007. Literature advances numerous arguments for reflective practice in schools as explored in the chapter and this serves to enlighten and strengthen the case for engaging in such an endeavour in line with the IQMS policy framework set up by the Education Department in South Africa. The literature review also covers the concepts that are crucial in order to understand the context and practice in which this research takes place. The concepts include, *inter alia*: school improvement, teacher appraisal, professional development, teacher leadership and whole-school evaluation. This serves to highlight the complex context where I want to explore the use of systems thinking in the implementation of the IQMS in the ward, as well as bring to the fore an awareness of the need for a tool that could be used for facilitating school improvement, viz. - a soft systems methodology. The chapter highlights a need for an in-depth look into systems thinking as will be introduced in the next chapter.

CHAPTER 3

SYSTEMS THINKING

3.1 Introduction

The previous chapter reviewed literature on reflective practice as the basis of this research that explores the reflection of the SEM on the implementation of the IQMS in her ward. The importance of reflection in systems thinking was brought up suggesting that systems thinkers reflect on their experiences and observations as they explore underlying causes and/or opportunities presented in a problem situation. The review also covered key concepts in the study, *inter alia*: teacher appraisal, teacher development and school improvement. Chapter 3 looks deeper into the concept of a system, the meaning of systems thinking and the change it brings about in a learning organisation. This raises a need for systems practitioners to utilize systems tools and techniques to get an in-depth understanding of assumptions, mental models and beliefs that influence the problem situation. It also provides a platform to discuss the systems approach and its relevance to the problem context by exploring the use of systems thinking in schools and possible examples of how it has worked; bringing to light that such an approach has been used for many years.

3.2 What is a System?

Different systems thinkers define a 'system' in different ways. Ackoff (1981: 64-65) defines a system as elements to satisfy three conditions, namely: the behaviour of each element affects that of the whole; the interdependency resulting from the behaviour of elements in relation to the whole; and the formation of sub-groups of elements, which on their own are interdependent and have an effect on the behaviour of the whole. Singh (2002: 14) citing Capra (1996) looks at a system as an integrated whole whose essential properties arise from the relationships between its parts. Interdependence and

interconnectedness are thus key characteristics of a system

Lane, et al. (1999: 39- 40) define it in terms of what is common in different systems, i.e. as a set of elements that are interrelated for a reason, which is recognised by someone who is interested in it (system of interest). They also bring in the features of having indefinable components that are critical if we want to understand how systems work; the limits we set or the boundary and the fact that it could be extended to get a better understanding of a complex situation. A system can be represented as a sub-system of other high level systems and there are systems tools that can be used to identify similarities, patterns and regularities. Checkland (as cited in Lane, et al., 1999: 41) explains that the component parts of a system are interrelated and interconnected, which results in the properties of the whole being able to perform more effectively than the individual parts on their own, e.g. a car as a system can take the driver from point A to B, wheels on their own or a steering wheel cannot perform such a task. Rapoport (1988: 30) names *identity,* meaning 'stability within change'; *organisation*, referring to what a system intends to do and its ability to manage difficult complications; and the objective, which determines the future direction of a system; as three fundamental features of systems. Luckett (1996: 6-7) ascribes the following characteristics to systems: purpose, boundaries, emergent properties, existence in nested hierarchies and internal processes of communication and control.

A system can be viewed in terms of its openness or closure in its environment. A system in continuous interaction with its environment is open and some of its primary characteristics as identified by von Bertalanffy (1968: 44) are regulation and feedback. A system operating in isolation from its environment is closed. It is, however, impossible to have a system that is totally isolated from its environment, hence the reference to different levels of closure.

3.2.1 A General Concept of a 'System'

Figure 3.1 shows some of the characteristics and/or properties of a system as discussed above:

1. Elements of a system;
2. A boundary identified to separate a system from its environment;
3. Elements that are related and interdependent;
4. Elements from the environment, i.e. outside the boundary, that influence the system; and
5. Elements on a feedback loop.
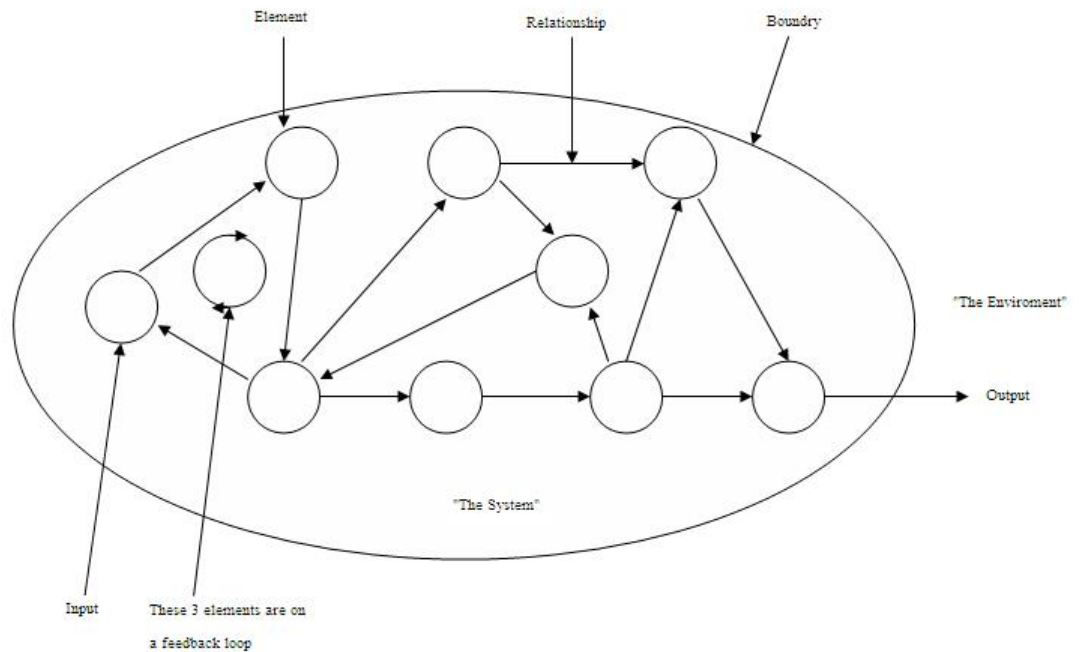
Fig. 3.1: Properties of a System (adapted from Flood and Jackson, 1991, Creative Problem Solving) as depicted in Moonsamy (2002: 97).

3.2.2 Emergence and Structure as Properties of a System

Emergent properties are properties that relate to the whole, which are not necessarily present in any individual part. Moonsamy (2002: 97) referring to

Checkland, Capra and Jackson define emergent properties as that which results in the properties of the whole being much more than the properties of the individual parts working in isolation. 'Emergence' is thus an inherent property of a system and it brings in features of interconnectedness and interrelationships in the elements of a system, which make the system have distinct qualities. The structure or hierarchy enables emergence within a system in that it orders the way in which individual parts are interrelated (Moonsamy, 2002: 98). The exploration of a pyramid depicting the events, patterns and structure gives better clarity of the system and/or systems thinking as a perspective, as represented in Figure 3.2.

3.2.3 The Events, Patterns and Structure Pyramid
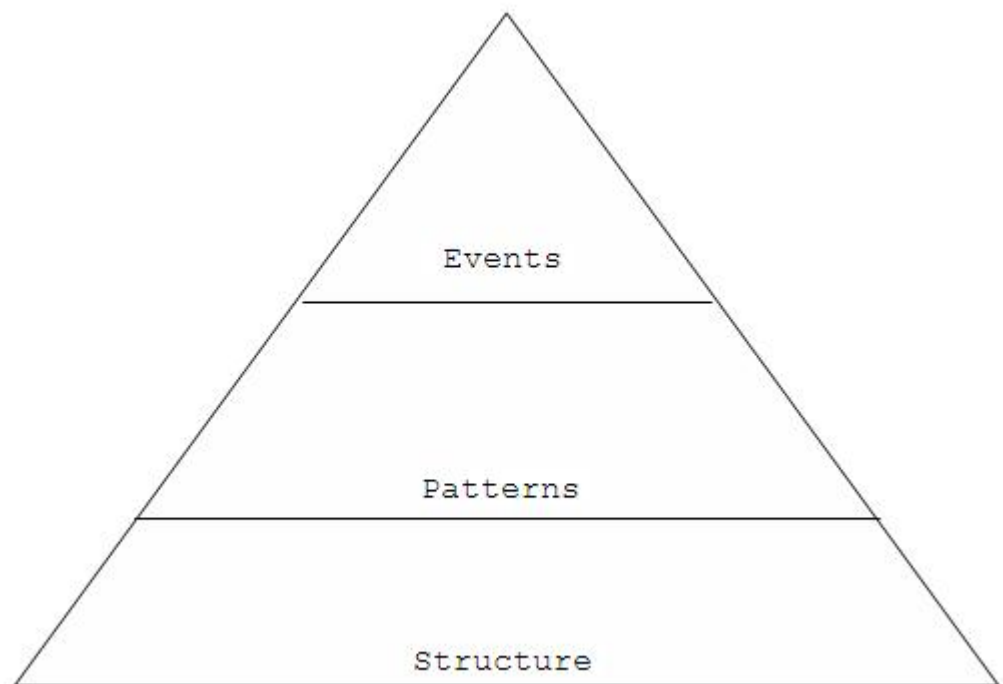
Fig. 3.2: The Events/Patterns/Structure Pyramid

In using systems thinking as a standpoint, we are able to take a closer look into events and patterns that influence our circumstances, reflect and make

informed decisions on how to act in response, e.g. a school experiencing an on-off water supply one day instructed learners to bring own drinking water the next day thus treating the water shortage as an *event* and reacting to it in that manner. The school operating at this level seems to believe that the 'tip of the iceberg' is the 'total iceberg'.

On the third day they checked what was happening in the local area, i.e. in the neighbouring institutions and private homes, only to find that they were the only institution affected, i.e. paying attention to *patterns* (relationships). They were by then trying to look below the surface. By the end of the week they had arranged with the local municipality to send a container to supply water three times a week, i.e. adapting to the situation but doing nothing from preventing it from happening again. It was only when they involved all the stakeholders and instructed the Water Supplier to investigate the water supply pipes and installation that they realised that the school's water supply had been partly diverted to an informal settlement that had come up in the neighbourhood. The school was actually paying for water used in that settlement, and arrangements had to be made to redirect the pipe to the school and put up the infrastructure to supply the new dwellers and prospective dwellers in such a way that such poaching could not happen again, i.e. using a systems thinking 'lens' to look at the problem situation. At the level of understanding the structure, the school can use a variety of tools to look deeper into the system, underlying causes and greater detail into the alternative solutions, sustainable solutions and not just superficial quick fixes.

3.3 What is Systems Thinking?

'Systems thinking' is an outlook that urges us to look at our activities in totality and thus appreciate the relations between the disconnected components. In the words of Kauffman Jr (1980), systems thinking entails: "a collection of parts which interact with each other to function as a whole". It requires that we attain the ability to explore and value other peoples' point of view, trying out new perspectives and working together synergistically to bring change. In this

study the systems tools and their use will be determined by the nature of the problem situation. Richmond (1993: 121) brings in the idea of connecting structure to performance, and vice versa with the aim of influencing relationships to enhance performance. He explains how we can think differently by using a variety of thinking tracks or what I refer to as 'lenses'. We can look at the dynamics, i.e. vibrancy of a system; closed loops, i.e. boundaries; generics, i.e. what is common; structure, i.e. how it is organised; operation, i.e. the process; the continuum, i.e. the range; and the scientific, i.e. the technical aspects. This will give us a very broad view on what the system is arranged, what it can do, how it operates, what is similar to other systems and so many other ideas.

Systems thinking is 'contextual' thinking, and as such involves a shift from objects to relationships. Capra (1996: 36) cited in Smyth (2005: 28) talks of an outlook that is mechanistic and depicts the world as a collection of objects that work together, thus giving the sense that there are (secondary) relationships between them. A systems outlook on the other hand consists of objects that are networks of relationships on their own, i.e. primary relationships, and are rooted in larger networks. It is Senge who identified five disciplines as key in any learning organisation, viz. - personal mastery, mental models, shared vision, team learning and systems thinking (Senge, 1990). Senge furthermore looks at systems thinking as a discipline that determines various ways to scrutinize challenges and objectives as elements of wider structures rather than separate incidents. Lane, et al. (1999: 7) see the core of systems thinking as acquiring an ability to view the world and learning to recognize your worldview and how it influences the decisions taken and the activities you engage in. We learn to question the manner in which we consider other people's points of view and whether we accommodate such in final decisions. In this way we acquire the ability to explore and value other people's points of view and try out new perspectives (Lane, et al., 1999: 11). From the work of these writers, I have begun to think of systems thinking as an approach, which constitutes a way of taking action without breaking the whole into parts. Professor Kanter's definition of leadership cited in the Sunday Times Business Times (2003), stresses that organisations need to examine root causes and

system issues, and not just superficial tinkering. Managers should rethink traditional practices and challenges underlying business assumptions to create sustainable change. Systemic change is not a quick fix and therefore takes longer (ibid).

Systems thinking opens new avenues in attempting to gain insight into what happens in a system and offers new ways of understanding a problem situation. It suggests being observant and learning from the interconnections and relationships between elements rather than concentrating on the snapshots presented by the linear, cause and effect practices (Moloi, et al., 2003, cited in Mchunu, 2006: 23).

3.4 A Simple Model Depicting Systems Thinking

In Figure 3.3, a system is depicted as a series of inputs (3) to a throughput or actions (4) to achieve your outputs (1) along with feedback loop (2) in the environment (5), to measure success. In this way five questions are asked in sequence:

1. What is our destination? (i.e. the end we have in mind)
2. How are we going to meet the clients' needs? (i.e. noting the feedback we receive)
3. What is our present state? (i.e. the current issues and challenges)
4. How will we get to our destination? (i.e. the process to be followed)
5. Ongoing: What opportunities and threats our environment poses?

The environment also highlights the notion that the internal elements of a system are separated from the external elements that influence the system by drawing a boundary.

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┌──────────────┐      ┌──────────────────┐      ┌──────────────┐
│  3. Inputs   │      │  4. Throughputs  │      │  1. Output   │
└──────────────┘      └──────────────────┘      └──────────────┘


     ╭─────────╮         ┌──────────┐          ╭─────────╮
    │           │        │   THE    │         │           │
    │  TODAY    │───────▶│  SYSTEM  │◀────────│  FUTURE   │
    │           │        └──────────┘         │           │
     ╰─────────╯                                ╰─────────╯
                        ┌──────────────┐
                        │  2. Feedback │
                        └──────────────┘

                         ╱───────────╲
             ┌──────────◇  Feedback loop  ◇──────────┐
                         ╲───────────╱

                                              ┌──────────────────┐
                                              │  5. Environment  │
                                              └──────────────────┘
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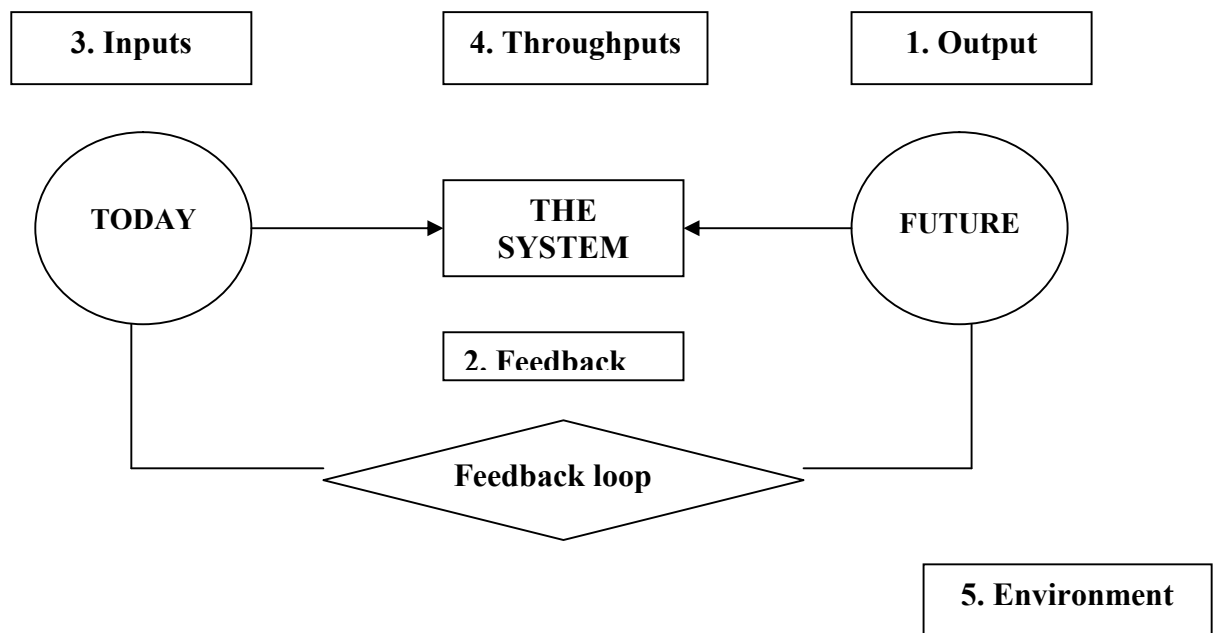
Fig. 3.3: A Simple Model Depicting Systems Thinking
(Adapted from: http://www.csmintl.com)

3.5 Systems Thinking in a Learning Organisation

When Senge looks at systems thinking he gives the idea of a theoretical structure that gives an outline of knowledge, tools and techniques that can be used to get a clearer picture on trends that are taking place in a problem situation; this would assist the practitioner in getting a holistic picture so that he/she can work out how best to introduce changes that can improve the situation (Senge, 1990: 7). As systems thinking deals with the behaviour of wholes, it urges people to develop and appreciate that any whole is part of a system that organizes itself so that there are negative and positive feedback loops (Stacey, 2003: 104). It highlights the need for people to observe how the components in the system interact and interrelate, as that will give more clarity than simply looking at cause-effect chains in any situation. When there is a problem, the main concern should not be to fix the problem temporarily,

but to engage ourselves in learning to understand how it came about and exploring different options that would be of a long-term nature, e.g., generally when a school performs poorly, the principal is the first person blamed by parents, officials, etc. and there is no effort to find underlying challenges in the system. This ignores the assertion that the main contributor to substandard results or production is the system, i.e. challenges created by the system, rather than problems created by workers (Deming, 1986). Systemic thinking would change this in a learning organisation, as it serves to enhance learning in people to make them appreciate that there is a need to delve deeper using systems tools to find out how people relate and interact with one another as that influences how they behave. If we have such information at our disposal we will be able to make informed decisions on how to effect long-lasting changes in the system and avoid quick fix solutions. Such decisions will be in tune with the socio-cultural and political processes in place.

3.5.1 Personal Mastery

Personal mastery means developing one's own proficiency, and does not suggest that people should dominate over other people or things. Stacey states:

> It has to do with each person in the organisation being able to continually clarify and deepen our personal vision, focusing our energies, developing patience and seeing reality objectively (Stacey, 2003: 104).

Each educator could be encouraged to do positive things towards achieving own personal vision, e.g. through IQMS. A proficient person would be confident, have a mature sense of responsibility and accountable for his/her actions. We learn to empower ourselves to pursue a common purpose and organize ourselves within the context of our environment in a way that promotes the development of individuals and the organization as a whole.

3.5.2 Mental Models

People hold profoundly rooted assumptions or general ideas called 'mental models', which often take place in the form of pictures or images. In a learning organisation people need to develop skills to deal with mental models, e.g. through reflection as individuals and with colleagues. Senge advocates that each member of a learning organization has to engage in an introspective exercise, i.e. to look inside the self; learn to surface and hold; and then work out/scrutinize how his/her worldviews influence his/her actions. In organisations we should always remember that people bring to any problem or situation a whole host of beliefs, interests, assumptions and values, something known as the worldview or *Weltanschauung*. Hence we need to take multiple perspectives into account to accommodate different mental models. Such an exercise includes taking a step back to think about our assumptions and perceptions, improve the way we view the world and welcome a paradigm shift in the way we act and decisions we take.

3.5.3 Shared Vision

Building a shared vision in an organisation has to do with developing common working values, common principles and ideas, as well as the mutual affinity and support**.** Whilst personal vision amounts to the pictures an individual carries around in his head and heart, shared vision amounts to pictures people throughout the organisation carry (Flood, 1999: 23). People are never keen to exert their energy on a vision that is dictated to them. A pep talk or passionate talk about vision, without taking time to involve stakeholders is usually a wasted effort, e.g. that would be the case in a school where the vision and mission statement appears on paper, but no one actually lives it. It has to do with members committing themselves to working towards a shared vision or dream, and operating within the working values and guiding practices that direct us in getting to our envisaged goal.

3.5.4 Team Learning

Team learning involves aligning people's thoughts and energies. The learning ability of a group will yield greater returns or intelligence than that of an individual in the group. In team learning, people should be able to distinguish between discussion and dialogue. Whilst discussion is valuable, dialogue forms the basis of team learning. People in dialogue take time to reflect on the way they tackle challenges, interrogate assumptions and welcome responses and comments made by the team and depicted by the results. The purpose of dialogue is not to influence others with your thoughts, but rather engaging in a process of learning to learn together. In team learning we engage in conversation and share deeply embedded thoughts in working towards achieving greater returns as an organization as we would if each individual operates on his/her own. It is working with the slogan: '*t*ogether *e*ach *a*chieves *more* (*team*)' in mind.

3.5.5 Systems Thinking

The five disciplines need to work together for a learning organisation to function optimally. Systems thinking serves as the lever that enables all the other disciplines to work together in such a way that the team achievements are much greater than summing up achievements of individual parts. Kanter claims that if we want to turn a culture of decline into one of success, we have to restore employees' confidence in the system (Sunday Times Business Times, 2005). The message that comes clearly to me is that we have to engage in systems thinking and use systems tools and techniques as a good mechanism to improve performance as a learning organization. Sir Geoffrey Vickers, cited by Jackson (2000: 66) describes human activity on the basis of a notion termed 'appreciative systems'. He introduces the notion of having both the observer and the subject as key participants in any systems intervention.

The arrangement of systems and sub-systems, with their complexity and

intricate interactions differs drastically, e.g. varying from being cellular like the chain of command of governmental departments and well-designed and creative like partners in a business (ibid). Human activity systems are by very far exceptionally unstable as humans possess massive powers of change, but the powers are inadequate to change in an expected way.

3.6 Systems Thinking and School Improvement

We can never predict how minor variations in human systems, like schools can lead to extremely complicated, unexpected outcomes, e.g. staff appraisal, learner assessment, school self-evaluation, the new curriculum and election of new SGB members. The plan to implement the IQMS as agreed to at the ELRC is a straightforward procedure that seeks to, *inter alia*: audit what already takes place in a school to identify strengths, weaknesses and contextual factors, so that a developmental cycle could be drawn up for individual educators as well as the whole school and implemented. In practice, however, IQMS can bring about a total paradigm shift in the school as an organisation. The assumptions, mental models, beliefs and worldviews that people hold may be so different that while some embrace it positively, others are totally negative and resistant or even totally confused. The need for advocacy, training, resources, communication, reporting, conflict resolution and even extra personnel might arise.

The notion of systems theory originated from ecology studies conducted by scientists many decades ago. They observed how small variations in natural systems result in unexpected and unpredictable outcomes; such changes manifest themselves in human systems, e.g. schools, as well. A school can be destabilized by a small change such as a change in the Post Provisioning Norm (PPN), the selection process to fill a vacant promotion post, a new educator, etc. A small change can thus trigger a chain of reactions in the way elements of a system interact and interrelate with each other, i.e. because human systems involve people and people respond differently to changes in the system, be it a school or any other entity. People, like elements of a

system, cannot be manipulated in a similar way that we fit cogs into a machine, because their behaviour and activities connect them to others and cannot be foreseen (Beckhard and Pritchard, 1992), just as how a change to a part of a system can affect other parts.

McREL researchers highlight the difficulty of doing as you say when thinking systemically - it is not as easy to practice what you preach. They noticed how difficult it is for school managers to consider all the components of a system in their endeavours to transform schools (McREL, 2000). Schools as systems are by their nature open yet multifaceted as well, thus resulting in uncertainty whether you have considered all elements of the system or not. They recommended the use of an organiser from Cordell and Walters (1993), to assist school leaders in thinking systemically about their schools. The organiser defines three major features or 'domains', which can be used by SMT members to look into school systems to make sense of their complex nature, viz.: - the Technical Domain, the Personal Domain, and the Organisational Domain. The three domains are not the only method that can be used to study the system to bring about school reform.

Senge (1990: 7) looks at systems thinking as a conceptual structure, the theory and models designed to clarify full patterns, and assist people in working out how to bring about effective reform. There are arguments against systems thinking as well, e.g. Patterson (1993: 66) finds the language and tools of systems thinking to be hidden behind complicated procedures and illustrations that can easily lead to confusion and an overstated vision on how a school system can go through change that results in school improvement.

3.7 System Thinking in Schools

Studies show that systems thinking is particularly helpful in working with organizations that are intricate, complicated and disparate, e.g. schools. People, however, tend to make mistakes in equating systems to reality and schools have to be cautious not to confuse the systems view with reality. SMT

members should not be tempted to attempt and enforce a systems outlook on the actual reality, as this is not sensible. The models constructed in a systems view are one-sided views of possible, relevant human activity systems and thus express what the system does, not the actual reality. Reality cannot be predicted because people are unique and always hold different views, mental models and worldviews. We can however consult widely to ensure that diverse worldviews are accommodated in decision-making and interventions. Sanchez and Meija (2008: 111) clarify that systems are not the real world; people construct them in their minds to try and make sense of complex situations.

Barber and Fullan (2005) base their argument for educational reform to be sustainable on two interacting assumptions:

1. The need to put three key levels in which school reform takes place, on the spotlight, viz. - the levels of the state, district and that of the school and community.
2. The need for initiatives that are purposely created as sources to initiate development at each level and/ or their interrelationships.

They purport that proof-confirming systems thinking leads to systems action has been scanty. They would like to see more systems action, which is planned, authoritative and followed in practice. Barber and Fullan (2005) call for State policies that seek to put together accountability and competence building systemically. These are profound changes influencing how system leaders conceptualise challenges, how they devise interrelated policies and strategies, and assign resources. Their call to policy makers is for commitment to improvement in the three levels, learning from such and going for in-depth understanding, like they do in places such England, Ontario, New South Wales and South Australia.

Systems that are planned and controlled cover a number of activities- a school system will have a number of layers as well, *inter alia*:

1. Society, the community, the profession; e.g. the South African society;
2. The Department, Local Authority, School District, e.g. DoE (National, Provincial and District);
3. Schools, e.g. schools in the Sweetwaters Ward as the local community;
4. Teachers and classes; and
5. Learners (and their families).

3.8 Hard and Soft Systems

Hard systems contribute to the assumption that they deal with challenges that involve selecting an efficient way to reach a known and defined end (Checkland, 1978 quoted in Jackson, 2000: 127). The hard systems approach is characterised by goals that are carefully set, looking for alternative ways to attain such goals coupled with evaluating such alternatives using efficient performance indicators. The key to a hard problem is that success can be early on in implementing the solution. Some criticisms levelled are that the machine metaphor is dominant in that objectives should be aptly clarified from the outset. They fail to pay proper attention to the human component, which might end up treating people as elements for engineering purposes just like mechanical parts of the system. In a way they offer support to the status quo and put goals of the dominant stakeholders at an advantage. Some examples of experts in hard systems are engineers and accountants.

Soft systems approaches address problems that are too messy and complex to understand by simplistic means. They are not easy to define due to their socio-political elements (Couprie, et al., 2007: 2). A soft problem situation is thus ill defined; it is unstructured and is viewed as 'probabilistic' in nature (Jackson, 1995). Traditional approaches thus have a shortfall of failing to deal successfully with soft problem situations, hence the pursuance of the soft systems methodology in this research. In considering organisations as political systems, we focus on different frames of reference to describe the connection between individuals and entities, viz. - unitary, pluralist and radical. A unitary view outlook projects the notion of an entity with a team that

is well coordinated and pursues a common purpose; the pluralist stresses differences in individual and group properties, which projects instability in an entity; whilst the radical brings the notion of entities that are 'psychic prisons' in which certain groups dominate and benefit themselves at the expense of others (Jackson, 2000: 29). The school system seems to fit well in the pluralist frame.

3.9 What is Critical Thinking?

Interesting definitions came up in the literature review on systems thinking, *inter alia*: Scriven and Paul (1996) see critical thinking as:

> The intellectually disciplined process to actively and skilfully conceptualise, apply, analyse, synthesise, and/or evaluate information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action (Scriven and Paul, 1996).

Angelo (1995: 6) looks at the official definitions that characterise critical thinking as intentionally applying balanced higher order thinking skills, *inter alia*: in analysing, synthesizing, recognizing and solving problems, inferring and evaluating. The Center for Critical Thinking (1996b) defines it as thinking that appraises itself and thus making it possible to think about one's thinking so as to identify strengths and weaknesses and recast the thinking in an improved form when necessary; whilst Beyer (1995: 8) says critical thinking has to do with how to make rational judgments, i.e. discipline in thinking how to evaluate the soundness of, *inter alia*: statements, arguments and research. This tells me that a person can learn to learn about his/her thinking and develop skills to be consciously in tune with his/her thought processes.

3.10 The Need for 'Learning'

Day (1987) conducted research in classroom observation, analysis and evaluation of in-service professional development in schools in support of

reflection on teaching (cited in Busher and Saran, 1995: 114). In the research he observed the differences between 'single-loop ' and 'double-loop' learning. Argyris and Schon (1976) associate the regular manner of learning as 'single-loop learning' and argue for 'double-loop learning' that allows for exposing things that were taken for granted to questioning, which goes with being open to progressive viewpoints, perceptions and sources of evidence (cited in Day, 1987: 20). A school that promotes learning will allocate resources and allow time for engaging in teacher reflection, evaluation and planning for school improvement. It is a way to listen to teachers' needs for learning and respond by providing opportunities for active experiencing, participation and support throughout the processes of change, e.g. the implementation of the IQMS.

3.11 Summary

This chapter provides a review of systems thinking in general. It seems to confirm the need to engage in systems thinking and highlights that a paradigm shift is necessary to get a better understanding on how the IQMS implementation contributes and influences teacher appraisal, teacher development, etc. in the pursuit to facilitate school improvement in the ward. The approach to systems thinking as espoused by Senge (1990) is responsible for introducing the learning organization and generating systems thinking - a lever to the disciplines of personal mastery, mental models, shared vision and team learning. Schools are by their very nature complex and expansive entities where there is human interaction on a daily basis. The complex and messy context in which the underlying challenges and opportunities in the implementation of the IQMS are explored sets the platform for introducing the soft systems methodology (SSM) in the next chapter. SSM is a methodology located within the broad systems thinking paradigm and this study will focus on Peter Checkland's seven-stage model. A qualitative research approach, based on an interpretive paradigm and follows a descriptive enquiry will be pursued as the most appropriate for this study.

CHAPTER 4

METHODOLOGY

4.1 Introduction

In Chapter 3 a review of systems thinking was provided to set the platform for using the soft systems methodology (SSM) to explore the complexity and mess in a situation of the implementation of the IQMS. Chapter 4 will therefore delve deeper into the choice of the SSM as the ideal methodology in this research. Methodology in this research either refers to a reflection on, or theorizing about, i.e. a science of method, or it is a set of principles or ideas that guide the choice of any particular method(s) or approach to a problem or problem situation (Luckett, 2004: 7). This differs from a method that has to do with the specific approach chosen or set of activities undertaken in a particular situation by a practitioner who is guided by a methodology. "SSM is a methodology [the logos of a method], not [merely a specific] technique" (Checkland and Scholes, 1990: 286-7).

There are significant differences between an instructive approach and a constructive approach when policy is reviewed/changed. In an instructive approach, the policy is predetermined and implemented by the policy maker whereas a constructive approach lays emphasis on participation, developing understanding, building support, collegiality, collaboration, a spirit of enquiry and a strong sense of mutual accountability and transparency. As SEM, intervening out of concern in a complex real world problem situation, i.e. the implementation of policy (IQMS), I am facilitating the learning of the participants/actors about the problem situation. I believe strongly in a constructive approach as the right way to go in initiatives to enhance school improvement through policy reform or change. In my role of facilitating such an enquiry process I believe that it has to enable the different stakeholders to think about the challenges and look for possible alternatives to facilitate change that will characterize the kind of system that seems suitable for

improving the implementation of the IQMS. This is where critical systems have provided me with a framework for the interpretation of my job and work with people. In this research I will pursue an interpretative approach, which is constructivist in nature using the SSM. I had to explore what would be the most suitable methodology to use. Jackson (2003: 18) provides an extended version of Jackson and Keys' 'ideal type' grid of problem contexts and other writers present the grid, called the System of Systems Methodologies (SOSM) in various ways as well. I tried to locate problem contexts in the grid that experienced researchers have used successfully in complex, real world problem situations. As this is a problem situation that seems to favour a soft systems approach I kept some of the methodologies of this nature in mind, *inter alia*: Social Systems Science, Strategic Surfacing and Testing, Interactive Planning and the Soft Systems Methodology (SSM). My main objective was to get a methodology that enables a systems practitioner to facilitate the expression of different viewpoints by the relevant stakeholders, make the various implications explicit to enable him/her to explore systemically, compare and contrast different alternatives. I will therefore give a detailed account/description on how Peter Checkland's SSM can be used to explore such problem situations.

4.2 A System of Systems Methodologies (SOSM)

In trying to understand the methodology to use in this research I looked at the System of Systems Methodologies (SOSM), i.e. a framework for classifying systems methodologies that was initiated by Jackson and Keys in 1984 and has been described and presented in various ways over the years. It is started by constructing a model grid of problem contexts. Figure 4.1 shows a grid of six cells corresponding to 'six ideal types of problem contexts' (Jackson 2003: 18).

PARTICIPANTS

	UNITARY	PLURALIST	COERCIVE
SIMPLE	Simple- Unitary	Simple- Pluralist	Simple- Coercive
COMPLEX	Complex- Unitary	Complex- Pluralist	Complex- Coercive

SYSTEMS

Figure 4.1: Jackson's extended version of Jackson and Keys' 'ideal type' grid of problem contexts (Jackson, 2003: 18)

The grid suggests that systems thinkers have to deal with situations that are complex, changing and diverse, which stem from two sources: the 'systems' managers have to deal with and the 'participants' with diverging interests in the problem situation. The vertical axis captures system types conceptualised in a continuum moving from the relatively simple to the extremely complex. The characteristics of simple system types are that they have a few subsystems involved in a small number of extremely ordered interrelations and connections (Jackson, 2003: 19). The characteristics of complex system types are that they have many subsystems involved in numerous unstable interactions and the results of such connections cannot be predicted. The systems adjust and change over time due to the effect of their own purposeful parts and the turbulence of their existing surroundings (ibid).

The horizontal axis has three categories showing the relationship between stakeholders/participants within the problem contexts as unitary, pluralist and

coercive. Unitary problem contexts are characterized by participants who have the same values and beliefs and are able to agree on the goals and objectives easily. Pluralist problem contexts are characterized by stakeholders who have similar but divergent value systems, but are willing to compromise in order to reach a solution. Coercive problem contexts are characterized by stakeholders who have different value systems and beliefs and where neither goals can be agreed upon nor compromise achieved. The situation enables the most powerful participants to use different forms of coercion to keep others in line and force them to adhere to commands.

Six ideal type forms of problem context result when the two dimensions: 'systems' and 'participants' are combined and divided as explained above, viz. - simple-unitary (S-U), simple-pluralist (S-P), simple-coercive (S-C), complex-unitary (C-U), complex-pluralist (C-P) and complex-coercive (C-C). It is important, however, to keep in mind that problems in real life cannot be categorized or defined to fit exactly into the above cells/boxes. Systems practitioners should keep the notion of 'ideal type' crucial in understanding the SOSM and what it seeks to convey. Jackson furthermore highlights the need to understand that people who developed the various methodologies had their own ideal-type views of the nature of problem contexts.

4.3 Relating Systems Methodologies to the Problem Contexts

System types conceptualised as simple are not likely to change significantly over time as they are barely affected by self-regulating actions of their components and the influences by the surroundings they exist in. The nature of the problem situation/investigation being explored has been described as complex and inundated by changes, which makes system types in cells S-U; S-P and S-C difficult even to consider for possible suitability in this study. One such limitation being that some of them are more aligned with hard systems thinking and probably unsuitable in dealing with multiple perceptions to reality in a satisfactory manner. One of the main criticisms of hard systems thinking

relates to its failure to handle considerable complexities, managing diverse viewpoints and dealing with political and power concerns (Jackson, 2003: 16).

A system type that classifies the relationship of participants as unitary brings the notion that the participants possess related values, beliefs and interests. They work towards shared objectives and involve themselves in taking decisions aimed at realizing their shared goals. Methodologies linked with hard systems thinking, e.g. Operational Research and Systems Engineering, appear to be simple and unitary; whilst those in line with emancipatory systems thinking like the Critical Systems Heuristics are seen to be simple and coercive.

The research envisaged makes the C-U systems to be out of favour as possible methodologies to pursue, as they suggest that the participants have similar values, norms, beliefs and agree on goals, whilst C-P systems are more suitable possibilities. The systems methodologies, which give a perspective of soft systems thinking and identify with the problem situation that I want to investigate as the facilitator are, *inter alia*: Systems Dynamics, Organisational Cybernetics (Viable Systems Model), Strategic Assumption Surfacing and Testing (SAST) Interactive Planning and SSM. There are system types that seem to indicate post-modern systems thinking as well, e.g. team syntegrity. They seem extremely complex and coercive as well, which does not augur well with the problem situation explored. Jackson (2003: 24) removed the intersecting lines that constructed the particular problem contexts in the previous grid to portray that what is discussed above is just indicative of the assumptions made by different systems approaches about the nature of problem contexts, as depicted in Figure 4.2.

PARTICIPANTS

	UNITARY	PLURALIST	COERCIVE

SIMPLE

THINKING

HARD SYSTEMS

THINKING

EMANCIPATORY

SYSTEMS

SOFT SYSTEM APPROACHES

SYSTEMS

SYSTEM DYNAMICS

ORGANIZATIONAL

COMPLEX   CYBERNETICS

COMPLEXITY THEORY

POST-MODERN
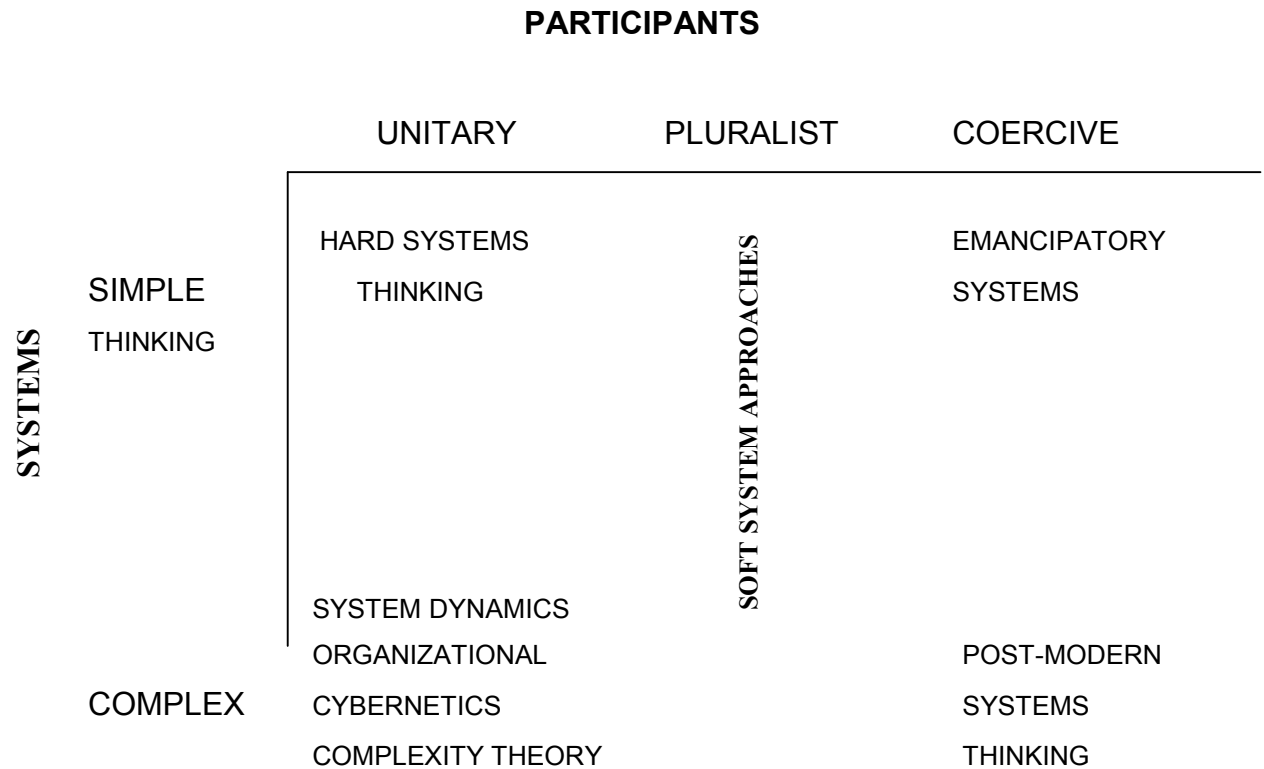
SYSTEMS

THINKING

Figure 4.2: Systems approaches related to problem contexts in the System of Systems Methodologies (Jackson, 2003: 24)

4.4 The Soft Systems Approaches

Systems thinking involves seeing or understanding the world as a way of taking action without breaking the whole into parts. Soft systems thinking (SST) is primarily concerned with perceptions, values, beliefs and interests of the stakeholders. It agrees with the notion that people perceive reality in different ways, with conflicting views emerging in some instances, but keeps on working towards empowering managers to succeed in a pluralistic and complex environment of that kind (Jackson, 2003). This means there are as many possible interpretations of perceived reality as there are perceivers (Brown-Syed, 2000). Different people exploring the same problem situation will give various interpretations due to different perceptions, values, previous experiences and mental models. Eliciting many perceptions may lead to revealing potential areas of commonality as well. Soft Systems Thinking emerged as a well thought out approach to explore human problem contexts.

Soft Systems Methodology (SSM) has systems thinking as its foundation, it thus looks at a problem situation holistically rather than in a manner that reduces it to individual parts, i.e. reductionist. The development of the SSM is attributed to Peter Checkland of Lancaster University. He developed it as a system of inquiring and taking action to improve unstructured problem situations where there is a vague perception of issues of concern and lack of clarity (Luckett et. al., 2001: 523). He recognized that the 'Human Activity System', i.e. the less tangible factors like culture, informal relations and attitudes affect the numerous problems experienced in different entities (Eva, 2004). Checkland adopted some ideas generated by von Bertalanffy into the expansive concept of systems thinking, hence the SSM depends upon the notion that: "organizations and their various subsystems can best be described as 'holons', and as manifestations of purposive, goal-directed behaviour" (Brown-Syed, 2000).

SSM recognizes the worldviews or *Weltanschauungen* of the analyst and the stakeholders as being crucial to the research conducted. It also recognizes the interdependence between the component parts, which leads to the situation where a change to one part affects the other parts. When the IQMS is implemented in a school situation, the consideration of the *Weltanschauungen* of key role players like the educators as individuals, the SMT members, Union site stewards and SEMs, is critical. It is important to reflect as well on some of the worldviews that were shaped by the political situation that prevailed at the time, viz. - a highly unionised teacher corps fighting against the inspection system practiced by the DoE at the time.

"At the heart of SSM is a comparison between the world as it is, and some models of the world as it might be" (Dick, 2002). This comparison brings to light that practitioners should have a clear understanding of the world (research) and some ideas for improvement (action). A research practitioner/analyst looks at a real-world problem, studies the problem situation in-depth, before moving on to the development of some ideal models of how the system might be improved. The next step involves comparing the

ideal models to the actual situation (reality); and observing how the two worlds differ (reality and models), as such differences are the core in the transformation plan. SSM is thus geared towards understanding the problem situation and improvement as depicted in Figure 4.3.
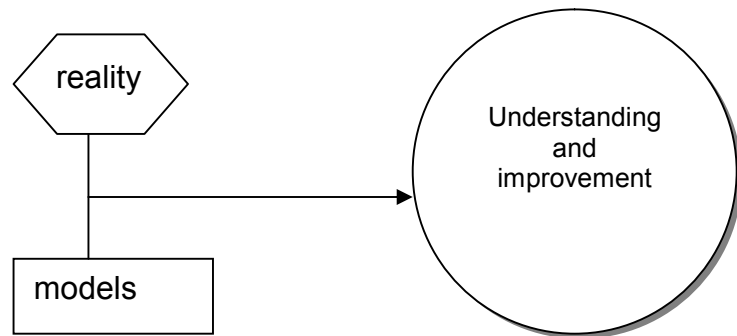
Figure 4.3: Comparing Reality and Models (Dick, 2000)

4.5 Checkland's Seven-Stage Cyclic Learning System

The systems practitioner finds out about the problem context and carries out a fundamental investigation into the problem area. It is crucial that he/she determines the main actors and/or role players and seeks to understand how the process works in the system at that particular time. In using an SSM approach, the term 'the problem' is found to be limiting and possibly restricting the practitioner's observation of a situation, hence the use of a suitable expression, 'the problem situation', which justifies that there might be a myriad of problems that supposedly need to be solved (Couprie, et. al. 2007: 4). Checkland suggested a seven-stage cycle to be used for analysis in the SSM, made up of the following:

1. The problem situation unstructured
2. The problem situation expressed
3. Root definitions of relevant systems
4. Making and testing of conceptual models

5. Comparing conceptual models with reality

6. Identifying feasible and desirable changes

7. Action to improve the problem situation
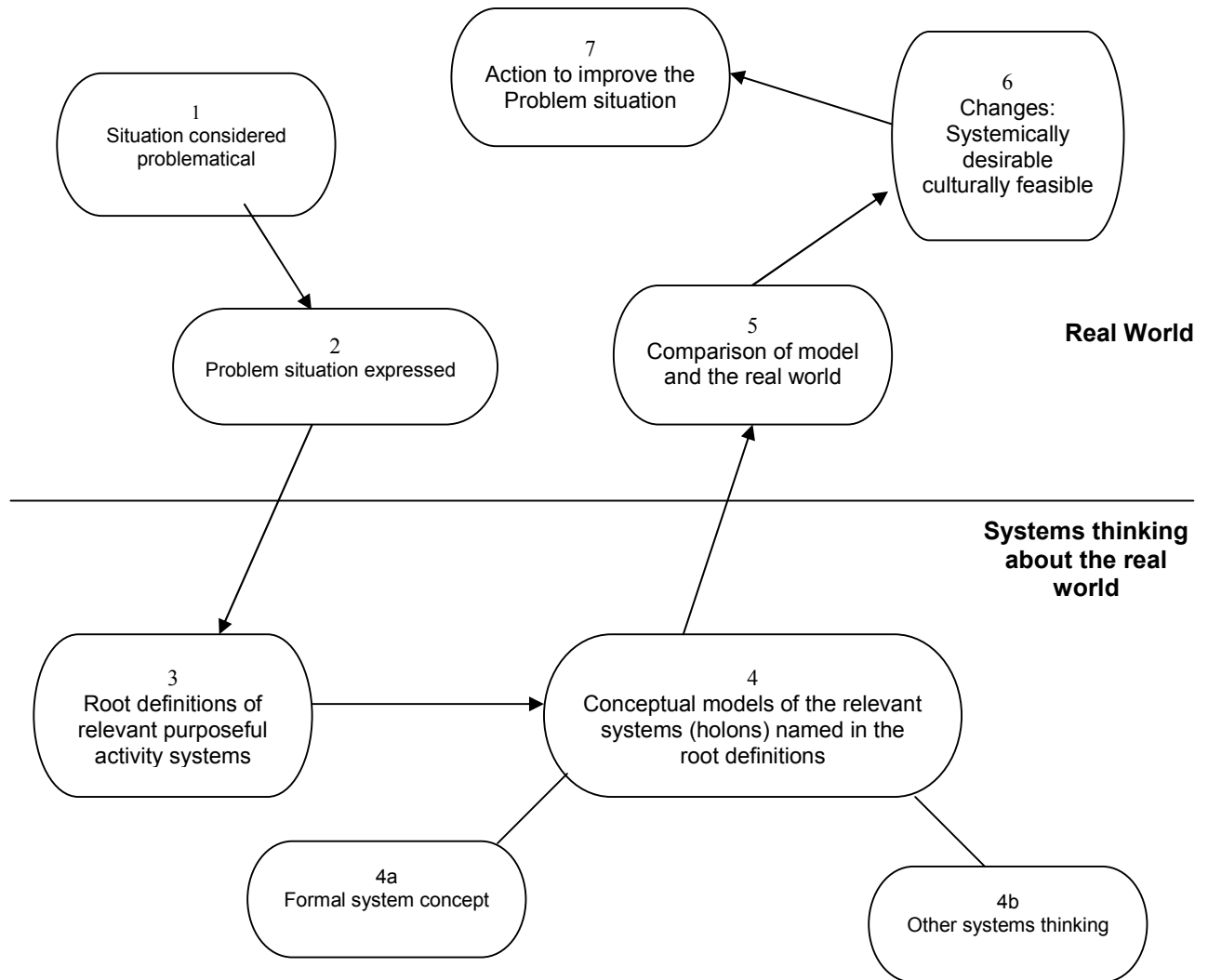
Figure 4.4: The Learning Cycle of Soft Systems Methodology (Jackson, 2003: 187) adapted

The developed form of SSM

History

Real-world
problem situation

Would-be
improvers of
the problem
situation

Tasks,
issues

The situation
as a culture

Relevant
Systems

Models

Situation

Analysis of the
intervention

'social system'
analysis

'political system'
analysis

Differences between
models and real world

Changes: systemically
desirable culturally feasible

STREAM OF CULTURAL

ANALYSIS

Actions to improve
the situation

LOGIC – BASED STREAM

OF ANALYSIS

Figure 4.5: The Two-Strands Process of SSM (Checkland and Scholes, 1999: 29)

Checkland's two-strands process of SSM suggests three types of inquiry for the cultural analysis:

1. A role analysis which focuses on the intervention itself and seeks to identify the client, the would - be problem solvers (analyst) and the problem owners (stakeholders), i.e. people who have an interest in the problem situation as identified and are likely to be affected by it.
2. A social system analysis identifies three sets of elements for the problem situation, viz. - roles, norms and values. Such analysis informs the systems practitioner what are the internal policies and processes of the organization and the possible benefits and factors that influence the perspective of an individual.
3. A political system analysis identifies the use of power in the problem situation, e.g. existing hierarchies in the organization and implicit organizational beliefs.

Jackson (2000: 256-257) suggests that Checkland's two-strands model does away with the 'formal systems model' and the use of other systems thinking thus excising any residual role of the functionalist systems thinking.

4.5.1 The Problem Situation Unstructured

It is important that the practitioner experiences the problem situation as it is and avoids making preconceived assumptions about the nature of the context. The practitioner refrains from using systems terms in analysing the problem situation in order to avoid misrepresenting the problem context and the possibility of jumping to impulsive unsubstantiated conclusions. The analyst will get an indication from the managers and/or employees (problem owners) on their thoughts about the need for a review, change or improvement in their organization. This stage basically points out that members of the organization assume there might be a crisis or a chance for development and initiate the review or analysis.

4.5.2 The Problem Situation Expressed

In this information gathering stage the practitioner collects and sorts information so that he will be able to provide some account of the problem situation (Couprie, et. al., 2007: 4). The information assists the analyst in building the richest possible picture of the problem context. The information needed pertains to:

1. The structure of the organization, i.e. factors that do not change easily like buildings and the environment;
2. Processes or transformations carried out within the system, many of which are changing constantly;
3. Issues expressed or felt by the participants/members in the organization in the form of complaints, suggestions and criticisms (ibid).

Various strategies and techniques can be used by the practitioner to collect facts, ranging from informal, unstructured methods to formal, structured tools used in traditional systems investigations. The techniques are, inter alia:

1. Work observation: to identify tasks performed, tools employed, video recordings, making drawings of structures, collecting samples of information handling tools and participant observation.
2. Interviews: unstructured, informal ("tell me what you do"); semi-structured; highly structured (questionnaires with boxes to tick; critical incidents and audio recording).
3. Workshops and discussion: future workshops; review workshops; conflict resolution workshops; simulation and mind-games (Wilson, 2001: 15).

It is advisable that an analyst refrains from narrowing the scope of the investigation at these early stages because that might result in excluding lots of potentially significant information. A widely used technique to depict a

complex situation is illustrating the problem situation in the form of a rich picture.

4.5.2.1 Rich Pictures

Rich pictures are constructed out of pictorial symbols, cartoon characters, sketches and key words. The presentation depicts, *inter alia*: the perceptions, mental models, worldviews, ideals and interests of the various members in the situation. In this way the groups of actors get to study their own understanding of the problem context in depth. Rich picture building aims at assisting the analyst in trying to capture the interactions, the valuable opinions made by the participants as well as give a sense how the situation feels. The practitioner's objective is therefore to observe the factors prevailing in the problem context as fully as possible and in particular the components connected to attitudes, emotions and politics. The rich pictures may appear messy and confusing to some people, they do, however, assist the practitioner and actors to illustrate and converse about the features of the problem situation as well as delineating relationships, identifying conflicts and isolating the roles of individual participants. Rich pictures are thus used to present models for thinking about the system and to assist the practitioner to realise what the problem situation involves**.**

4.5.2.2 Guidelines for Drawing Rich Pictures

Luckett (2004: 19-20) provides these mind enhancing guidelines:

1. Attempt to put together all activities and items that might be fitting to a problem situation, in a cartoon- type picture;
2. Put various links observed by the participants between the pictographic symbols;
3. Do not get distracted but keep on being resourceful and tap into your creativity to find pictorial symbols;
4. Refrain from using excessive words, whether as comments or 'speech bubbles' coming from people's mouths;

5. Words to be used only where ideas fail to encapsulate the intended meaning;

6. Do not look for ways to impose any style or arrangement on the picture;

7. Avoid thinking in systems terms as this might direct you to follow a set line of thought and suggest some assumptions;

8. Include the hard, factual data concerning the problem context as well as the soft, subjective information;

9. Observe the social responsibilities considered meaningful by the stakeholders - look at expected behaviour and indicate conflicts identified;

10. As practitioner, include yourself in the picture, e.g. your roles and relationships, and remember you are not an objective observer.

4.5.3 Root Definitions of Relevant Systems

The participants have to develop a range of systems that are significant in improving the problem context, guided by the analysis in Stages 1 and 2. Each system has to express a specific viewpoint, which will be further developed in conceptual models. These theoretical systems, called root definitions (RD), are representations of the different perspectives expressed by individual role players, which capture the achievements they are trying for in the system. Luckett (2004: 24) describes a root definition as a definition (or a very brief summary) of a system that will bring about a desired outcome. He further stresses that the transformation process is the core of a RD. The transformation process involves starting with an undesirable present situation and then developing a vision for this situation. The transformation process is then the process that takes you from the present situation to the desired situation. "The purpose of the RD is to express the core purpose of some purposeful activity system" (Couprie, et. al., 2007: 8).

Checkland (1981) suggested distinguishing between *task-based* and *issue-based* holons to get participants to think out of the box and go outside of the usual official dialogue.

1. *Issue- based* root definitions relate to issues that arise in the organization, e.g. conflicts, suggestions, complaints, etc.

2. Primary *task or task-based* root definitions express official, declared tasks of the organization, e.g. encapsulated in a mission statement.

Sanchez and Meija (2008: 113) stress that we should consider issues outside the official discourse as well, hence their preference to use terms *official* and *non-official.*

4.5.3.1 CATWOE Analysis

Checkland presents the mnemonic CATWOE as a checklist to ensure that the main aspects of the RDs are included to facilitate the logical analysis. In conducting a CATWOE analysis the researcher formulates and structures the real world situation meaningfully, also ensuring that the RD developed truly characterizes the relevant system. Each letter signifies the elements that should either be explicitly included, or at least implied, in any well-formulated RD:

Customers are the beneficiaries of the system. If there are people who lose out (victims) in the system, they are counted as customers;

Actors are the people who carry out the activities defined in the system, i.e. the people who would make the system work;

Transformation process is shown as the conversion of input to output;

Weltanschauung is the worldview or assumptions underlying the system and gives the transformation process meaning in context;

Owners are the people with the power to start up and shut down the system from realising its objectives;

Environmental constraints are those external elements over which the owners have no control but which have an impact on the system (Checkland and Scholes,1999: 35-36; Checkland,1999: 224-225; Wilson, 2001: 17-18; Couprie, et al., 2007: 9).

The core of CATWOE is the pairing of transformation process T and the W, the *Weltanschauung*, which makes it meaningful. For any purposeful activity, there will always be a number of different transformations, by means of which it can be expressed, these deriving from different interpretations of its purpose (Checkland, 1990: 35).

The transformation process seems to be the crucial word of SSM, as it describes the act of transformation needed to change an input into an output (Checkland, 1990: 16- 8; Checkland and Scholes, 1999: 36-38; Wilson, 2001: 16-17). There are other mnemonics suggested by some writers, e.g. BATWOVE, TO-A-WEB (Luckett, 2004: 26) after considering some elements of the CATWOE. B in such mnemonics stands for the beneficiaries of the system. CATWOE is, however, a very well established in SSM literature and keeps the Transformation and the *Weltanschauung* together.

4.6 Conceptual Model Building

A conceptual model of a system can be derived from a given root definition of a system and can be defined as a human activity model that is logically derived from the root definition using the least amount of actions. Systems thinking is applied as an iterative process that joins three concepts, viz. - the perceived world, ideas and methodology, in this development as shown in Figure 4.6:
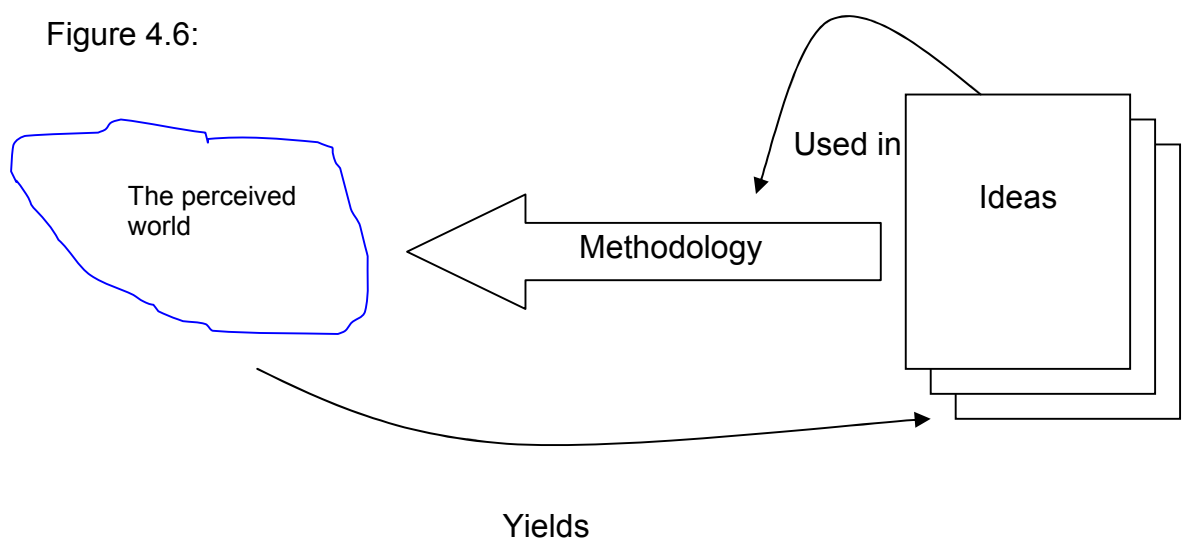
Figure 4.6: The Routing of Systems Thinking (Couprie, et al. 2007: 10)

The use of SSM involves the creation of some models to be contrasted with the real world. This differs from hard methodologies where the normal occurrence is the creation of a single model. These models are contributions to a debate concerning transformation and thus prompt the SSM to guide the process towards the implementation of agreed changes. Conceptual models are pictorial/symbolic references to a situation and are used when necessary to depict qualitative data in soft systems thinking. When models are constructed, the researcher must resist the appeal to describe what actually exists, but to rather focus on what the owners and actors are searching for. The researcher works out descriptions/metaphors of how the significant elements might ideally function, drawing upon his/her knowledge of systems and concepts, and using systems terms. It is crucial that the researcher considers all points of view as the outcome can be largely influenced if stakeholders are appropriately identified and thus have a chance to express their *Weltanschauungen*. Stakeholders may be, *inter alia*: the client, people in the system and people outside the system who might be affected or have an influence in the system.

4.6.1 Guidelines in Making Conceptual Models

1. The activities must be expressed by using verbs in the imperative;
2. The model is logically derived from the RD and thus does not describe a human activity system that exists in reality. Checkland (1981: 170) warns against conceptual model building that slides (wrongly) into a description of actual activity systems found in the real world;
3. The connections between the activities are shown by means of arrows, which point in the direction of influence, result or dependency. That means each activity (y) that is connected by an arrow, and indicated by an arrowhead, to another activity (x) dependent on that activity.
4. The practitioner aims to have about seven activities within each system of operation. If this leads to activities that are of a higher level, the practitioner can expand them to another level.

4.6.2 Comparing Conceptual Models with Reality

The systems practitioner engages in comparing the models with the real world at this stage. The purpose of this comparison is to identify which differences can be used as the foundation for a discussion, i.e. how the relevant systems work, possibilities of how they might work, and what the connotation of that might be. The aim is definitely not on implementing the conceptual models.

4.6.3 Identifying Feasible and Desirable Changes

The participants engage in a dialogue on how desirable the system is and how feasible the cultural aspects are as depicted by the models. When possible changes are identified, they have to be assessed in terms of desirability and feasibility. Desirability has to do with the technical improvement, whilst feasibility concerns the fit to the culture.

4.6.4 Taking Action to Improve the Problem Situation

The most desirable and feasible changes that are identified are put into place, which produces a new problem situation, and the cycle begins again. According to Checkland the learning cycle could be commenced at any stage and SSM should be used in a flexible and iterative manner and the model with two strands, as discussed briefly under CATWOE, gives equal attention to a 'stream of cultural analysis, and to the logic- based stream of analysis'. The three parts of the cultural analysis are continually updated and developed as the intervention progresses.

4.7 Summary

In this chapter I explore how I approached the collection and analysis of data, keeping in mind that the objective is to explore how IQMS is being used and can be used for school improvement. The research is, as mentioned before,

qualitative in nature, which makes it imperative that besides events that can take place, I need to have an instrument to capture data on the observable, e.g. behaviour; as well as on the non-observable, e.g. attitudes, values and perspectives. Qualitative oriented research increases the practitioner's ability to describe complex social systems and promotes the interpretation, both of the systems practitioner and the participants.

As a potential problem solver I have identified a real-world problem, the implementation of the IQMS, relevant to my area of research interest as the SEM. I negotiated entry into that area of concern, which in fact is an area that I monitor and moderate as part of my job description. I declared in advance the framework of ideas (philosophy and theories) and methodology I will use in trying to bring about improvement. I took part in action in the situation and reflected on what happens using the framework of ideas and methodology (action research). I pursued a philosophical perspective/paradigm of learning that looks at reality as extremely complex and it leads to worrying about modelling it systemically. So, instead of searching for ways to work with various viewpoints/outlooks of reality, it facilitates a systemic process of learning, in which the different viewpoints are investigated and dialogued in a manner that can lead to purposeful action in pursuit of improvements in the Sweetwaters Ward.

I find a fitting end to the chapter, in preparation for the next one, in the words of Jackson who looks at SSM as being:

> Closer to the interpretative sociology of Weber than the functionalism of Durkheim, and to the phenomenology of Husserl and Schultz, and hermeneutics of Dilthey, than to the positivism of Comte and Durkheim. It has more in common with the action theory of Silverman (1970) constructed, in opposition to the dominant 'systems' approach to organizations, than to the functionalist, organizations-as-systems approaches he attacks (Jackson, 2000: 248).

CHAPTER 5

REFLECTIONS ON THE USE OF THE SOFT SYSTEMS METHODOLOGY IN THE IMPLEMENTATION OF THE IQMS IN THE SWEETWATERS WARD
(June 2005 – May 2007)

5.1 Introduction

We used an action research oriented approach named the soft systems methodology (SSM) to promote learning in the Sweetwaters Ward as regards the implementation of the IQMS and the role it plays in school improvement. The study spanned over a period of two years coordinating the activities of the key actors in the school context, i.e. principals of schools, Union representatives and SDT Chairpersons of the twenty-two schools that form the Ward. The action research applied was participatory in nature and used Peter Checkland's soft systems methodology (Checkland 1972, 1981; Checkland and Scholes, 1990) as a starting point. The research group consisted of SDT Chairpersons from the twenty-two schools, two Union representatives; one from the SADTU and one from the NATU, i.e. National Teachers Union; and the Principals' representatives (1 from primary and 1 from a secondary school). It was therefore a diverse group as the SDT Chairpersons consisted of two deputy principals, eight department heads (HODs) and twelve Level 1 educators. The research group intended to work through the different stages of the methodology in fortnightly meetings and went from the stage of getting to appreciate their different worldviews, inquiring into the problem situation from them, working on possible activities that could lead to improving the situation and finding ways to implement them.

This chapter describes reflections on an intervention from the initial description of the implementation of the IQMS in the schools, the process followed and comments on whether/how it contributes towards school improvement or not; a description of the actual SSM process that was followed and the challenges, lessons learnt and successes as perceived by the research group.

5.2 A Description of the Initial Problem Situation as Observed by the SEM

The implementation of the Developmental Appraisal System introduced in 2000 was disappointing and there was an ongoing fight between the DoE and Unions on how to implement the Whole School Evaluation, particularly on the area of evaluation that covers "the quality of teaching and learning and educator development" (Government Gazette, 2001: 5). The main purpose of this area is to assess the quality of teaching in totality, i.e. throughout the school and how good it is in helping all learners and raising their levels of performance and attainment. The second purpose is to evaluate the quality of in-service professional development enjoyed by educators as highlighted by reports and the professional growth plans of DA and PM (Government Gazette, 2001: 5; Evaluation Guidelines: 11).   Hence, the ELRC signed the IQMS, Resolution No. 8 of 2003, on 27 August 2003. The advocacy of the IQMS as an integrated system that aligns the Quality Management System programmes, viz. - whole school evaluation, developmental appraisal of educators and their (the educators) performance evaluation, in 2004 (KZN: IQMS, 5-7) took place in a haphazard manner. There was insufficient training for the SEMs, who are the DoE officials tasked to facilitate and monitor the implementation at the local level (Ward). The cascading model used to eventually get all the educators trained, spelled disaster from the outset as well. The model involved a two-day training workshop for three educators from each school (the principal, one HOD and one Level 1 educator) who had to go back and train all the other staff members. One big challenge was the number of people to be trained, i.e. more than a hundred people at the same time, as

there were set time frames. The facilitators themselves had not been sufficiently trained so a trial and error method was used.

The linking of teacher appraisal for purposes of pay progression with teacher development encouraged educators to project a picture of excellence (good scores) rather than indicating their areas of development/gaps so that relevant developmental interventions could be arranged for them. In 2005/2006 the system showed excellent scores/performance by educators, whilst learner performance in many schools showed the opposite. School Improvement Plans on the other hand indicated serious backlogs that the DoE had to attend to, e.g. infrastructure needs, teaching and learning resources, shortage of qualified educators in critical subjects such as Mathematics, Physical Science, Computer Studies and Accounting. So schools waited for the DoE to provide the necessities and there was very little that materialized.

There were extremely polarized views concerning the IQMS and the role of the SDT in schools. Many educators resisted any form of developmental appraisal and did not plan to pursue educator/staff development on their own. So they waited for the DoE and nothing happened. Some looked at the IQMS as an event, where the school set aside a week and Development Support Groups (DSGs) would conduct class visits and submit scores to secure the 1% pay progression. Most educators wanted high scores in preparation for the 3% grade progression after three years of good performance.

Some of the many challenges faced by the Sweetwaters Ward with the implementation of the IQMS at the beginning of 2005 were:

1. In many schools, relationships amongst staff members were not harmonious, thus making it difficult to initiate the IQMS implementation;
2. Administrative processes were not efficient (at school and ward level);
3. There were no support class visits by HODs and no staff development programmes in place in most schools.

4. DoE officials (e.g. District Coordinator, Circuit Coordinator, SEM) and Principals were not leading the way in advocacy, putting systems and procedures in place and monitoring the implementation of the IQMS.

5. The SDT Chairperson had to take initiative and find ways to get the scores so that educators would not blame him/her if they do not get their 1% increase. This was initiated with little or no support from the principal in cases where the SDT Chairperson was a Level 1 educator and did not even sit in the SMT meetings.

Many people were able to point out what they considered problematic and why the implementation of the IQMS would not succeed, though we did not agree on what the core problem was or what the possible way out (solution) would be. There were so many contradictory perspectives from the people involved in the implementation, e.g. DoE officials, principals, union representatives, SDT chairpersons and Level 1 educators, which confirmed that we were facing a 'mess', rather than a problem that was well-structured, in dealing with the problem situation.

5.3 The 'Ideal' KZN DOE Framework for the Development of Educators

The KZN Strategic Plan of 2005-2010, Programme 8 (Human Resource Development) provides for the development of the educator corps. It provides a framework specifying that the addressing of (educator) developmental needs will not be centralized but would be devolved to different levels according to the type and relevance of the identified needs. The levels are:
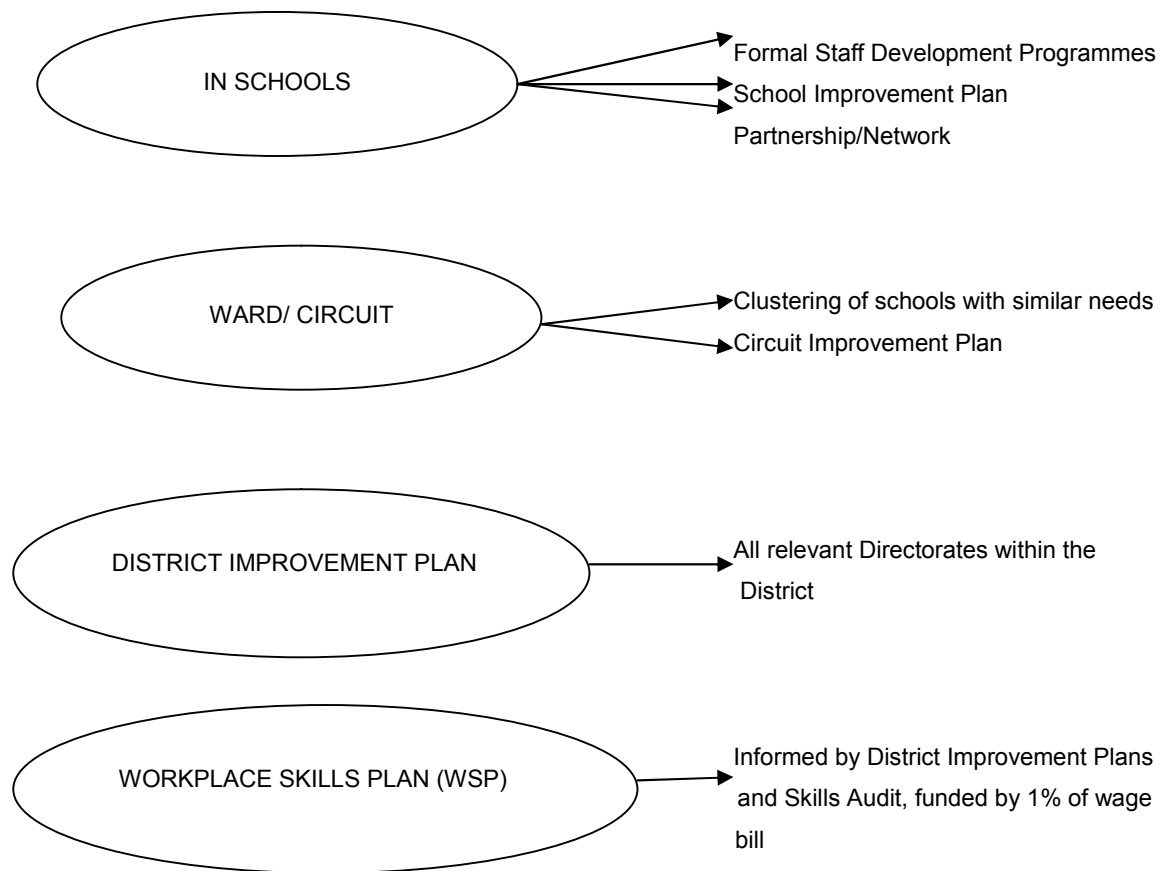
Figure 5.1: The Levels at which the Developmental Needs of the Educator Corps can be addressed (KZN-DoE, 2005)

I have used the word 'ideal' because this seems to exist on paper only. A few people have access to copies of the Strategic Plan and some who do have it are not even aware of such a framework. I particularly became aware of its existence when I actively looked for every bit of legislation, policy and information that I could get on the IQMS, which I could use in clarifying issues that may arise as I engaged the research team in the envisaged project. I realized that the DoE already has a sound policy framework upon which transformation in schools is based but that there is a dire lack of proper training and communication to DoE officials, principals, SMTs and educators. This contributes to the messy situation where Union representatives are well informed and functionaries of the DoE are ill informed of what, how and why policy should be implemented. I will make reference to the framework after the reflections on how the research unfolded have been discussed.

5.4 Reflections on First Steps Initiated by the SEM

As the SEM I took the initiative to conduct research and involve schools in exploring the problem situation facing the implementation of the IQMS. The intention was to facilitate as much participant learning as possible on the problem situation and take groundbreaking appropriately supported actions to improve the situation. The starting point was a workshop (2005/06/08) in which each school was represented by the Chairperson of the School Development Team. Two principals and two union representatives completed the group as they served in the Ward Support Team (WST) and play the role of giving feedback and monitoring that their constituencies give the necessary support to the SDT chairpersons. The workshop was held after a renewed effort by the DoE to provide refresher training reviving the implementation of the IQMS. As it was quite clear that the DoE efforts were not working as expected, my main intention was to work with the participants through the stages of SSM in fortnightly or monthly meetings and workshops during a period of 12 months, which excludes school holidays, towards a meaningful way from which we can learn as a ward and possibly achieve a more effective implementation.

5.4.1 Developments in the First Meeting (2005/06/08)

This stage involved discussing and defining the problem situation. My role as a practitioner was to be vigilant that the participants learnt about the problem situation and did not engage in defining a problem that they had to solve. This is necessary because the participants have to appreciate that there are so many worldviews or *Weltanschauungen* to be considered.

The participants worked in six groups (four groups had four members and two had five members each). They discussed the objectives they had in mind highlighting where we (the Sweetwaters Ward) wanted to go with the implementation of the IQMS. Some of the objectives were:

1. To implement an effective IQMS programme
2. To empower educators on skills required for the IQMS
3. To improve the implementation programme for the IQMS
4. To design effective monitoring tools
5. To expose educators to transformation programmes that boost school improvement
6. To understand the process of implementing the IQMS and how it enhances school improvement

These objectives give the idea of a problem situation where participants are confused and just go through the motions without clear understanding. They lack the skills needed, but are prepared to work towards effective implementation and school improvement. Their objectives seem to indicate that there might be an opportunity to turn things around if they can seek a well thought out, lasting and sustainable strategy.

The participants highlighted possible constraints and/or obstacles feeding the problem situation based on the knowledge that the IQMS integrates WSE, DAS and PM:

1. The implementation of DAS had been a dismal failure because of the assumptions and/or mental models that it was a replacement for the traditional inspection system;
2. IQMS was seen as national policy aimed at pleasing the Teacher Unions, who were totally against the implementation of WSE;
3. Peer appraisal was questionable and possibly encouraged educators to choose friends as peers, who would inflate scores in their favour;
4. Time constraints posed a big challenge as schools had already fallen behind the management plan designed by the District Task Team and the Department had prioritised more than five other initiatives at the same time e.g. Revised National Curriculum Statement (RNCS), Early Childhood Development (ECD), Further Education and Training (FET), National

Teaching Awards (NTA), Systemic Evaluation (SE) and Transformation and Gender Equity (TGE).

5. Lack of capacity to implement the IQMS lead to confusion at the school as the site of implementation;

6. Lack of ownership of the IQMS at school level and even confusion of ownership at Head Office.

The constraints raised by the participants suggest that the problem situation is plagued by conflicting ideas, lack of proper coordination, lack of accountability, power struggles and a policy/initiative overload that creates tension and confusion. It projects the metaphor of the Department of Education as a toothless dog and officials and principals as puppets, which are just pulled from any end.

The participants committed themselves to work closely with the SEM in the research. They agreed on some ground rules regarding, e.g. meeting sessions, ensuring representation of each school in sessions, comments on IQMS implementation by the SDT Chairperson and honesty in reporting school IQMS developments in each session. This would facilitate ongoing discussions in schools as well so that the participants keep abreast of progress made in each school or lack thereof.

5.4.2 Developments in the Second Meeting (2005/06/22)

Participants devoted time in drawings that expressed the different features of the problem context discussed in the first workshop in detail. The drawings, termed 'rich pictures' are meant to stretch the participants' thoughts so that they end up with a good understanding of the various aspects that will be considered in the problem situation. Figure 5.2 shows one of the rich pictures drawn to depict the problem situation in the Sweetwaters Ward. According to Checkland and Scholes (1990), it may be easier to communicate some concerns in this way, as compared with doing it in writing. The pictures drawn aided creativity, allowed for sharing of ideas between the actors in a fun-filled

manner. Some interrelationships came up from the discussions. There was no clear direction, however, how this 'play' session would really assist schools with the implementation of the IQMS. The rich picture raised questions about the role that IQMS had to play in school improvement and how this role could be fulfilled in the best possible way. The participants eagerly took part in the exercise though some comments indicated they had no idea how drawing 'stick figures' and 'funny heads' could contribute to a worthwhile study, e.g. comments like what would children say if they found adults playing at work.

Figure 5.2 shows an example of one of the rich pictures developed and discussed with participants.
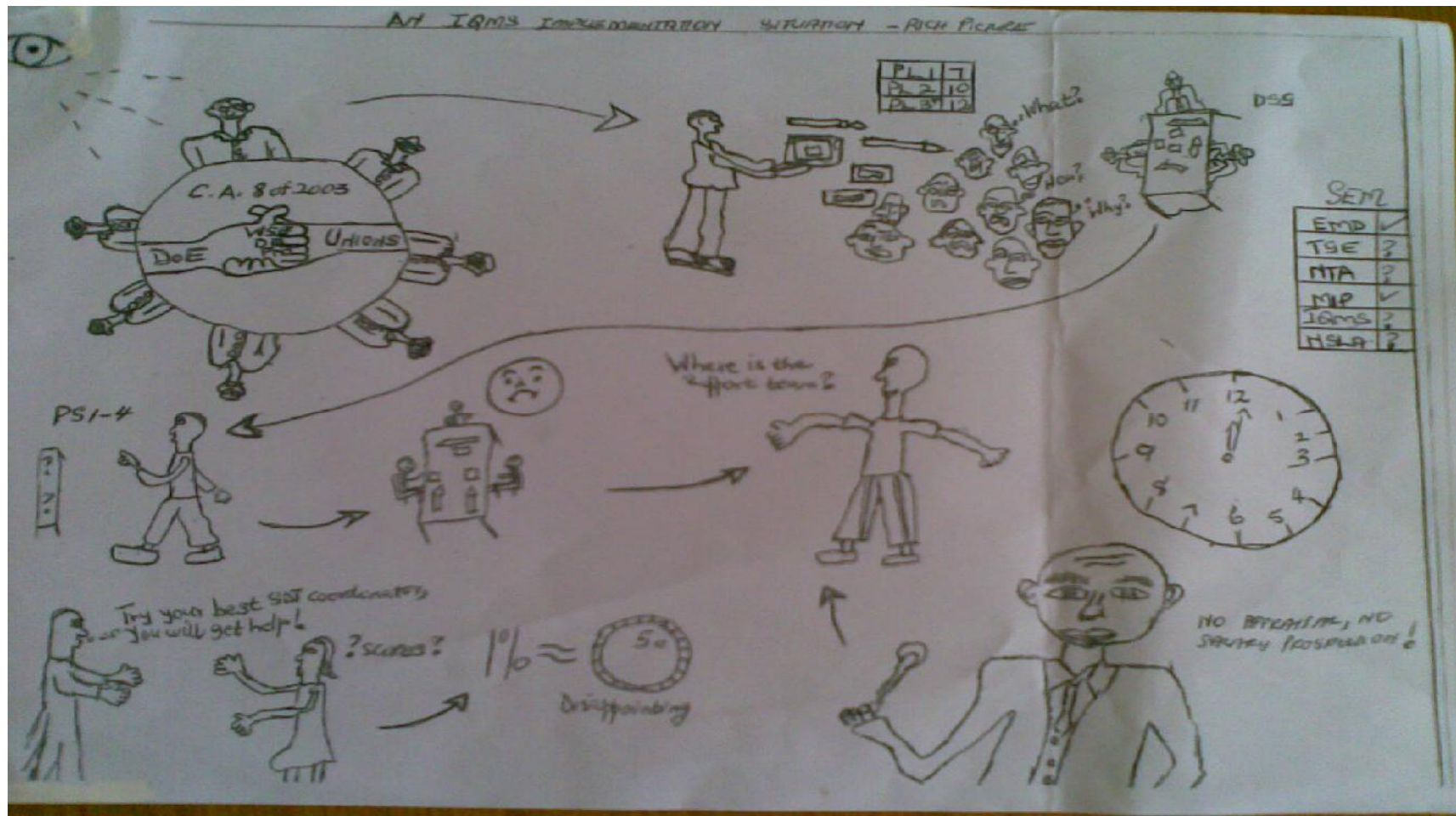
Figure 5.2: A Rich Picture of the Problem Situation in the Ward

5.4.3 Problems Uncovered

When the outcome of the 'finding out' phase was discussed, the participants expressed different problem perspectives, themes and ideas that seemed to emerge. The themes identified showed perspectives of the different participants involved in the study and gave the implication that the IQMS seems to be clouded by a myriad of problems/challenges, *inter alia*:

- A problem for educators of different levels to conduct a self-evaluation on their performance as individuals.
- A problem in facilitating that all educators perform in accordance with their job description, e.g. Level 1, HOD and Principal and get rewarded.
- A problem to put up structures in place and hold school-based educators accountable for their core function to facilitate school improvement.
- A problem to promote harmony in the working relationship between the Department of Education and Educator Unions by aligning the implementation of policies previously contested to enhance school improvement.
- A problem to synergize and coordinate activities promoting school improvement to alleviate the burden of overloaded local Department officials, e.g. SEMs.
- A problem in promoting accountability by punishing educators who fail to meet minimum performance standards.
- A problem caused by using a confusing monitoring instrument that creates a culture of blame throughout the Department of Education.
- A problem to bring about collective responsibility and provide a process of introducing a culture of development to improve schools.
- A problem with tools used by schools to evaluate themselves internally and used by Departmental officials to give support, monitor performance in schools and evaluate schools externally.

- A problem that encourages educators to set up Development Support Groups (DSG) with colleagues they can rely on to inflate their scores when necessary.

- A problem in assessing if DoE officials have the necessary expertise to guide and assist schools in planning and development for resources.

- A problem which shows educators' triumph in stopping the DOE from implementing the Whole School Evaluation and DAS as previously envisaged

- A problem with promoting and monitoring effective teaching and learning in schools, which can be used to compare teacher performance against learner performance as well.

5.4.4 Root Definition

The participants really enjoyed extracting the numerous *holons* from the rich picture. *Holons* are expressions through which the participants in the problem situation find ways to make sense of concerns and issues that seem significant. This means selecting important Human Activity Systems (HAS), offering insight into the problem situation, and preparing 'root definitions' from the relevant systems. They were then requested to engage in further discussion and come up with iterations that will express each root definition 'as an input system (X), using some means (Y), in order to achieve an output/outcome (Z)'.   Each root definition had to consider the elements brought to mind by the mnemonic CATWOE [Customers, Actors, Transformation process, *Weltanschauung,* Owners and Environmental constraints]. Four groups were formed and each group worked revisited the ideas above to create a root definition that would come up with a system that would address the failure of the IQMS and capture what an effective/successful IQMS implementation system would entail.

Examples of root definitions formulated are:

1. *A system that is fully owned and understood by educators and supported by Department officials, instils professionalism, engages educators towards a professional development and leads to school improvement.*
2. *A system that promotes ownership and expose educators and all role players to transformation programmes.*
3. *A system that brings holistic support and development to educators at all levels is monitored by Departmental officials for accountability and enhances school improvement.*
4. *A system that encourages empowerment of all stakeholders enabled by ongoing support, monitoring and evaluation by well informed accountable Department officials.*

When the participants presented their root definitions, there were further iterations to ensure that they would lead to a model that addresses the appropriate system. It was evident that we were all focused on a model that would address the failure of the IQMS. Such a model had to be fully owned by the stakeholders; it must be supported; it must identify areas of development and promote such development; it needs to build accountability of stakeholders; it must lead to positive transformation in schools and enhance school improvement. The final root definition that participants agreed on captured and consolidated what an effective IQMS implementation would entail. We felt that the root definition expresses what the system *is*, ensures that the Human Activity System has been considered and would thus help the facilitator to understand the differing needs and viewpoints of the various actors and thus accommodate them in the new strategy. The exercise involved getting the group to recognise the value of the different worldviews, to question the situation from them, to ultimately settle on a root definition that would lead to actions to improve the situation, and begin to take steps to implement them. The root definition that we agreed on:

An IQMS system that is fully owned and understood by educators, supported and monitored by Department officials for accountability , engages all stakeholders towards professional development and leads to school improvement.

5.4.5 The CATWOE Process

Customers	: educators; SMT members; principals; SEM and other officials of the Department of Education
Actors	: educators; DSGs; SDTs; principals; SEM and other officials of the Department
Transformation	: ownership; supported; monitored; accountability; participatory; brings improvement
Worldview	: rewards good performance; employer – employee conflict; judgmental system; reviving old inspection
Owners	: educator unions; educators; officials of the Department
Environment	: dysfunctional system; demotivated irresponsible educators; ill informed department officials; schools that lack resources; conflicts in schools and department directorates; negative unionism; underperforming schools

The core of a root definition is the transformation process (T), the means by which defined inputs are transformed into defined outputs (Checkland, 1999: 224). The transformation aimed at in our root definition is:

'Ineffective' IQMS implementation system, not contributing or unknown impact on school improvement. Lacks ownership, support, monitoring and accountability (input) → *' Effective' IQMS implementation system, with an impact on school improvement. Full ownership, support, monitoring and accountability (output)*

The transformation required in the IQMS is where educators have full ownership, engage in professional development and can be held accountable. Departmental officials are well informed, give support to educators, monitor the implementation in schools and are able to assess its impact on school improvement. If the system has to work optimally, the full ownership and participation by the people who are identified as the customers, actors and owners is necessary. There should be systems and measures in place to hold relevant people accountable for performance in their roles as well as for monitoring performance. This should run through from the advocacy stage of the IQMS, implementation process up to the submission of reports in preparation for the allocation of performance rewards. This necessitates that different assumptions, beliefs, perceptions and worldviews be taken into consideration, as failure to do so might lead to escalating conflicts, power struggles and lack of trust. Some of these perceptions and assumptions came out clearly in the definition and expressing of the problem stages.

The owners of the system are the educator unions and the officials of the Department. It might be difficult for individual educators in their ordinary capacity to stop the IQMS, but they may do so when organized through their unions. A site steward backed by his/her union can easily put a stop to the implementation of the IQMS in a school. Hence the need to keep unions actively involved from National Office to the site of implementation, the school. Departmental officials tasked with the implementation of the IQMS, e.g. SEM, District Coordinator, Coordinators of initiatives such as Teacher Development, Education Management Development and Skills Development should all ensure that stakeholder representation is emphasized all the time.

The educators, SMT members, principals, DSGs and SDTs were identified as representatives who perform the key activities of the system, i.e. actors. The SEMs and other Departmental officials as actors are agents that cause the main activities of the system to be carried out. The SEM has to initiate the

implementation process of the IQMS in the ward by providing the initial training, providing materials, support and monitoring progress of the whole programme. Each of these actors has a specified role in the implementation process and the issue maintaining good working relationships and conflict resolution are crucial. At the school level the principal leads the IQMS process by providing training for staff members, chairing the staff meeting and guiding them in electing the SDT. The SDT manages and controls the IQMS programme, e.g. drawing the management plan, monitoring implementation, moderating scores and record keeping. The DSGs work with individual educators to ensure that each educator draws a professional growth plan (PGP), providing guidance, mentoring and support to monitor that the educator gets developed in the areas identified for development.

Customers of the IQMS are educators, SMT members and principals. They are direct beneficiaries in salary and grade progression. They furthermore benefit from development and support programmes in the form of in-service-training (INSET), whether initiated and run by the school itself, the ward or the district. Departmental officials benefit indirectly from the INSET programmes planned for schools and when schools perform well. School governing body members, parents and learners though not mentioned in the root definition are indirect beneficiaries or potential victims of IQMS. It can unduly put them at a disadvantage if it tampers with the core business of the school, teaching and learning. It can work to their advantage if it leads to school improvement.

The environmental constraints range from what takes place in schools to conflicts prevailing at Head Office as well. The participants, however, keep it in mind that the IQMS is implemented in a situation where different worldviews prevail, e.g. many schools are dysfunctional and under-perform; educators are unskilled, lack the capacity to implement the IQMS and in some cases unscrupulously inflate their colleagues' for classroom observation without consideration of the dismal performance by many learners; schools lack resources; there are rifts due to

conflicts in schools and department directorates; unions give different messages to their members depending on what they intend to benefit at that time. They can be allies, with a positive influence at times and turn to destroyers with extremely negative consequences when they want to.

The *Weltanschauung* is unreservedly the framework that makes the root definition meaningful. The participants considered the educators' worldview to be that of a compromise in an employer-employee conflict, i.e. the Department and Unions, with indications of being a judgmental system that seeks to revive the old inspection system. My worldview as an official of the department is aligned to accountability through evaluation (school and educators), development and rewarding good performance.

5.5 Conceptual Models of the System

In the third meeting (2005/07/27), the participants engaged in building conceptual models that could be put to use. Checkland (1999: 286) explains the basic language used for conceptual model construction as involving: assembling the list of verbs involved, the construction of conceptual models of the system defined in the root definitions. The conceptual model expresses what the system *does*. Conceptual models are thus simply highlighted, one-sided opinions of possible, relevant human activity systems. We used the models, together with CATWOE to explore the implications and consequences of each of the human activity system proposed as relevant for discussion.

As a facilitator I had to guide the participants to resist the temptation to describe what actually exists, but instead to concentrate on what the owners and actors seek to do, when models are constructed. I had to use systems terms in developing descriptions of how the relevant parts might ideally function, drawing upon my knowledge of systems and concepts. I had to keep in mind that it is crucial to consider all points of view because a careful identification of

stakeholders can make a large difference to the outcome. Stakeholders may be, *inter alia*: the client, people in the system and people outside the system who might be affected or have an influence in the system.

We therefore revisited our root definition and test carried out through the CATWOE elements and explored the actions that the system could take with respect to the IQMS implementation. Verbs such as analyse, promote, empower, change, influence, monitor, support and assess described the fundamental activities necessary in the system. After lengthy deliberations, we decided to pursue a discussion responding to questions that interrogated the key activities in the root definition, e.g.:-

What activities are involved in creating ownership and understanding?
- Creating an awareness by advocacy
- Analysing needs, e.g. for information and skills
- Training on dealing with attitudes, values and addressing the different perspectives.

What activities are involved in giving support?
- Operation of the plan
- Empowerment of officials and educators in their different roles as per needs analysis
- Coordinating activities to influence behaviour of stakeholders
- Challenge attitudes and values of officials and educators
- Communicating to promote support of the operational plan and inform on new developments

What activities need to be carried out in monitoring?
- Knowing the processes and procedures
- Monitoring the advocacy and operational plan
- Put control measures in place

- Evaluating implementation
- Compile reports on advocacy and operational plan

What activities are involved in professional development?

- Highlight areas of development identified in PGPs
- Cluster common needs
- Organize most suitable intervention, e.g. mentoring and workshops
- Reflect on practice

What activities indicate school improvement?

- Revisit School Improvement Plans regularly
- Track developments
- Assess impact

The key activities that we identified as actions that the system could take with respect to IQMS implementation are an awareness (advocacy) system; an implementation system; a monitoring system and an improvement system as shown in Figure 5.3. Figures 5.4 and 5.5 show that the model can be expanded to a higher level of resolution, e.g. activities 2 and 3, i.e. implementation and monitoring were taken as sources of new root definitions and accompanying conceptual models, which depicts multi-level thinking. The strength of a model is that it gives a starting point and guidelines.

The advocacy system involves raising awareness, lobbying relevant stakeholders and even sensitising them about attitudes, values and perspectives. The implementation system includes, *inter alia*: simplifying the process which was further broken down into setting structures, analysing needs, etc. in Figure 5.4. The model furthermore emphasizes the importance of monitoring all activities throughout, taking corrective action where necessary as well as consideration of cultural feasibility and desirability. Figure 5.6 puts together the activities in the

first level resolution in Figure 5.3 and the higher resolutions in Figures 5.4 and
5.5 to give a consolidated view.

A Conceptual Model for the IQMS

ADVOCACY
Raise awareness about model
Lobby relevant stakeholders
Analyse needs of educators &
officials
Promote ownership of integrated
approach
Sensitise stakeholders about
different attitudes, values and
perspectives

1

IMPROVEMENT
Revisit SIPs & SDPs
regularly
Track developments
Assess impact

4

IMPLEMENTATION
Simplify process
Plan development
Give support
Report on progress

2

MONITORING
Monitor advocacy &
implementation
Take corrective action
Assess effects
Compile reports

3

Monitor
1 – 4
6

Take control action
7

Define E 1 2 3
5

Figure 5.3: A Conceptual Model of the IQMS

Figure 5.4: A Higher Level Resolution of the 'Implementation System'

IMPLEMENTATION

Simplify Process

<u>Set</u> structures
<u>Analyse</u> needs of educators &
officials
<u>Appraise</u> resources available
<u>Draw</u> management plan
<u>Appraise</u> educators
Resolve conflicts
<u>Develop/ update</u> records
2.1

Plan Development
<u>Identify</u> areas of development
<u>Cluster</u> common needs
<u>Organize</u> suitable intervention
<u>Facilitate</u> intervention
<u>Reflect</u> on practice

2.2

Give Support
Draw support plan
Communicate support plan
Operate plan - empower leaders & educators
Coordinate activities
Challenge values, attitudes, etc. (reculturing)

Figure 5.5: A Higher Level Resolution of the 'Monitoring System'

MONITORING

**Monitor advocacy &
implementation**

Understand the IQMS process

Develop monitoring instruments
3.1

Assess effects, e.g.
IQMS progress
evaluated

3.4

**Compile reports on
advocacy, Implementation
& support
3.2**

Take corrective action

3.3
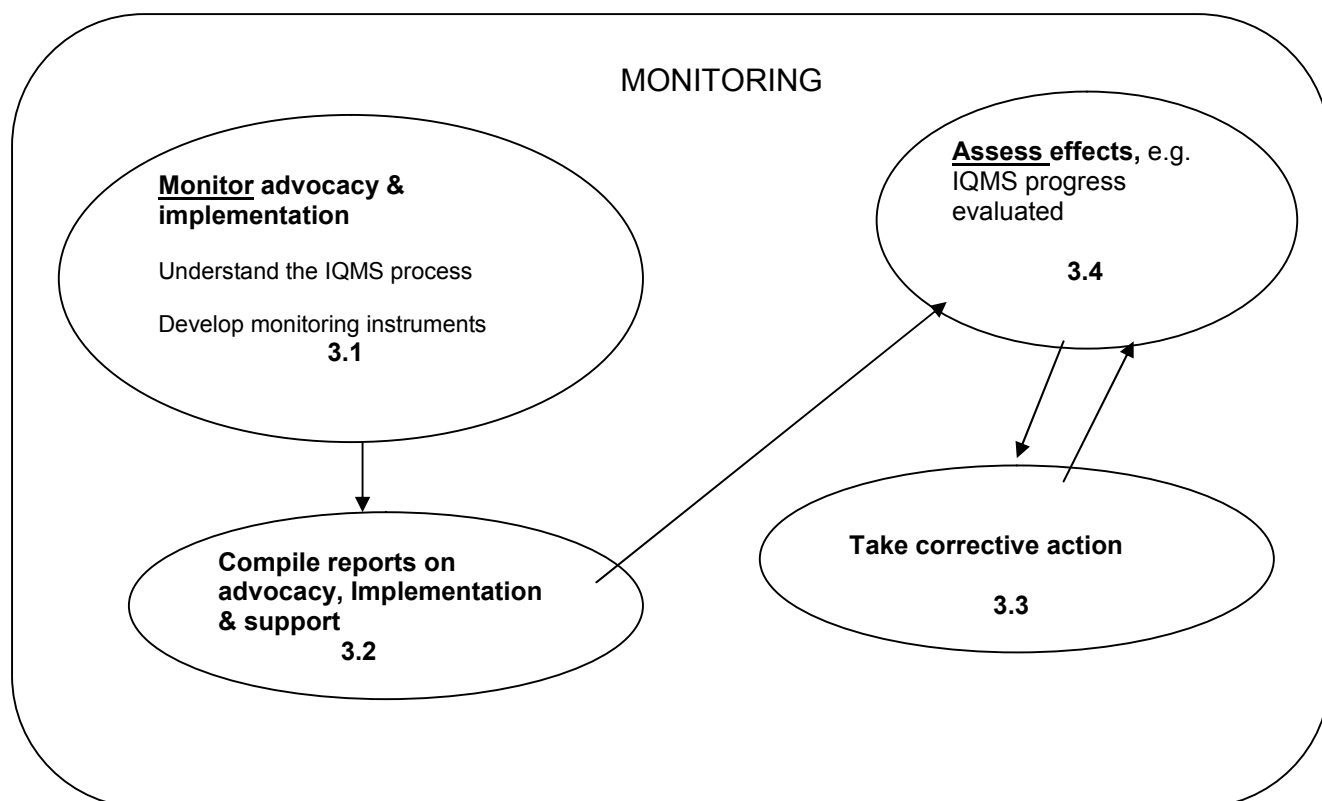
Figure 5.6: A Consolidated View of the First and Higher Level Resolutions
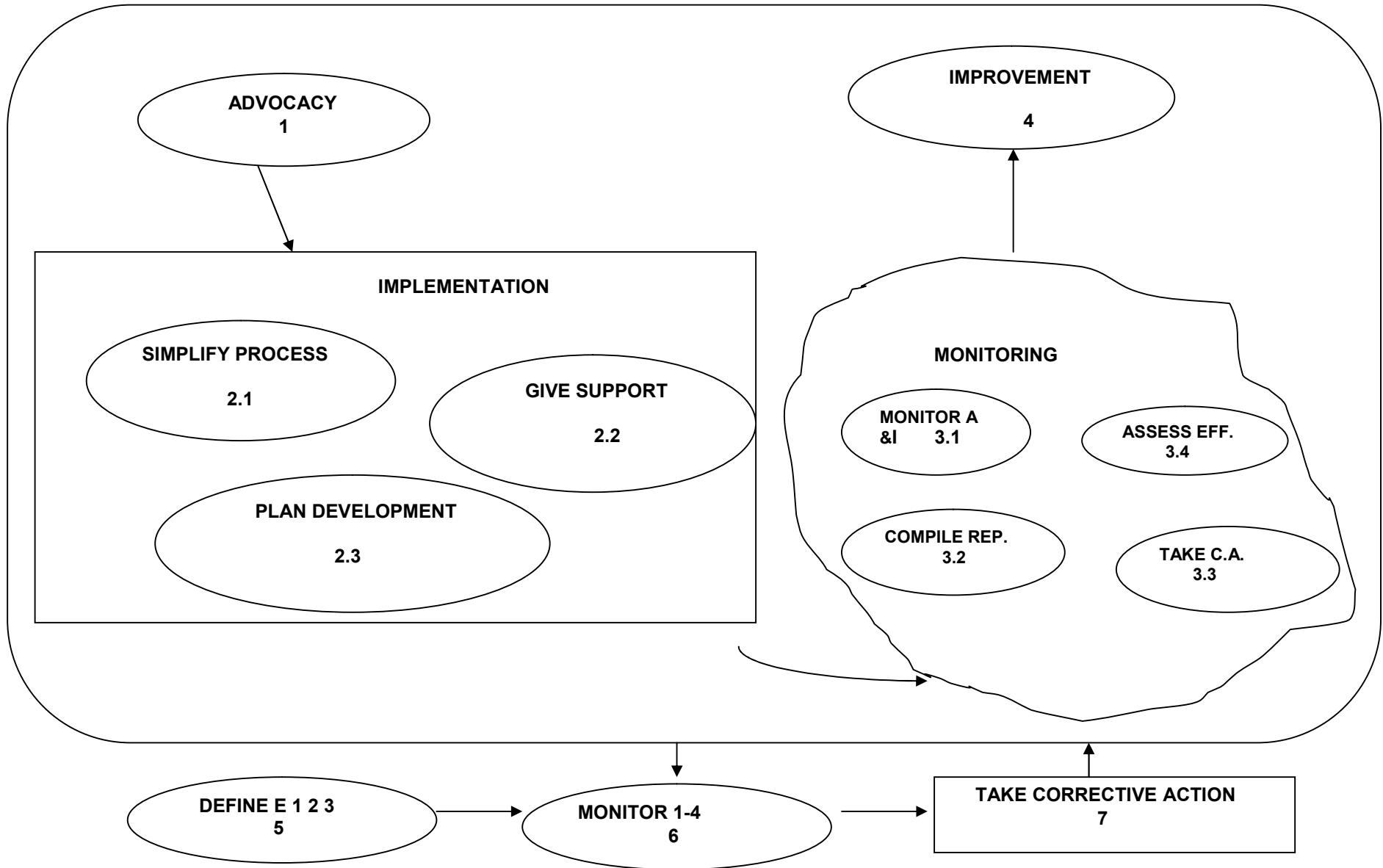
5.6 Comparing the Models with Perceived Reality (2005/08/17)

The comparison involved formal questioning of the main differences between the model and the rich picture, i.e. between the conceptual model and what is expressed in the rich picture (what is perceived to exist in the problem situation).

Models are generally used to lead a debate about the problem situation in order to decide how to improve it. We used the model mentioned above for formal questioning, i.e. as a source of questions to ask of the real world. The action research participants had to discuss, debate and dialogue in eight groups of three or four, to find (an) accommodation(s) between the different interests or perspectives in the situation. I had to caution the participants against trying to 'improve the models' – we had to focus on getting an accommodation that can be argued to constitute an improvement of the initial problem situation. We also had to consider the desirability, feasibility and the ethicality of each accommodation.

5.6.1 Issues that the SDT Chairpersons Emphasized as Accommodations Between Conflicting Interests

1. The advocacy has to promote ownership of an integrated approach. Training on the IQMS to be taken seriously and the emphasis should be on how activities carried out on a daily basis are related IQMS performance standards. The timing of the advocacy is crucial because if there is a gap in the year plan, the IQMS will always be treated as an add-on/separate, additional task that schools have to accommodate. Ideally they felt it must take place within the first fortnight of the school year. The DoE had to desist from imposing a blanket or 'one size fits all' management plan in April and expect schools to run with it. It was neither desirable nor ethical that the DoE fails to provide proper guidelines on time.

2. Staff development focused on their (educators) different roles and ensuring that responsibilities assigned to each role are known to all. Emphasizing that honesty in drawing a PGP opens an opportunity for developmental interventions and mentorship. Encouraging educators to take risks, make mistakes and move on, learn from them, rather than playing it safe and not learning from experience. The DoE cannot expect high performance without enabling development.

3. In giving support in response to individual PGPs, the DSG led by the immediate supervisor has to ensure that arrangements are made to provide the necessary guidance, assistance or development. The support has to start at the level of the school to provide mentorship on site, move on to the cluster of schools and/or eventually the ward. It should include the recording of milestones and acknowledging effort made by the educator to develop himself/herself as this might ultimately benefit learners and the whole school.

4. Monitoring within the school was crucial. All structures set up to drive the implementation of the IQMS have to purposefully and actively engage in monitoring whether it is efficiently and effectively implemented, i.e. the DSGs, SDT, SMT and the principal as the accounting officer. The relevant officials of the Department (the Ward Manager in particular) have to conspicuously give direction, give support and monitor the process rather than come in as moderators of scores at the end. A progressive Ward Manager has to be proactive in managing the implementation of the IQMS in the ward, rather than reacting to directives from Head Office all the time. One participant put it clearly when she said: "… no monitoring without prior facilitation".

5. Good leaders lead by example and should emphasise efficiency and effectiveness.

5.6.2 Issues that the Principals Emphasized as Accommodations Between Conflicting Interests (September – 14 October 2005)

The principals had been indirectly involved in the research from the beginning because they were apprised of every step or developments after each session. This enabled some of them, *transition persons*, i.e. change agents focused on making a difference, to initiate some changes with their SDT chairpersons whilst the research continued. To give an example, all schools had the IQMS as a standing item in the agenda of their scheduled SMT and Staff meetings as agreed in a ward meeting. As schools are not the same; each principal is unique and each SDT chairperson is unique, this did not work in the same way, i.e. the significance attached to such activity differed. In three primary schools, one secondary school and the special school they set up regular once a week afternoon sessions to discuss IQMS developments and ways to consciously/deliberately infuse it in their daily activities. Where they felt they had to introduce changes, they did so immediately mostly with the blessing and involvement of colleagues. They were obviously a few dissenting voices in some cases. These schools tried to let the action research fit seamlessly into their plans so they were able to learn/make sense of what was happening rather than following and doing the minimum that was expected. Transition persons are change catalysts and healers in times of discord. They refuse to be victims and carriers. They break the flow of negative traditions in a workplace, transcend their own needs and tap into the deepest impulses of human nature (Covey, 2006: ix).

The principals were given a chance to make their contribution to the debate in the sessions held with them on an individual basis as part of either the second cycle of development or the summative evaluation. Their inputs gave an indication of the direction each school was taking, the intervention as well as the real challenges that were experienced in implementing the IQMS in the year. The interviews took up to mid-October. The Ward Manager and the peers were involved in these sessions as the members of the DSGs. The

feedback received in quarterly reports indicated that fifteen principals took such discussions to their staff meetings as well. I noted that five out of the seven schools that did not engage further on the matter, were secondary schools.

What they emphasized was that the Ward Support Team has:

1. To put in place an advocacy plan with clear guidelines/checklists compiled from the inputs by stakeholders to promote ownership. This will give direction to schools and encourage educators to engage in the IQMS process from the beginning of the year.

2. To ensuring SIPs and SDPs are in place and are drawn in consultation with the stakeholders. Guidance and capacity building in developing realistic SIPs and SDPs. Ensuring that the SGB members as key stakeholders are involved and get the necessary service and capacity building as well. The assumption is that SGB members will give the necessary support to the Principal if they are *au fait* with their role in school development and improvement.

3. To ensure monitoring takes place within each school and by Departmental officials. School-based and office-based educators to develop relevant monitoring tools for use and encourage ongoing sharing of best practices.

4. To engage the DoE in dealing with contextual factors that can be addressed, e.g. movement of educators and promotion appointments mid-term. Consider what actually works in each school and why. The Ward Support Team to treat each principal differently, provide support and be sensitive to each principal's view of what he/she finds meaningful or trivial about the implementation.

These inputs proved extremely valuable to the Ward Manager, as the research practitioner. We were in an area where the practitioner and participants had to make sense of all the information and activities engaged in and chart the way forward. We got carried away and really stuck on the models, which raised some uncertainty on how to move on. We realized that we had to take stock and track what we had covered and reflected on

previously, keeping in mind that schools had their own unique challenges relevant to their contexts.

5.7 Consolidation Meeting in Preparation for 2006 (2005/11/02)

Principals and SDT chairpersons were invited to an inclusive final meeting for the year (2005) that was scheduled for reflection, to consolidate accommodations and chart the way forward to the implementation plan to be put in place in 2006.

5.7.1 Developments in the Consolidation/Planning Meeting

A number of common or shared hindrances and/or gaps were raised, viz. - The elements of leadership that came to the fore in the 2005 interventions highlighted that in some schools there is lack of ownership of the programme on the part of the principal, SMT and/or SDT. This led to subtle SDT and principal power relations. There were a few overt cases that seemed to characterize neglect on the part of the leaders (principal, SDT chairperson and/or SMT members), e.g. schools that failed to provide copies of the Collective Agreement to educators and schools with educators who simply fail to honour their teaching periods. In some schools the IQMS was treated as an ad-hoc thing that is not taken seriously. They looked at it as an additional event that they have to plan for with the only attraction or positive aspect being the expected monetary compensation.

The relationships between the analyst and some participants might have created some tension, with a possibility that some participants were just going through the paces without full commitment to score points with the SEM. There is no tangible evidence of such, however, because even the two schools that changed their SDT chairpersons during the year were reasonable cases, i.e. one due to ill health and the other due to employment in another government department.

Certain schools realised the potential of using the IQMS model as a driver of all activities in the school and thus create synergy, e.g. a school looks at all the models (programmes/initiatives) and starts with a bigger picture like Whole School Evaluation/Whole School Development; look at educator development (DA) and refrain from concentrating on working narrowly towards an incentive (PM). This might remove the subjectivity that comes in when schools are pressurized to submit and promote the idea of the IQMS as a project with which each school checks itself.

The need to develop instruments to facilitate the implementation process, e.g. capturing development interventions each educator engages in; summary per school of all educator performance growth plans, which would give a comprehensive indication of the areas of development to be addressed in the school. The need for systems and procedures for ongoing monitoring that can be verified through inputs from a variety of reliable stakeholders and/or actors was highlighted as crucial.

5.7.2 Real Challenges Faced By the Schools in Implementing the IQMS

Principals and SDT Chairperson agreed that the following challenges really dampened the efforts towards effective implementation of the IQMS and should be prioritised by the Ward Support Team in future attempts towards quality improvement:

1. Time constraints which can be attributed to *inter alia*: schools taking IQMS implementation as an event rather than a process to be embedded in everyday activities; lack of planning by the SMT and educators in schools and the lack of timeous guidance by the Department, e.g. it shows poor planning on the side of the Department when schools receive the IQMS Management Plan towards the end of April, whilst the IQMS year is based

on the calendar year. It gives a message that the IQMS process commences in April/May of the year.

2. The attitude of many educators towards the IQMS still reflects a tendency to resist development. In this case the development is further tainted by suspicions that the Department of Education is trying to revive the traditional oppressive inspection system to hold educators accountable for performance.

3. There are educators who fail to capture the real areas for development in their PGPs and sometimes decline assistance by their DSGs in giving guidance and assistance. This culminates in providing development interventions that are not addressing the real knowledge and skills deficiencies.

4. Educators did not cover the development tasks as expected in the policy and particularly the two cycles of development, i.e. DSGs focus on the 1% incentive (PM) rather the two cycles of development that educators engage in.

5. Development Support Group (DSG) members who lack the skills needed to develop the appraisee and do not look for alternative ways of support, e.g. partnerships/twinning with schools with better human and material resources.

6. In many secondary schools there are subjects taught by a single educator, i.e. when the educator needs specialist assistance with subject matter, neither the HOD nor the peer has relevant knowledge. The on-site learning amongst educators on the subject itself is thus not as effective.

7. Ongoing poor human relations are prevalent in some schools and this becomes even worse in conflicts created due to power struggles for promotion posts. In such cases the person who got promoted, e.g. to HOD or principal, will experience barriers in intervening as the immediate senior in the DSGs.

8. There are many documents completed in the IQMS implementation process and educators complain about the amount of written work involved. Record keeping is crucial in keeping track of milestones achieved and providing evidence of development.

9. Arguments about scores where an educator rates himself/herself very high (self-evaluation) whilst the peer and/or HOD think he/she is mediocre, which lead to the inflated scores submitted for performance measurement. This leads to changing peers in some cases and serious challenges in the case of HODs as most educators report to just one immediate senior.

10. Valuable teaching and learning time is lost in some schools where the meetings and feedback sessions are held during teaching time.

11. Various other contextual factors that destabilize the effective functioning of a school, e.g. the movement of educators due to changes in the Post Provisioning Norm (PPN) which leads to some schools having to identify and free additional (surplus) educators whilst schools with vacancies have to wait and receive such educators. The procedure followed is open to abuse as schools with problematic educators use it as a way to purge such educators and receiving schools refuse to absorb them. Some schools even fail to provide copies of the Collective Agreement to each educator.

5.8 Ward Initiated Changes in the Implementation of the IQMS from January 2006 Onwards

5.8.1 A Vibrant Inclusive Advocacy Campaign

Seven members of the research group and three principals were willing and able to conduct advocacy workshops to individual schools and/or clusters of schools. Two on-site based advocacy workshops were conducted for secondary schools and one in a struggling primary school. We considered the diverse challenges as raised in the previous meeting as well as the number of their educators; they have between twenty-two and thirty-three educators each. The remaining schools attended workshops in clusters over two days in different venues, i.e. the school would send a minimum of three SDT members for two-and-a-half hours (12h30 – 15h00) each day so that most SDT members have a chance to attend. This was followed up by advocacy/planning meetings chaired by the principal or SMT member and facilitated by SDT chairpersons/members in each school. Such meetings

would culminate in reviewing SDTs, setting up DSGs and drawing management plans for the implementation process, e.g. two SDT chairpersons had transferred to other schools outside the ward. The advocacy campaign had to be completed in two weeks (2006/02/01 to 2006/02/15). The first SDT Chairpersons' meeting was held on 01 March 2006. This provided sufficient time for educators to engage in the pre-evaluation exercise with their DSGs and to draw their PGPs. Sufficient time was given to the leaders to shift from the leadership dominated planning to shared control of planning with the educators. Louis and Miles (1990: 214) appear to be of the same mind when they state: "The control base expands as evolutionary planning unfolds", which could mean more educators take ownership and become involved as there is inclusive progress in the planning itself. This was a proactive approach in anticipation of the provincial management plan, which usually gets to the schools at the end of April.

5.8.2 Alternatives Explored by the Participants

The participants explored different alternatives/activities to map out how we can get to effective implementation of the IQMS. It was noted that schools were at different levels of IQMS implementation and the alternatives/activities pursued will not be 'a one size fits all', but would be effected in the most suitable for each:

(1) Schools had to identify needs based on priorities, i.e. whole school based as well as educator as individual based needs. The emphasis was on discussing such needs within the school to foster ownership and generate innovative ideas to attend to them;

(2) Designing plans for development that integrate the IQMS with the school development plan (some schools still needed to draw development plans);

(3) Developing an IQMS programme for all levels of educators, viz. - Post Level 1 educators to principals and the circuit to ensure that all office-based educators undergo the Performance Management Development System (PMDS) applicable to them. Non-educators should not be left out

but appraised in line with the provisions of their Employees Performance Management Development System (EPMDS) both at the level of the school and the circuit.

(4) Clustering of schools for performance management networks to facilitate easy/meaningful monitoring, support and evaluation.

5.8.3 Preferred Ways to Monitor Developments

(1) Each school is represented by the SDT Chairperson or other SDT member if the Chairperson is not available. A report is presented in each session with highlights, challenges and needs for the ward intervention.

(2) Reflections by the SDT Chairpersons on the activities, their experiences and lessons learnt in the period between meetings. Some questionnaires are provided for completion, to facilitate reflective practice in some meetings. Some people find it difficult to keep reflective journals and prefer sharing their observations and/or experiences in response to questions. Please refer to Appendix 1.

(3) Feedback/Information from the side of the SMT members presented by Principals, as IQMS is a standing item in the agenda of all ward meetings. Some questionnaires were issued to capture reflections in some meetings. Please refer to Appendix 2.

(4) IQMS input by the SDT Chairperson supported by the Union site steward as a standing item in all school quarterly reports. Some guidelines were agreed on to report on progress made in each school. Please refer to Appendix 3.

(5) On site visits by the Ward Support Team to one or two schools each term for an in-depth assessment conducted by looking at all relevant documents and materials provided as evidence; and interviewing some educators to learn/make sense of activities the school engages in.

(6) A monitoring tool completed by each educator to indicate the development activities/interventions he/she has been exposed to as checked against the initial PGP. Please refer to Appendix 4.

(7) An ongoing record kept by the Chairperson of the Ward Support Team on all IQMS interventions in the Ward.

5.8.4 The Practitioner's View on the Strengths and Challenges in the Research

We managed to secure a venue that is easily accessible to all members and they could get a taxi right at the school gate. The school has excellent facilities, whether warm or cold, the SDT members were comfortable and attended the sessions eagerly. There is enough seating space and sufficient space to work on posters/charts, on tables and on the floor where necessary. We never ran out of resources such as charts, Koki pens, chalk and photocopies. As the analyst and SEM I ensured that the school resources that were used were replaced by the Circuit afterwards. I spent about R60-00 to provide fruit, e.g. apples, bananas or oranges, and the participants appreciated such hospitality. We worked way past the normal school closing time during the meeting sessions without complaints and people seemed to look forward to upcoming activities.

My deepest concern was the possibility of sustaining the developments. I pondered/worried if the observed successes would be sustained over time. Was the research developing the leaders, e.g. the principals, SMT members and SDT Chairpersons, towards systems thinking? Fullan (2006: 113-122) argues that if we want to really transform a system/organization, e.g. a school, we have to work at linking systems thinking with sustainability. That goal can only be accomplished if we focus on changing not just the individuals, but systems as well. He suggests that the route and approach that can change systems is to prioritise and advance the development of practitioners that he terms "systems thinkers in action" (ibid). These are leaders who work intensely in their own schools or districts or other levels, and at the same time connect with and participate in the bigger picture, e.g. community development, national and even international issues. They help to develop other leaders with similar characteristics in turn. Fullan (2005: ix) furthermore

finds the groundbreaking definition of sustainability by Hargreaves and Fink (2006: 30): "the capacity of a system to engage in the complexities of continuous improvement consistent with deep values of human purpose", compatible with his, which states:

> Sustainability does not simply mean whether something will last. It addresses how particular initiatives will be developed without compromising the developments of others in the surrounding environment now and in the future Fullan (2005: ix).

That is why I keep on asking myself: Did the research develop any good leaders who can even go further with the successes achieved (impact)? This seems to epitomize a progressive idea that takes the concept of distributed leadership seriously. However, in the current situation that emphasizes accountability based on learner pass rates; school managers are more inclined to work on raising pass percentage scores before thinking of developing new leaders.

5.9 The Envisaged Change

On reflection it was quite evident that the common/shared vision of the participants (Principals and SDT Chairpersons) is to see an IQMS that addresses educator development in a collaborative manner that shows synergy. Performance standards are related and work in tandem. They should not be treated in isolation from each other as well as from the key areas of evaluation in WSE, e.g. professional development and the four classroom-based performance standards cannot be separated. Strategic planning and leadership by the SMT prepares the ground and enables putting systems and procedures in place that enable the creation of a positive learning environment for classroom-based activities as well as extra and co-curricular activities.

The key areas of evaluation in WSE work together as well and cannot be separated from the performance standards for educators, e.g. quality of

teaching and learning and educator development gives a broad evaluation of what is covered by the classroom-based performance standards and educator professional development; governance and relationships coupled with leadership, management and communication covers similar issues as performance standards on strategic planning, decision-making and accountability; and leadership, communication and servicing the SGB. Consequently, there are overlaps in relationships and structures, which necessitate collaborations, team effort and promotion of learning to learn together if schools work towards enhancing reform and improvement. Interconnections and interrelationships of a similar nature might result from the interaction between the IQMS and other policy reform initiatives as well, e.g. Governance and Management, Matric Intervention Programme and *Batho Pele*, i.e. service delivery transformation as depicted in Figure 5.7.

Figure 5.7: IQMS at the Centre of all School Improvement Structure
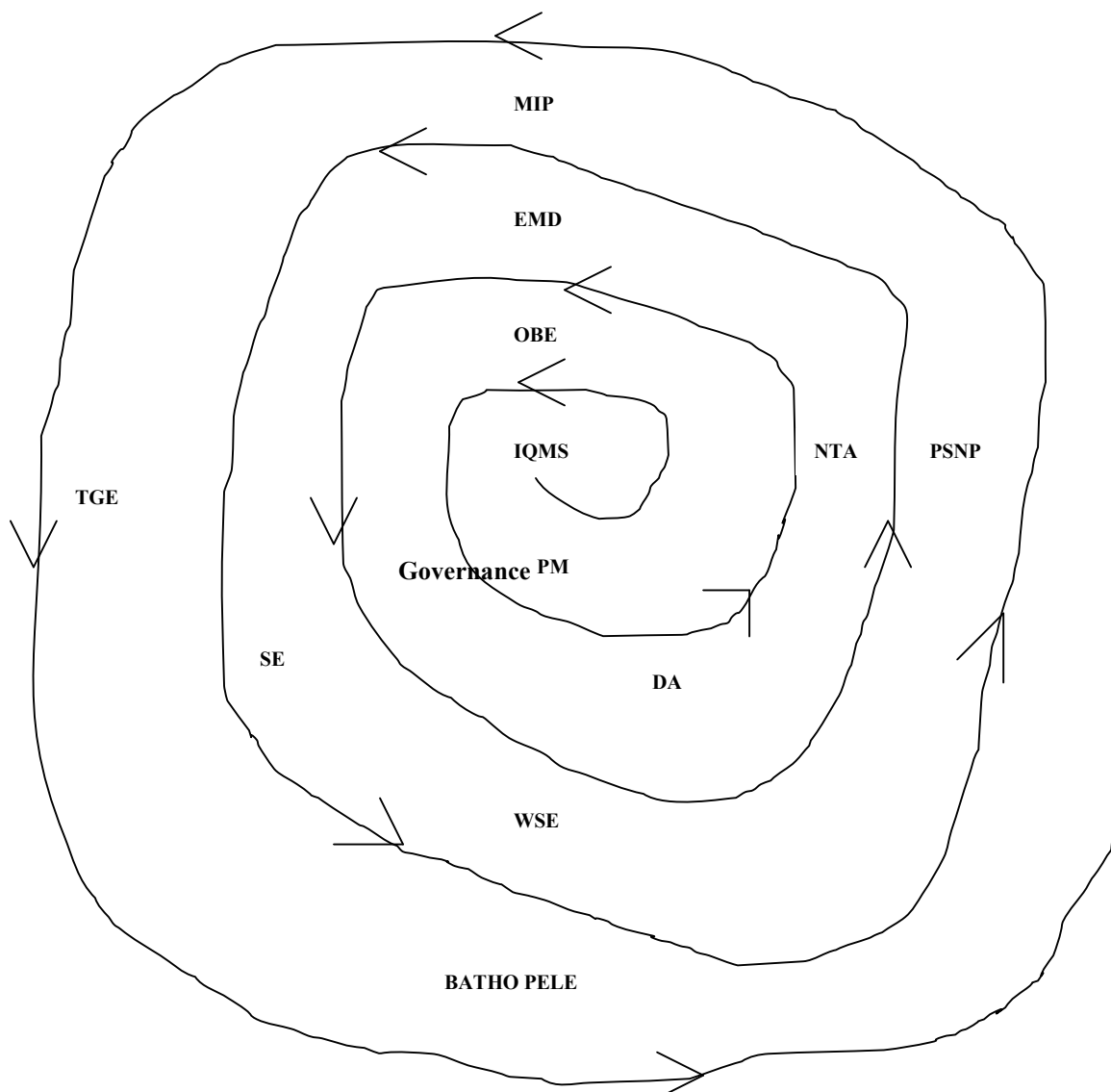
Figure 5.7 brings the notion of an IQMS used a driver/core for all different initiatives aimed at school reform and improvement. IQMS contributes to National Teaching Awards (NTA), ensures the Primary School Nutrition Programme runs effectively, the curriculum implementation is phased in smoothly as driven in class-based activities, etc. That is how we encapsulated the research as a whole and the manner to be pursued at the Sweetwaters Ward.

5.10 Summary

In this chapter I intended to describe the course travelled from the inception of the intervention, i.e. the use of the soft systems methodology in the implementation of the IQMS in the Ward, to the envisaged change that participants deem suitable for implementation. It charts the challenges as captured by the SEM and practitioner through her observations, consultation of relevant stakeholders and action research conducted by the participants involved, i.e. SDT Chairpersons. The participants engaged in developmental activities as expressed in rich pictures, root definitions and conceptual models to make sense of the problem situation and explore alternatives that can lead to an improved IQMS implementation that integrates the diverse programmes and initiatives resulting from the policies of the DoE.

A comprehensive coverage of the findings and lessons learnt from the research will be presented in Chapter 6. The discussion will concentrate on the reflections on interventions concerning the IQMS implementation in the years 2005 to 2007. I will endeavour to expose how such findings link to the concepts that were identified as crucial in this study.

CHAPTER 6
FINDINGS

6.1 Introduction

The previous chapter provided a reflection on how systems thinking was used to implement the IQMS in the Sweetwaters Ward. The reflection highlighted possible areas of improvement of the methodologies and reviewed the processes adopted in the study. The strengths, weaknesses and opportunities of the model were critically reflected on and possible alternatives or adaptations explored.

Chapter 6 focuses on the lessons learnt and conclusions drawn from the study, which concerns the use of the systems approach for purposes of school improvement, as explored during the implementation of the IQMS in the Sweetwaters Ward. It involves scrutinizing the relationships and trends that emerge from this period of school improvement, using the policy of the IQMS. I classified the findings in four categories in line with my research questions to cover:- the lessons learnt from the experiences of the SEM and educators in the implementation of the IQMS; the leverage possibilities that can be explored if the IQMS is implemented more systemically; the school improvement possibilities facilitated through the implementation of the IQMS in the Ward, and the impact of introducing the use of systems thinking and the systems approach in the implementation of the IQMS.

6.2 Lessons Learnt from the Experiences of the SEM and Educators

Educators work within varied structural and cultural contexts, i.e. school and/or community, district and education system. It is difficult to find strategies that change contexts that affect the people in a desirable direction. Though

contextual factors are noted in the IQMS and scores are adjusted accordingly, the truth is how does it help to note such each year without working on improvements? Some of the contextual factors go beyond issues that principals, district and even education system leaders can change, e.g. poverty, cultural and socio-political influences. Education tries to address such issues, e.g. poverty index is considered in allocating Norms and Standards quintiles; and the Primary School Nutrition Programme feeds learners from the lowest quintiles, but needs the assistance of other organizations and government departments.

The networks developed at local level motivated educators to share their expertise. They realized that it is important to tap in on the expertise they have on site and in neighbouring schools, rather than wait for a once-off training session that will be organized by the District some unknown time in future. On site and local (ward) expertise is able to give guidance and monitor the performance on an ongoing basis and therefore does not provide just a 'quick-fix' solution.

The changes in reporting enabled the school and ward to collect a range of qualitative and quantitative data. More people were involved in communicating how the implementation of the IQMS was progressing as part of the monthly report submitted by the school. The SDT Chairperson gave his/her input and the site steward commented briefly in support or not supporting such input. The principal was finally accountable for the whole report, so it would be difficult and/or dishonest to append his/her signature confirming something that did not take place. This removed the focus on particular individuals when mistakes were made and made it easier for schools to share what they tried, what went wrong and how they envisage improving on it.

I learnt that as a practitioner I had to alter my realities of change through exchange with would-be implementers, otherwise I might end up being as authoritarian as the defenders of the status quo. I realized that it is normal for people to find difficulty in opening up to the realities of others because of their

own deep convictions about the need to reform. Ideas of others, however, lead to alterations for the better towards the direction of change and sometimes expose the problems of implementation which must be addressed or at the very least indicate where one should start. We need the energy and intelligence of others to implement plans. Fullan 1991: 96-97 citing Wise 1977 states: "When policymakers require by law that schools achieve a goal which in the past they have not achieved, they may be engaged in wishful thinking…". The DoE should have learnt from the implementation of DAS that preceded that of the IQMS.

6.2.1 Team Learning

The SEM and educators (SDT chairpersons and principals) shared the experience of learning to learn together - team learning. This was the outcome of the approach used by the Ward in the implementation of the IQMS, which prioritised the need for ownership, participation and integration. The research created a platform for members to talk freely about areas of need in their schools without the fear of being seen as failures, which led to a willingness to share the lessons learnt in different schools. As a manager I have learnt to be particularly sensitive to the unique aspects and needs of each school and most of the time, find a way to accommodate them and/or people with expertise/skills to assist. Working together has exposed a wealth of skills/expertise that we have in the ward and the SADTU Branch.

In working together the amount of paperwork was reduced. The Ward Support Team kept on adapting the templates to capture the relevant information as suggested in different meetings. Forms soliciting irrelevant information were set aside and simplified; adapted templates that would provide the core information needed were used. We did go through different stages of development from being wary of each other, gradually becoming comfortable in sharing information, up to the stage where team spirit was boosted and members got used to valuing each other's input. This does not imply a

hundred percent commitment, but simple that there was cooperation in varying degrees from all the research participants.

Team learning involves appreciating that people are working within different constraints. Such constraints influence the way schools perform, be they economic, political and/or institutional; and schools must contend with them, e.g. unqualified/under-qualified educators teaching key subjects, overcrowded classrooms of more than sixty learners per class; displacement of educators due to violence and threats in communities, which leads to staff shortages in some institutions and surpluses in others and clashing personalities.

6.2.2 Pursuing a Developmental Approach

Significant changes were accomplished by taking a developmental approach through pursuing multiple activities aimed at school reform simultaneously. Schools became a part of an ongoing group to discuss and evaluate what was going on in their institutions on an ongoing basis. The uniqueness of schools contributed to the nature of reform taking place. Some schools run effectively whilst others are dysfunctional. Whilst by the look of things dysfunctional schools should actively seek school improvement opportunities, the opposite seemed to prevail more. Educators in the more effective schools went out of the way to seek even more knowledge and skills for self-development and to find ways to improve the school, e.g. seeking sponsors for computer laboratories and partnerships to improve physical facilities.

It was evident that the training of educators does not equip them for the realities of the classroom, whereas when a new educator is employed, he/she assumes the same responsibilities as an experienced educator with twenty years' experience. When such an educator needs help, the most effective source tends to be fellow educators, then the HOD, and in rare cases specialists such as Subject Advisors. The compartment-like nature of the school perpetuates that educators struggle with their problems and anxieties privately as most time is spent physically apart from colleagues, i.e. each

educator working on his/her own in a classroom. There seems to be a norm of not sharing, observing and discussing each other's work – educators do not develop a common technical culture, i.e. educator-to-educator links for mutual assistance or collaborative school improvement.

6.3 Leverage Possibilities That Can Be Explored

Everything that happens in a school is influenced and/or influences the implementation of the IQMS, e.g. the Post Provisioning Norm, movement of educators on compulsory temporary transfer (CTT), lack of delivery of the Learning and Teaching Support Material (LTSM), introduction of the new curriculum, school governance, promotions and sports activities. In IQMS implementation we are therefore dealing with the behaviour of the school as a whole, urging people to develop an understanding of the negative and the positive feedback structure of the system of which they are part (Stacey 2003: 104). As we implement, the need to see interrelationships rather than cause → effect chains in any situation is highlighted. When there is a problem, e.g. IQMS implementation, the main concern should not be to fix the problem temporarily but to engage ourselves in learning to understand how it came about, exploring different options that would be of a long-term nature, and not just looking to attach blame to individuals, as we usually do.

Generally there are set policies and procedures in place, which aim at addressing problems clinically, however, in practice there is no change that is comfortable to all and affects all the people in the same way. This leads to unhappiness, dissatisfaction, demotivated people and low staff morale. Hence there are so many 'difficulties' and 'messes' to be attended to on a daily basis in each school. That is where the use of systems tools and techniques become so useful in exploring the complex situation and looking for possible alternatives, e.g. rich pictures, brain writing and conceptual models.

6.3.1 The IQMS and Realistic Appraisal

Educators who are realistic in their self-appraisals, i.e. able to indicate their strong points as well as gaps/areas of development, open opportunities for development and training to overcome such weaknesses. Some development needs can easily be addressed within the school where there are sound interpersonal relationships, careful planning which promotes the tapping of various skills, and expertise of colleagues. A ward and/or district support team that is ready to intervene should be easily accessible to provide ongoing training, e.g. in-service, and support where schools lack the necessary expertise. That would limit the time lapses whilst educators wait for assistance.

Whilst summative evaluation scores indicate that we have excellent educators, reality indicates that educators cannot be that good if learner performance seems so mediocre, e.g. the results of the systemic evaluation conducted with Grade 3 learners show that our learners have an extremely low ability in numeracy and literacy. The performance of Grade 12 learners leaves much to be desired both in terms of quantity and quality. Schools are not interested to partake in initiatives that promote or award excellence, e.g. the National Teaching Awards and Premiers' Service Excellence Awards. The study did not provide for the learners' voices, though the core business of the school is teaching and learning. It would have been great to hear the learners' voice on what improvements, if any, the IQMS brings in their learning.

Systems thinking involves looking for relationships between the elements and indications of interdependency, which enables the practitioner to pick up gaps like the one mentioned above. Elements with the biggest influence, e.g. SDT Chairpersons, SGB Forum and the Ward Support Team in the Sweetwaters Ward, can serve as points of leverage. We identified the IQMS implementation itself as a possible powerful lever for reform as it can influence the multitude of education change initiatives that are pursued in schools, e.g. Matric Intervention Programme (MIP), Education Management Development

(EMD), National Teaching Awards (NTA), Primary School Nutrition Programme (PSNP), OBE, Batho Pele and Quality Assurance.

6.3.2 The Relationship Between the IQMS and Other Initiatives

Just like 'systems thinking' is the glue that puts together the other four disciplines, viz. - mental models, team learning, personal mastery and shared vision. The influence of the IQMS can be read in any activity or initiative planned or taking place in the school, e.g. in an agenda for a meeting staffing matters deal with performance standards (PS) 1, 4 and 9; school funds and/or norms and standards cover PS 10; teaching, learning and assessment cover PS 1, 2, 3 and 4; and workshops facilitated or attended encompass PS 5. In all initiatives as well, we determined that the role that the IQMS plays can be identified, e.g. PS 12 takes in the initiative EMD; PS 11 encompasses Governance; PS 6 partly addresses the PSNP and PS 1-4 looks into issues of the curriculum implementation. If educators realize that all activities and initiatives taking place in their schools can be connected/related to the IQMS it becomes a learning reinforcement activity. It gets staff to think about backing-up or providing evidence and not accepting things at face value.

6.4 The School Improvement Possibilities that are Facilitated

While there is a difference between voluntary and imposed change, all real change involves loss, anxiety and struggle (Marris, 1975: 121) and individuals, (e.g. educators) are members of social systems (e.g. schools) that have shared senses of meaning. If educators have negative experiences with previous implementation attempts, e.g. the DAS, they will be more cynical or apathetic about the next change presented, e.g. the IQMS, regardless of its merits. The study facilitated in the ward thus developed a capacity for change in which educators got involved. The psychological process of learning and understanding the educational reform happened in several flashes.

6.5 The Impact of Introducing the Use of a Systems Approach

An assessment of the real impact of the IQMS would require longer-term research and a wider scope than the present project. The findings that are pertinent to the Sweetwaters Ward cannot be generalized to other wards or districts. The participants' reflections suggest that the IQMS is a good programme for staff development and school improvement if followed in a meaningful manner. The implementation process is as important as the expected outcome. Some noteworthy influences that resulted from the use of a systems approach in the implementation of the IQMS include transformation in the process and progress; introducing an integrated approach and an emphasis on the development of educators.

6.5.1 Transformation Processes and Progress Made

The participants and principals noted some changes in the IQMS process and progress as provided in the discussion that follows. Educators have been exposed to policies that impact on education, e.g. IQMS, Revised National Curriculum Statement (RNCS), Governance and Batho Pele; and each educator has a copy of the IQMS document. The concept of the school as a learning organization is promoted and there are glimpses of educators appreciating the importance of learning to learn together (collaboration), e.g. structures are in place for sharing information between educators and the community, its management and dedicated educators. Educators continuously improve their expertise in teaching and learning by facilitating and/or attending the local cluster workshops on specific areas of need. A new culture has developed as evident in the plans in place and communicated to educators, learner representatives and members of the governing body. Educators are learning new ways to interact with learners and parents, which emphasise the need to take their perceptions and worldviews into consideration.

6.5.2 Introducing an Integrated Approach

From divergent worldviews between the DoE and the Unions, the route followed within the ward created a movement towards cooperation. Challenges were identified, depicted in rich pictures, and hard and soft issues were taken into consideration. The alignment of three systems seems good on paper but was proving to be a nightmare to implement due to, *inter alia*: poor training and the cascade model. In using the systems approach in the Sweetwaters Ward we brought more light into the challenging situation. SEMs spend most of the time working directly with principals, however, in this study more time was spent working with SDT Chairpersons, who are mostly Level 1 educators and the feedback received on the IQMS was initially very different from that received from principals and very honest. It is possible it was because the educators are not held accountable for the failure of a school to implement the IQMS, they are supposed to follow the leader who is tasked with managing the process from the advocacy up to the moderation and submission of scores. Getting feedback from the two sources, questioning it and asking for evidence, encouraged the two leaders to discuss the IQMS and process followed in the school. The integration furthermore promoted ownership of the problem situation in the active participation of SDT Chairpersons and proactive support from principals. The tools used, e.g. rich pictures, conceptual models, reflective journals and going through the SSM stages stretched the thinking of participants enabling enhanced understanding of the key role players in the CATWOE.

6.5.3 Emphasis on Development of Educators

The conceptual model formulated indicates the need for professional development of all educators. The norms and standards for educators indicate that educators should be reflective practitioners. However, besides the best intentions, there is no structure and no systems in place to provide the support needed by an educator to develop such skills. A supportive environment for educator development prevailing in the ward enables the sharing of

knowledge and expertise locally, identifies pockets of excellence and encourages educators to develop their Professional Development Portfolios. In developing training opportunities within the school, the school promotes best practices as well. In the ward, the clustering of schools and ward support promotes the best practices in the circumstances, until educators are willing and able to take control of their own development. This is obviously not embraced in same way in all the schools.

6.6 Indications of Making a Difference Despite the Uncertainty

Cook (2009: 278) talks of doubts about whether people are doing 'proper research', or whether they are doing 'research properly'. I asked these questions and even thought of the possibility that 'research' did not apply at all in what we were doing at certain stages, e.g. I had serious doubts on how to move on after building a conceptual model. I told myself we were learning and we had to keep on adapting, by adding new loops in our thinking and allowing ourselves to shift as our research directed us. The participants expected that I had answers, i.e. on the expected outcome of the research, and I was going to give instructions on what to do. However, my role as facilitator was to open the floor to discussion in a stimulating way, to get ideas into the open, to help members to listen to each other, debate, reflect and learn. One good practice that we gained is getting used to writing down notes on anything that seemed relevant to the research questions. I drew a column in my diary each day to capture my reflections, so it served as my journal and it has proved to be a great practice and experience in my different endeavours.

There was a marked change in the information supplied by the principals and SDT chairpersons in the first stages of the research when compared with that given in 2007. There was a move from schools going through the steps as set in the policy document or the management plan as set by the provincial department in implementing the IQMS, to school-driven plans trying to address the needs identified by the individual educators and those meant to

improve the whole school. An example of a response to a question asking a participant to describe the role she played in the implementation of the IQMS in 2005 was: 'I organize meetings and check that the IQMS Plan is followed. I collect and submit relevant documents to the Ward Support Team'. In 2007 a general response was: 'I facilitate regular staff development, network with schools in the cluster and monitor the ongoing activities in the implementation processes'.

It was difficult to keep close to the participants when they got back to their schools and that may have limited the achievements gained from school-based interventions. Despite the shortcomings I feel that I actively participated in all sessions and activities, I engaged in research with the participants, and I was therefore part of the knowledge constructed. SDT Chairpersons reported that it was a great challenge to create an environment that enhanced the relationships among educators when they returned to their schools, but working with the SSM got the participants to appreciate a number of different worldviews, to enquire into the situation from them, and to ultimately agree on actions to improve the situation and implement them. It highlighted the ability of participants to understand other perspectives, to work cooperatively with others, to acquire and maintain attitudes of openness and enquiry (Sanchez and Meija, 2008: 109, citing Kember 2002, Cook 2004).

6.7 The Constraints of the Study

The control of participation was largely confined to the decisions of principals because even the involvement of the SDT Chairpersons was at their discretion. It is possible that some participants may have been briefed on the limits of what they can talk about in the research team. One participant actually confided in me that she had been warned not to divulge what they were actually not doing as expected in the implementation of the IQMS and yet they were able to achieve very high scores.

The participants had no experience of seeing their spoken language, their experiences and their judgments printed and discussed. Some became obsessed with the suitability and correctness of what they said and it took time to eventually overcome this hurdle. Participants spent too much time on activities, they got carried away and difficult to control so that we could move on. It was difficult to decide whether to let discussions go on or to foreclose the discussion in the interest of completing the research versus the need to encourage ownership of the facts by the participants. This lead to shortcomings in capturing their core thoughts in some instances and I felt as if I just had the periphery of their real thoughts. Some people seemed comfortable putting reflections on paper, particularly when responding to questions, but not happy with interviews probing the deeper meaning of their words, e.g. one participant wrote "now I regard IQMS as a powerful tool to develop educators and the community at large…", the meaning of his reflection was, however, unclear when I interviewed him. This creates doubts on how genuine the words written down are, whether intended to please the SEM or not.

It was a challenge to cover aspects of the research intensively because we could spend about three hours after a half-day spent by participants teaching in their classrooms. There was furthermore a time lapse of at least two weeks before proceeding to the next stage, thus creating gaps in understanding. It was difficult to keep to time frames agreed on and to move on to different phases due to the need to recap. The study also revealed how time consuming the process of trying to involve individuals can be, e.g. it took more than six weeks to get the principals' views on the conceptual model. This suggested that the study may have been too wide as well and might have been more worthwhile targeting a few specific schools, rather than the whole ward at the same time. Though all schools participated, the levels differed drastically. Some leaders that I can call transition people emerged, however, there are few cases where leadership can be summed up as: 'the more things changed, the more they remained the same'.

6.8 Summary

The findings of the study suggest that educator appraisal and whole school evaluation have been and will continue to be controversial issues at school level. The IQMS on its own cannot solve the problems of schools; it can, however, enhance development and improvement in a school depending on the readiness of stakeholders, particularly educators, to work at developing new attitudes, principles, ethics and norms. It became clear as well that the DoE did not learn from the failure to implement the DAS because the same mistakes were repeated with the IQMS, e.g. lack of proper training, hasty implementation without sufficient buy-in from the educators and officials expected to implement the system, time constraints, insufficient resources/training materials and lack of monitoring.

The findings express that there is a need for educators to engage in professional development. An excellent way to get used to understanding how you learn is through reflective practice; and the soft systems methodology served as an ideal approach in learning from the complex situation in the Sweetwaters Ward. We were thus able to enter into a learning cycle that would lead to an improvement in the implementation of the IQMS. It might not necessarily be the best solution to the problem, but we are learning about the problem situation and not necessarily looking for quick fixes that would distract and limit us to predefined worldviews.

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

7.1 Summary of the Main Aspects of the Study

The study was prompted by the need to review the implementation of the IQMS in the Sweetwaters Ward, for the purpose of facilitating school improvement. The seed to use systems thinking emerged out of the participation of the SEM in the TESM programme and subsequent studies towards a Masters degree. The study took me on a journey focused on enhancing excellence in both academic and real-life work experience. Some of the salient points of the study highlighted the practicalities of using a systems thinking approach in the implementation of the IQMS as well as the critical need for effective professional improvement of educators.

The culture that dominates in the DoE is that of an instructive bureaucracy, driven by respect for protocol, which sometimes culminates in the prevalence of a top-down approach to management. Managers at lower levels of the hierarchy, i.e. from Director or Manager level and below, are informed of the decisions taken by Senior Management at Head Office and National Office. They rarely question these decisions, to such an extent that in some cases educators refer to them as 'implementers' or 'functionaries' of the system. This instructive culture is highly refuted by the Unions as they see their role as that of progressive elements of the system, who are prepared to challenge whatever decision or policy if it perpetuates the marginalisation of their membership, i.e. educators. They advocate a constructive approach where they are consulted, participate in policy development and implementation as equal partners in the education system. The mutual accountability, however, generally lacks on their side of the partnership. The complexity with the policies like the IQMS is that at the National level the employer and employee top leaders sign high-profile agreements, assuming the would-be implementers will favourably embrace them. They do not actually consider the

systemic issues that influence the implementation of policies and leave it to chance, hence the DoE ends with so many policy initiatives and systems that are designed to fail. In some cases the agreements are signed as quick-fix solutions to put out fires that threaten the system at the time, e.g. as Unions were fighting the implementation of the DAS and WSE in its initial form, there might have been a need for the urgent alignment of the policies.

The findings revealed the importance of considering all prevalent aspects of policy from its inception, *inter alia*: how advocacy, implementation, support, monitoring and evaluation will take place. It is crucial for the DoE to look critically at the policy framework or theory against that which is prevailing in practice, i.e. getting the viewpoints that are deeply entrenched in the minds of the educators expected to implement the policy. This is where soft systems approaches seem the most appropriate to use as they provide fertile ground to enhance educator participation, promote inquiry and expose participants to reflective practice. The use of systems thinking and the soft systems methodology in the study promoted the involvement of educators, provided an opportunity for action research and exposed new skills of ongoing reflection and learning from practice. Though it might take longer than prescribing what people have to do, the gains experienced by individual educators may result in more meaningful and long-lasting education reform.

7.2 The Possible Limitations of the Study

The results of the study cannot be generalized to other schools and wards, as the significance of the impact cannot be guaranteed even in the ward itself. We cannot confirm that achievements gained in each school will bring about a sustainable improvement in the performance of the school. What will happen if the SEM as facilitator leaves the ward? The influence that was created by the participation of the SEM and the specific group, SDT Chairpersons can be questioned, e.g. would the outcomes have been the same or different if another group took part? Other educators were affected by the study, as it introduced some changes from their normal expectations or way of doing

things – we, however, did not seek their specific views on the effect of the developments in their performance. This somehow confirmed that school leaders could develop a capacity for change and pursue it.

As the initiator and facilitator of the study, I already had an experience of new paradigms that systems thinking can bring out, and it is possible that I specifically looked for such as the research unfolded. Some critics highlight the failure of the SSM to deal with situations clouded by political issues or emancipatory interests. In using the SSM as an approach I declared upfront that it deals with soft complex-pluralist issues. It would thus be inappropriate to judge the approach on the assumption that it does not make. There were phases of confusion whether we were using systems thinking for school improvement or using the implementation of the IQMS for school improvement. In the course of the study I tried to keep focus on the ultimate aim, school improvement. I viewed soft systems thinking as the key to unlock the implementation of the IQMS as an initiative that could take us closer to achieving the set goal. That seemed to be an ideal frame of reference for me in facilitating and manipulating the course of the research.

7.3 What is Implicit in the Study?

The significant changes realized during the study are duly described in the findings and provide details of how SDT Chairpersons and principals appreciated the transformation processes and the integrated approach in exploring possibilities for school improvement using the IQMS as a lever. What was prevalent in the study is the zest shown by the participants, the astuteness to look beyond the top-down step-by-step expectations that reduced them to a limited view of the IQMS to a more flexible system, which allowed for an emerging community of leaders with fresh ideas and new ways of looking at the problem context. This insightful learning-oriented approach ties up with Schon's description of new competencies in undefined areas of practice, (Schon, 1987).

The practitioner's personal learning experience developed from the start of the enquiry and went on up to the intervention determined. As an active participant throughout the study I realized that my learning progressed from single loop to double learning and kept on developing. This was probably sustained by the awareness of what was happening all the time, which enabled me to 'see' the situation using my worldview and perspective as a 'lens'; as well appreciating the ability to 'see' the situation using the worldviews of the other participants as alternative 'lenses'. We were thus able to continuously learn from our interactions and interrelations in the problem context.

7.4 Recommendations and Issues for Further Research

Despite the possible limitations of the study, some paradigms did change, e.g. the SDT Chairpersons attested to having been genuinely influenced by the study. The use of soft systems tools and techniques equipped them with skills that they can use in managing complex pluralist problem situations they encounter in their daily lives. Many of them see themselves as educator leaders and catalysts for initiating changes aimed at improving the educator corps and the school as a whole. The DoE has a well thought-out policy framework upon which school reform is based. The challenge is to capacitate the would-be implementers, i.e. district officials, principals, SMT members and educators with proper skills to deal with messy situations. This makes it necessary to encourage dialogue, which is enhanced through training educators in systems tools, action research and reflecting on practice.

There are numerous areas that invite further research using a soft systems thinking approach to facilitate school improvement, that were raised by this study, *inter alia*: evaluating the significance of individual development of educators; school based driven educator development programmes; mentorship programmes that make a difference; possibilities of delinking educator appraisal from remuneration and even research reviewing the tools

used in educator assessment. Conducting action research in schools can provide suitable opportunities for educators to explore complex theoretical frameworks and gain an in-depth understanding of the systemic relationships within schools. I see a fertile ground for research driven by district officials, SEMs in particular, which creates an enabling environment for educators to engage in professional dialogue on IQMS related issues. In such an environment district officials can be resourceful, purpose-driven and accountable practitioners that provide leadership, mentorship, support, monitoring and evaluation on whole school improvement. I look forward to research in a school where all educators keep reflective journals, work collaboratively and get exposed to using systems thinking approaches to review school reform.

7.5 Conclusion

The study encouraged a great deal of learning and educator collaboration amongst the SDT Chairpersons and the principals. The communication barrier had been a major hurdle that contributed to lack of progress in the implementation of the IQMS and thus stifled school reform. Taking short steps to overcome the hurdle was a major transformation and achievement for the educators. It gave the notion that if transition people take action and engage in dialogue, enquiry and reflective practice; they get into a process of developing   new values, attitudes, beliefs and norms that are critical in efforts that bring about school reform.

It was crucial to understand that reform is not about putting into place the latest policy, e.g. the IQMS - it means changing the cultures of the classrooms, schools, districts, the education system and society in general. This brings the notion of identifying the most powerful levers for reform at our disposal and the IQMS seems to be such a lever at present in our school improvement efforts, hence the focus on its implementation as investigated in the Sweetwaters Ward. An approach that emphasizes democratic values, transparency and values in line with current government thinking and practice

was pursued through the use of a systems approach to interrogate the problem situation in an action research explorative manner. As the implementation of the IQMS had to take place in a messy environment involving intertwined human activity, the preference of the SSM was justified for its suitability to explore problem contexts of such a pluralist complex nature. It is envisaged that these initial steps by the participants as agents of change will seed an extended practice that will prevail in future school improvement initiatives.

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ANNEXURES

Appendix 1

QUESTIONNAIRE TO SDT CHAIRPERSONS

In reflecting on some of the important features of the IQMS implementation in your school, would you please provide some detailed responses [from your perspective as the SDT Chairperson] on the following:-

1. How important do you regard the IQMS and educator appraisal in your school?

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2. Share your experiences/thoughts on whether the IQMS has been influential or not in helping educators in your school. If it has been influential, explain how or in what way. If it has not been influential, explain why not.

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3. Share your experiences/thoughts on whether the IQMS has been influential or not in enhancing more effectiveness or improving your school. If it has been influential, explain how or in what way. If it has not been influential, explain why not.

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4. Comment on the importance (or lack thereof) of having a peer as part of your development support group (DSG).

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5. Comment on the importance (or lack thereof) of having an immediate senior as part of your development support group (DSG).

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6. Comment on the importance (or lack thereof) of having the IQMS as a system that has a linkage to salary progression.

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7. Explain whether the IQMS as practiced in your school includes staff development or not. If yes, how or in what way? If not, why not?

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8. Explain whether the IQMS as practiced in your school includes whole school evaluation (WSE) or not. If yes, how and in what way? If not, why not?

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9. Comment on the challenges (if any) that your school experiences in organizing and administering the IQMS.

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10. How can the IQMS be improved and changed in light of your own experience?

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Thank you.

Appendix 2

THE INTEGRATED QUALITY MANAGEMENT SYSTEM [IQMS]
QUESTIONNAIRE TO PRINCIPALS:

In reflecting on some of the important features of the IQMS implementation in your school, would you please provide some detailed responses [from your perspective as the Principal] on the following:-

1. What are the key challenges experienced in the implementation of the IQMS in your school?

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2. How do you use the IQMS for your own benefit as a school?

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3. Do we need the IQMS in a good school? Why/Why not?

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4. Describe what you consider to be a viable [efficient/effective/ethical] IQMS?

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5. What is your role, as the Principal, in the implementation of IQMS? Describe your performance in executing the role.

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6. Is it viable to use the same system for development as well as evaluation? Yes/No? Why?

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7. Describe the positive developments and/ or whole school improvement that you can relate/link to the implementation of the IQMS in your school. If there is none, please explain why it is so.

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Thank you.

Appendix 3

QUARTERLY REPORT ON THE IQMS: 2006

A. Introduction

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B. Highlights and Successes

1. Developments, e.g. (January – March 2006):

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2.

Activities/ Tasks	Responsible person	Beneficiaries

3. Functional Structures

Name	Representation and tasks	Remarks

C. Problem Areas

1. Challenges

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2. Suggestions/Action taken to overcome challenges

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Prepared by:

…………………………   Date: ………/………/……………

SDT Chairperson

Supported by:

…………………………   Date: ………/……….../…………..

School Site Representative

Approved by:

…………………………….   Date: ……../……….../…………...

Principal

SCHOOL STAMP

Appendix 4

<u>SWEETWATERS WARD</u>

_____ <u>SCHOOL</u>

RECORD OF IQMS DEVELOPMENT ACTIVITIES
NAME OF EDUCATOR:_____ PERSAL NO.:_____
RANK:_____

DATE	DESCRIPTION OF ACTIVITY	RELATED PERFORMANCE STANDARD(S)	*LEVEL OF ACTIVITY (√)						SIGNATURE OF DSG MEMBER
			S	W	D	P	N /I	U	

SIGNATURE: EDUCATOR_____   SIGNATURE: SDT CHAIR_____

DATE: _____   DATE: _____

SIGNATURE: PRINCIPAL_____   DATE: _____

Level of Activity based at:

*S-School   *W- Ward   *D-District   *P-Provincial   *N/I – National/ International   *U- Union

Appendix 5

ETHICAL CLEARANCE APPROVAL LETTER

UNIVERSITY OF
KWAZULU-NATAL

RESEARCH OFFICE (GOVAN MBEKI CENTRE)
WESTVILLE CAMPUS
TELEPHONE NO.: 031 – 2603587
EMAIL : ximbap@ukzn.ac.za

18 DECEMBER 2007

MRS. C MNTAMBO (971166373)
LEADERSHIP CENTRE

Dear Mrs. Mntambo

ETHICAL CLEARANCE APPROVAL NUMBER: HSS/0770/07M

I wish to confirm that ethical clearance has been granted for the following project:

"The use of systems thinking for school improvement: Reflecting on the Implementation of the Integrated Quality Management Systems (IQMS) in the Sweetwaters Ward"

PLEASE NOTE: Research data should be securely stored in the school/department for a period of 5 years

Yours faithfully

MS. PHUMELELE XIMBA

cc. Post-Graduate Office (Cheralyn Terblanche)
cc. Supervisor (Dr. K Pillay)