AN ANALYSIS OF THE RELATIONSHIP BETWEEN CLUSTER-BASED SCHOOL MANAGEMENT AND IMPROVING TEACHING IN NAMIBIAN SCHOOLS

BY

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Submitted in fulfilment of the requirements for the degree
PHILOSOPHIAE DOCTOR
EDUCATION POLICY STUDIES

In the Department of Education Management and Policy Studies
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University of Pretoria

SUPERVISOR: DR K E WEBER
PRETORIA
2008

ACKNOWLEDGEMENT

I would like to express my sincere appreciation to my husband, Akiser Pomuti and our children Alfred-Lazarus Tunelago, and Sofia-Anna Dhiginina for their patience and support throughout my studies.

Special thanks go to my supervisor, Dr Everard Weber for academic guidance throughout my studies.

I would like to thank the Department of Statistics at the University of Pretoria for assistance they provided to me with the statistical data analysis.

A word of gratitude goes to Dr Wendy Crebbin for the language editing of my dissertation.

SUMMARY

In 1991, one year after the Namibian independence, the Ministry of Education and Culture was organised in six departments and six regional directorates. The regional directorates were established as early as in 1991. The establishment of the regional directorates was the first step towards decentralisation of education management, which took a form of de-concentration. During the late 1990s, the regional directorates were subdivided into thirteen regional education directorates to be in compliance with the central government policy of decentralising functions from the head offices of various ministries to the regional administrations in the thirteen regions.

During 2000, the Namibian Ministry of Education introduced cluster-based school management as a decentralisation reform, granting authority and responsibility for managing school supervision and in-service training for school managers and teachers to clusters, to be implemented in all the thirteen education regions. Cluster–based school management reform has been adopted as a strategy for improving school supervision and teaching in Namibia. However, there is little empirical evidence on the effects of school clustering on the quality of teaching in Namibia.

This study examined the implementation of cluster-based school management reform in the Namibian primary schools. The specific focus of the study was to assess: (1) the implementation of cluster-based school management reform in the Namibian primary schools; and (2) the relationship between cluster-based school management reform and improving teaching at classroom level.

The data for this study were collected through: (1) survey research in thirty-seven primary schools in five regions: Caprivi; Erongo; Hardap; Karas and Kunene, and (2), case studies, based on interviews; focused group discussions; informal conversations; observations; and document analyses in the three primary school clusters in two of the five education regions.

The study's main findings are that the implementation of cluster-based school management reform has been constrained by resource scarcity and reluctance to share resources; potential threat to the authority of school inspectors and school principals; and incongruence between the ideologies existed prior to the introduction of the reform and the

democratic ideology. The other main finding from this study is that there is insufficient evidence to show that the teaching methods of teachers who have received support from the school management reform are notably different from those who have not.

This study demonstrates a number of obvious missing links between cluster-based school management and improving teaching, because the reform lacks: (1) clarity, guidelines and resources to support and monitor teaching in schools and at classroom level; (2) clarity on the roles and responsibilities of key implementers in improving teachers' teaching practices; (3) capability to transform school traditions and culture into a culture which transforms teaching in schools; and (4) clarity on how teacher involvement can be utilised to improve teaching in schools.

This study concludes that there is no evidence from this study that cluster-based school management reform relates to improving teaching.

Key words: Decentralisation; Educational Management; Site-based management; School Clustering; Education Policy Reform; School Reform; Cluster Contexts; Educational Change; Cluster Dynamics; School Cultures

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LIST OF ACRONYMS AND ABBREVIATIONS

AG: Administrator-General, South Africa's colonial governor in Namibia

BEP: Basic Education Project

BETD: Basic Education Teacher Diploma

BETD INSET: Basic Education Teacher Diploma In-Service Training

CCP: Cluster-centre principal

GDP: Gross domestic product

GTZ: Deutsche Gesellschaft für Technische Zussamenarbeit

IIEP: International Institute for Educational Planning

MEC: Ministry of Education and Culture

MBESC: Ministry of Basic Education, Sport and Culture

NSSCH: Namibia Senior Secondary Certificate Higher

NSSCO: Namibia Senior Secondary Certificate Ordinary

TRC: Teachers' Resource Centre

SBM: School-based management

SDM: School-decision making

SIP: School Improvement Program

SPSS: Statistical Package for Social Sciences

SRS: Simple random sampling

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LIST OF CONCEPTS

Authoritarianism: an ideology which emphasises respect and blind submission to authority and opposes individual and collective freedom of thought, initiative and action. Stakeholders' participation in decision-making process is not promoted.

Bureaucracy: an ideology which views institutions and organisations as governed by set of rules, regulations and procedures. Bureaucracy stresses hierarchy and specialised division of labour.

Circuit management committee: the top management level of the cluster-based school management structure, consisting of circuit inspector and cluster-centre principals, which is responsible for supervising and monitoring cluster activities at the circuit office level.

Coloured: in the context of Namibia and South Africa, the term coloured has been used as a language of racial differentiation between white and black racial groups.

Cluster: refers to a grouping of schools for political, administrative and pedagogical purposes

Cluster management committee: the middle management level of the cluster-based school management structure, consisting of the cluster-centre principal and satellite school principals, which is responsible for managing, supervising and monitoring the cluster activities

Cluster centre principal: a principal of a cluster school who is given the responsibility to support, guide and supervise the satellite school principals and the cluster activities

Cluster subject facilitator: a teacher in a particular cluster who is given the responsibility to support and guide teachers in that cluster

De-concentration: refers to a territorial decentralisation which involves central government decentralising its own staff to sub-national levels to carry out their regular functions closer to the people, while the central government retains overall control

Delegation: refers to a functional decentralisation which involves the central government allocating some of its functions to the sub-national levels to carry out, but not to take full responsibility for, and without abrogating its own public accountability for those functions

Devolution: refers to functional decentralisation which involves the central state, either by legislation or through constitutional requirements, giving full responsibility and public accountability for central functions to the sub-national level.

Managerialism: A technocratic ideology which views analytical tools, developed to help managers make decisions, as ends in themselves. Its primary value is economic efficiency, or the pursuit of maximum output with minimum inputs as well as efficiency in public administration

Police Zone: refers to the southern and central areas of Namibia to which white settlement was directed in pre-independent Namibia. Unlike the territories north of this so-called Red line, which were governed through a system of indirect rule, in the Police Zone the administration employed policies of direct control.

Satellite school principal: refers to a principal of a satellite school in a cluster

CHAPTER 1: INTRODUCTION

1.1 Purpose of the study

How does school clustering relate to improving teaching in Namibian schools? More especially, what are the effects of cluster-based school management reform on the teaching practices of teachers? This is the central question that triggered the study on the implementation of cluster-based school management reform initiative in Namibia.

The study assesses the relationship between cluster-based school management reform initiative and improvement in the quality of classroom teaching. The study is in part a response to ongoing debates in the literature about the effectiveness of decentralisation reforms in improving the quality of education.

The purpose of the study is to evaluate the implementation of cluster-based school management reform in Namibian schools through the perceptions of the range of stakeholders and to determine the effects of the reform on classroom teaching through the perceptions of teachers. In particular, the objectives of the study are to: (1) determine through literature the meaning of the concept education decentralisation and the relationship between education decentralisation, school-based management and teaching; (2) examine the perceptions and views of the key role players on the implementation of cluster-based school management reform; (3) assess the extent to which cluster-based school management improves the quality of teaching in Namibian schools, and (4) recommend strategies (drawn from the study findings) for improving the implementation of cluster-based school reform in a developing context.   The study is guided by the following questions:

1. What are the perceptions of school principals and teachers regarding the implementation of the goals of cluster-based school management reform?

2. How do cluster contextual realities shape the implementation of cluster-based school management in Namibian primary schools?

3. How do the beliefs and perceptions of the key role players influence the implementation of the reform?

4. What are teachers' perceptions of cluster-based school management reform?

5. To what extent does cluster-based school management improve the teaching practices of teachers?

1.2 Rationale for the study

There is little research on the relationship between school clustering and teaching in a developing context. Recent studies (Pellini, 2005; Chikoko, 2007) which investigated the implementation of school clustering in a developing context have done little to investigate the effects of cluster-based school management on teaching. The recent Namibian studies (Topnaar, 2004; Uriab, 2006; Aipinge, 2007) on school clustering focused more on investigating the implementation of school clustering from school management or administrative perspective with little attention given to its effects on the quality of teaching. The only recent study which assessed the impact of school clustering on teaching (as part of its study objectives) was the study conducted by Mendelsohn and Ward (2007). However, that study excluded the perspectives of teachers on the impact of school clustering on teaching; it assessed the impact of cluster-based subject groups on teaching through the perceptions of cluster-centre principals and district education officers and was not able to capture the content and organisation of the cluster-based subject group (an organisational structure, which is assumed to influence teaching). The review of school clustering establishes that little research is available which investigates how beliefs and values held by key role players influence their actions and perceptions of school clustering.

This study aims to contribute to the existing knowledge on school clustering in a number of ways. First, the value of this study lies in the fact that it has given teachers a voice to judge the effectiveness of cluster-based teacher meetings in improving classroom teaching. Second, it provides insight on the content and organisation of cluster-based subject group meetings, pointing out the potentials and limitations of these meetings as teacher development strategies. Third, the study provides insight on how ideology has influenced the way in which school clusters operate in the Namibian context.

1.3 Methodology

The study collected the data through: (1) *survey research* carried out in the 37 primary schools out of the 60 sampled primary schools in the five regions (Caprivi, Erongo, Hardap, Karas and Kunene); and (2) *case studies* were based on semi-structured interviews with two inspectors, ten school principals, eighteen teachers, observations, informal conversations, focus group discussions and document analyses in three primary school clusters in two of the five education regions. The survey research collected information on perceptions of school principals and lower primary teachers on the implementation of cluster-based school management reform in Namibian primary schools and whether from their experiences the school management reform has brought improvement in the teaching practices. The case study methods were selected to enable the researcher to gain in-depth understanding of important issues involved in the implementation of cluster-based school management reform and the subtle aspects of its effects on the quality of teaching.

The analysis of data for this study was based on quantitative and qualitative approaches. The quantitative data analysis involved coding of the numerical and non-numerical raw data from the survey research. SPSS software was used to run frequency procedures for

checking data entry errors and making summary statistics and statistical analysis. Qualitative analysis of data was informed by the Miles and Huberman (1994) framework for qualitative data analysis. The qualitative analysis involved coding a set of field notes and transcribed data collected through case study methods. Three levels of coding were used to analyse data. The first-level coding focused on identifying first-order categories, the second-level coding involved connecting first-order categories with each other to produce higher-order categories (core categories) and the third level coding involved integrating and condensing core categories into a central theme in the data (Punch, 2005). The three levels of coding enabled the researcher to: (1) conceptualise data; (2) connect concepts with each other in order to produce a set of propositions and (3) develop central conceptual themes of the study.

1.4 The context for the study

Namibia gained its independence in 1990 after many years of political struggle against South Africa's illegal occupation and apartheid policies. Namibia is bordered by the Atlantic Ocean to the west, Angola and Zambia to the north and north east respectively, and Botswana and South Africa to the east and south respectively. It is very sparsely populated; the country spreads over an area of 824, 469 kilometres marked by big contrasts of landscape with the Namib Desert along the entire west coast and the Kalahari Desert along the central eastern border with Botswana, making it the driest country south of the equator characterised by frequent droughts.

The Namibian economy has both a modern market sector, which produces most of the country's wealth, and a traditional subsistence sector. Namibia's gross domestic product (GDP) per capita is relatively high among developing countries. In 2006, real GDP growth

measured an estimated 4.6 percent. About 80 percent of the country's 2 million people are literate, and 90 percent of children of school age are enrolled in primary schools.

1.4.1 Brief historical overview of education management in Namibia

The education system in Namibia was administered and managed by different authorities before independence. Before the German occupation, missionaries (Finnish and Rhenish missionaries) were the providers of education to the blacks and coloureds in Namibia (Cohen, 1994). After the German occupation in 1884, missionaries continued to control the coloureds[1] and blacks, while the education system for whites was state-controlled (Ibid). However, 'the colonial government was involved in the education for blacks and coloureds largely by awarding grants to mission societies whose schools satisfactorily taught the German language' (Ibid: 69).

After the South African government occupied Namibia (then called South West Africa) in 1915 there was a change in the education administration for blacks, coloureds and whites in Namibia. When South Africa was given an official mandate to 'take care' of South West Africa in 1920, attempts were made to centralise education control in South West Africa (Cohen, 1994). The centralised management of education for whites, blacks and coloureds came into being with the issuing of Education Proclamation no.55 of 1921 which provided for the creation of a Department of Education with a Director of Education who was given the responsibility to 'supervise all education in South West Africa falling within the Police Zone' (Ibid: 83). However, the issuing of Education Proclamation no. 55 of 1921 did not significantly influence the management of the education system for blacks and coloureds. Schools for blacks and coloureds continued to be in the hands of the missionaries. Another education proclamation, Proclamation No. 16 of 1926, repealed Proclamation No.55 of 1921. The proclamation attempted to introduce separate management of the

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[1] In the context of South Africa and Namibia, the term 'coloured' has been used as an official language of racial differentiation between white and black racial groups

education system for blacks, coloureds and whites. However, as in the case of Proclamation No.55 of 1921, the missionaries continued to have direct control over local management and supervision of black and coloured schools (Ibid: 85-86).

Two changes were introduced in the education management for whites, blacks and coloureds in the 1950s. During the early 1950s, 'the education administration for whites, blacks and coloureds in the central and southern regions of Namibia was brought under a single controlling body, the Department of Education of the South West Africa Administration' (Cohen, 1994:91).

In 1958, the South African government appointed a commission known as Van Zyl Commission to 'look into the black and coloured education in South West Africa with a view to establish separate systems of education for the two groups' (Ibid:95). Van Zyl Commission recommended separate education systems for whites, blacks and coloureds.

Further changes in the administration of education for blacks, coloureds and whites were affected with the establishment of Education Ordinance No. 27 of 1962 and the recommendations of the Odendaal Commission of 1962 -1963. The Education Ordinance No. 27 of 1962 was established to deal with the management of blacks, coloureds and whites, while the Odendaal Commission extended the development of 'homelands' policy in South West Africa (Ibid: 104-106). As per recommendations of the Odendaal Commission, the management of the education of coloureds and blacks was transferred to corresponding ethnic departments in South Africa via regional offices in Windhoek. In other words, the administration for coloured education was transferred to the Division of Education within the South African Department of Coloured Affairs, while the administration for blacks was placed under the Department of Bantu Education of South

Africa as per Education Act No. 39 of 1968. The administration for white education in Namibia remained under the management of the South West Africa Administration. However, in the late 1960s the management of education for whites was also transferred to the South African government under the auspices of the South African Department of Education in Pretoria (Ibid: 112-113).

During the 1970s separate education systems for blacks, coloureds and whites continued, with departments in South Africa administering each system independently via regional branches in Namibia. Though the creation of 'homelands' assumed transfer of responsibilities for education management to the so-called education departments of the various 'homeland administrations', these departments of education were still dependent on directives from the Department of Education and Training in Pretoria (Ibid: 127).

In 1979, the Directorate of National Education was established as an attempt to unify three major ethnic groups within one structure and shift control from South Africa to Namibia. During the early 1980s the Directorate of Education was converted to the Department of National Education. In addition to the Department of National Education, decentralised ethnic directorates were established under three pieces of legislation, namely: the Representative Authorities Proclamation (Proclamation, AG 8 of 1980); the Government Service Act, No 2 of 1980, and the National Education Act. No. 30 of 1980 (Cohen, 1994).

The Proclamation AG 8 of 1980 established ten ethnic authorities. They were authority for the Rehoboth Basters, Bushmen, Caprivians, Coloureds, Damaras, Hereros, Kavangos, Namas, Ovambos, and Tswanas, plus Whites, with each ethnic administration given the responsibility for establishing its own Directorate of Education and Culture to 'administer its

educational matters from pre-primary to teacher training for lower primary including Standard II' (Ibid: 198).

The Government Service Act No. 2 of 1980 'aimed to create an "independent" government service in Namibia which led to the abolition of ten directorates including the Directorate of National Education' (Ibid: 199). Education management was decentralised into 16 departments including the Department of National Education (D of NE). The D of NE was given the responsibility to 'administer all primary and secondary education which did not fall under a representative authority' (Ibid).

It is clear from the brief historical overview of education management in Namibia that education was administered along centralised lines during the South African occupation. Centralisation of the management of education has been inherited by different generations and therefore its influence is still significant in Namibia.

In 1991, one year after the Namibian independence, the Department of National Education and the separate ethnic education authorities were absorbed into a single ministry of education, with its head office in Windhoek, and six regional offices (Ibid: 386). In other words, at independence, the ministry of education known, as the Ministry of Education and Culture, was organised in six departments and six regional offices. However, the organisational structure of the Ministry of Education and Culture was rationalised between 1991 and 1993. As a result of the rationalisation of the organisational structure of the Ministry, the structure consisted of two Departments, ten head office directorates and seven regional directorates, which included within their spheres of operation one, two or three of the thirteen new Regional Authorities.

Thus, the process of the rationalisation of the organisational structure of the ministry also led to the process of decentralisation of the education management through de-concentrated structures.

1.4.2 The legal framework for education decentralisation in Namibia

The Namibian Constitution establishes Namibia to be a democratic and unitary state. Namibia, like other democratic countries, has adopted decentralisation policy as a means to enhance and guarantee democratic participation by the majority of the people at grass roots level as well as to achieve sustainable development (Ministry of Regional and Local Housing, 1997). Chapter 12, Article 102 of the Constitution of the Republic of Namibia, provides the basis for decentralisation by providing for establishment of regional and local governments. Article 102 (1) specifically provides for structures of regional and local governments. It states that, 'for purposes of regional and local government, Namibia shall be divided into regional and local units which shall consist of such region and local authorities as may be determined and defined by an Act of Parliament' (Republic of Namibia, 1990: 54). Various legislations were enacted for establishing the legal framework on decentralisation: Regional Council Act (Act 22 of 1992); Local Authority Act (Act 23 of 1992); Trust Fund of Regional Development and Equity Provision (Act 22 of 2000) and Decentralisation Enabling Act (Act 33 of 2000).

Two pieces of legislation instituted the introduction and implementation of decentralisation in Namibia: Regional Council Act (Act 22 of 1992) and Local Authority Act (Act 23 of 1992). The two acts form the legislative basis for regional and local government system in Namibia (Ministry of Regional and Local Government and Housing[2], 1997);

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[2] The Ministry of Regional, Local Government and Housing (MRLGH) was given the responsibility to spearhead the development and implementation of the decentralisation policy in Namibia.

Both Acts provided for the determination and establishment of councils; qualifications and elections of councillors; management committees of councils; chief executive officers and other officers/employers of the councils; powers, duties, functions, rights and obligations of councils and financial matters in respect of both regional and local authorities councils (Ministry of Regional, Local Government and Housing 1998: 7).

The preferred decentralisation model in Namibia is that of devolution of power to lower tiers within the context of the overall authority of a unitary state (Ministry of Regional and Local Government and Housing, 1997). However, Ministry of Regional and Local Government and Housing stipulated that the decentralisation process was to take place in three phases: immediate, medium term and long term. The fundamental principles of decentralisation are embodied in the Decentralisation policy, which was developed in 1997. The following are some of the fundamental principles of the decentralisation policy:

(1) That devolution of responsibility will go hand in hand with availability of resources;

(2) The pace and content of devolution shall be determined by political and technical feasibility, system and individual capacity, as well as the national macro-economic and fiscal environment, public sector and economic reform policies and activities';

(3) 'For effective implementation of decentralisation there will be institutional and organisational change at national, regional and local levels',

(4) 'Decentralisation will be cost effective, because the assumption behind participative decentralisation is that when people manage their own resources, there will be less wastage and more responsibility, while cost recovery will be more feasible';

(5) 'For the policy to be effectively implemented, a level of individual, organisational, institutional and system wide capacity building has to be developed across the board'.

(6) 'Functions to be decentralised are to be divided into immediate, medium term or long term'.

Based on the principles above, the Decentralisation policy (1997) identified functions to be decentralised in different phases to Regional Councils and Local Authorities. The policy also put down implementation guidelines, resource strategies and the choice of the form of decentralisation the country was going to take.

Another decentralisation policy document was developed in 1998, which clarified how decentralisation was going to take place. The policy outlined that decentralisation would take place through the following process: in the first step, line ministries would delegate functions to either Regional Councils or Local Authorities, together with the necessary human and financial resources. The policy stated clearly that 'under delegation, the Centre shall continue to provide the funds for the delegated functions, both recurrent and development funds' (Ministry of Regional, Local Government and Housing, 1998: 19). Regional Councils and Local Authorities would be responsible for operational management and delivery of the decentralized services, acting as agents of central government.

In the second step, the functions would be devolved to the Regional Councils and Local Authorities. Devolution of functions to Regional Councils and Local Authorities would give them full responsibility and public accountability of certain functions. The policy further states that 'under devolution line ministries' activities shall change significantly and be limited to the issuance of policy, guidelines, the determination and establishment of national standards of service delivery, inspection and support supervision, capacity building, monitoring and evaluation' (Ibid: 12).

To facilitate the implementation of the decentralisation policy, the following legislations were enacted in 2000: the Decentralisation Enabling Act (Act 33 of 2000), and the Trust

Fund of Regional Development and Equity Provision (Act 22 of 2000). The Decentralisation Enabling Act regulates the decentralisation of functions vested in line ministries to Regional Councils and Local Authorities and stipulates terms and conditions under which decentralised functions could be withdrawn. In other words, the Decentralisation Enabling Act states the terms and conditions for: delegation and withdrawal of delegation of functions; devolution and withdrawal of devolution of functions; and the use of the funds paid to regional councils or local authority councils. The Trust Fund for Regional Development and Equity Act provides for the establishment of a special fund aimed at ensuring the development of the regions.

In parallel with local and regional councils, several ministries including the Ministry of Education had adopted a de-concentrated form of management and established regional directorates across the country to manage education system at the local levels. The following section discusses the decentralisation of education management in post-independent Namibia.

1.4.3   Decentralisation of education management in post-independent Namibia

As mentioned previously, in 1991, one year after independence, the Ministry of Education and Culture was organised in six Departments and six regional directorates. The regional directorates were established as early as 1991. The establishment of the regional directorates was the first step towards decentralisation of the education management, which took a form of de-concentration. While the regional directorates were given managerial autonomy to some extent, they were operated within the structure and functions of the central Ministry (Ministry of Education and Culture, 1993). The establishment of School Boards, under the Education Act of 2001, (Act no. 16, Section 30) was another step towards decentralisation of education management. The role of the

School Boards is to promote parent and community participation in the management of schools.

In 2002, the seven regional directorates were subdivided into 13 regional education directorates to be in compliance with the central government policy of decentralising functions from the head offices of various ministries to the regional administrations in the thirteen regions as well as to ensure representation in all thirteen regions.[3] Until recently, the Ministry of Education has not yet moved from de-concentration phase to delegation phase.

While the central Ministry is responsible for the running of the education system, the regional directorates shoulder the bulk of the implementation of educational programmes and work closely with schools and communities in their respective regions. Figure 1 below, shows the levels of management in the Ministry of Education after the introduction of the decentralisation reforms:
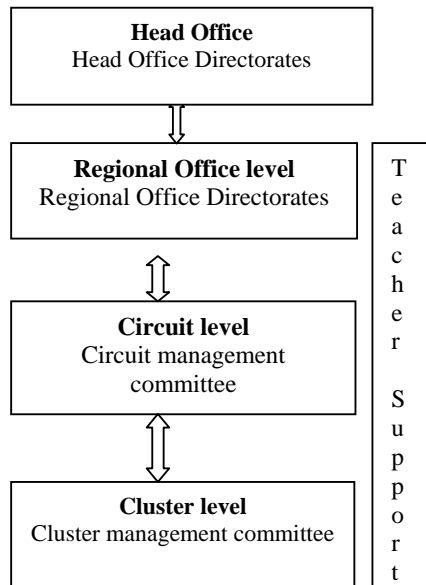
Figure 1: Levels of management in the Ministry of Education

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[3] The increase of regional directorates from seven to thirteen was meant to transform the management of education from de-concentration structures to delegation form of decentralisation as per intentions of the central government policy of decentralisation.

At the top level, the national Ministry of Education at head office delegates certain functions to the regional education directorates. The regional education directorates are at the middle management level of the Ministry, while circuit offices, clusters and schools are at the low level of education management. At each level, certain functions are decentralised. The national Ministry of Education takes the responsibilities for managing curriculum development; financial management; resource allocation; policy formulation; procurement services, pre-service teacher training; examinations; quality determination and setting standards, while management responsibilities regarding personnel management, evaluation of school system and teacher recruitment are shared between the national Ministry of Education and the regional offices. The responsibilities for school supervision, school administration and in-service training (including teacher professional and leadership development) are shared between circuit offices and clusters, while schools (school boards) are given some responsibilities for advertising and interviewing teachers and making recommendations for appointment and promotion of teachers. Though the authority and responsibilities over some functions of the management of the education system was distributed to regional education directorates, the Head Office retains the power and authority over the budget. Decentralisation of school administration, supervision and in-service training activities at the cluster level is the one with which this present study is concerned.

1. 4.4 Origin and development of school clusters in Namibia

As mentioned previously, efforts to decentralise education management at the regional level had been made. Before the implementation of cluster-based school management reform, the regional and circuit offices were responsible for the management and supervision of schools. Circuit inspectors had been required to travel long distances distributing materials and collecting statistics in schools. The supervision and support to schools and teachers had been difficult because of long distances to schools, budgetary

and transport constraints (De Grauwe, 2001; Dittmar et al., 2002). Consequently, most principals and teachers, especially in small and isolated schools, could not get the support they needed, and therefore have continued to be poorly supported and managed (Ibid). The school clustering system was introduced as a decentralised management and support structure between circuit (district) offices and schools. Every region comprises a regional education office, circuit education offices and school clusters, with a cluster centre and a certain number of individual schools related to the cluster centre.

Cluster-based school management reform was first initiated as a pilot project in the Rundu region, one of the thirteen regional education regions of Namibia in 1996. During the mid-1990s, the Rundu education region was considered as the region with the weakest education delivery services. The project was part of the activities of the Basic Education Project (BEP), funded by the Deutsche Gesellschaft für Technische Zussamenarbeit (GTZ), a German non-governmental organisation. The BEP's support to the Ministry of Education included educational reform and institutional development; decentralised education management; access to mother-tongue education and curriculum revision (Orth and Pfaffe, 2007). School clustering has been regarded as a means for promoting the Ministry's goals of equity, access and democracy.

School clustering was expanded to other regional education regions upon the recommendations of the Presidential Commission on Education, Culture and Training in 1999 and since then cluster-based school management has become a government strategy for school management in Namibia. However, the cluster system has not been institutionalised by law and there is no policy for school clustering in Namibia in 2008.

During 2000, the Namibian Ministry of Education introduced cluster-based school management as a decentralisation reform, granting authority and responsibility for managing school supervision and in-service training for school managers and teachers to clusters, to be implemented in all the thirteen education regions.

Before the development of school clusters, school mapping exercises and baseline studies were carried out in each region to provide initial recommendations on the grouping of schools into clusters, selecting cluster centres, and grouping clusters into circuits (Dittmar, 2001). In order to coordinate the implementation of the school cluster system, the project had a national project coordinator based at the Ministry of Education's head office and a fulltime advisor stationed in each region.

School clustering requires the grouping of schools into geographical clusters, each consisting of between five and seven schools. One school in each cluster is selected to serve as a cluster centre. A cluster centre is selected on the basis that it has the most resources, is accessible to its satellite schools and also has access to commercial services. Cluster centres act as focal points for contact and co-ordination between schools in that regional entity, the cluster centre. Ideally, cluster centres also serve as in-service training centres and provide examples of exemplary education practice and management (Dittmar et al., 2002).

The objectives of cluster-based school management are to: improve school management; improve supervision and teacher support; promote democratic participation, improve access and equity in education and improve teaching and learning.

It is assumed that cluster-based school management promotes local participation in school decision-making process by 'involving people close to schools in decision-making' (Dittmar et al., 2002: 21). It is also assumed that cluster-based school management creates opportunity for schools to be managed, supervised and guided as networks rather than individual entities through shared and collaborative leadership; and to improve the efficiency use of resources, because resources would be shared within clusters and therefore ensure equitable allocation of resources. It is argued that school clustering can reduce waste and save time and transport costs when schools share resources and when distribution of materials and collection of statistics is done through cluster centres (Ibid).

School clustering has been regarded as an organisational means for improving teaching through establishment of cluster-based subject groups, which provide teachers with the opportunity to share ideas, lesson plans, good teaching practices, examination questions and teaching resources.

Cluster-based school management is a decentralisation reform characterised by: (1) a delegation of authority and power from regional education offices and circuit offices to cluster levels, and (2) participatory leadership. Decentralised structures have been created to ensure communication and collaboration between circuit offices, and among schools and teachers. These are circuit and cluster management committees and cluster-based subject groups. A circuit management committee consists of a circuit inspector and cluster-centre principals within the circuit, while a cluster management committee consists of a cluster centre principal, school principals from each satellite school in the cluster and co-opted members, such as senior teachers and school board members. It is assumed that cluster management committees, under the leadership of cluster centre principals, support and guide satellite schools.

Circuit inspectors are, at management level, immediately in charge of clusters; they are required to play an important role in supporting cluster-based school management reform (Dittmar et al., 2002: 4). Circuit inspectors are supposed to manage cluster centres in collaboration with cluster centre principals and cluster management committees. From the point of view of the advocates of cluster-based school management reform, a cluster centre principal is critical in the management of cluster-centres and satellite schools. The cluster centre principal takes a large part of responsibility for co-ordinating activities, management and supervision of the school cluster. He serves as the chairperson of the cluster management committee, and is required to have strong management and leadership skills.

1.4.5 The Namibian general education system

Formal general education is regulated by the Education Act. 2001 (Act no. 16 of 2001) which is established to provide for the provision of accessible, equitable, qualitative and democratic national education service, and to provide for the establishment of: the National Advisory Council on Education; the National Examination Assessment and Certification Board; School Boards; Education Development Fund; schools and hostels; the Teaching Service and the Teaching Service Committee (Education Act no. 16 of 2001).

Administration and management

Since independence in 1990, the general education system falls under a common and unified management. Education has been managed along centralised lines. At the top of the hierarchy is the Ministry's head office, which oversees 13 regional education offices. Each of these regional offices has five to ten circuits. Each circuit or district office is managed by a circuit inspector who supervises about 25-50 schools grouped into clusters.

Cluster-based school management reform is assumed to bring authority and decision-making closer to schools. Circuit inspectors do not longer supervise schools directly. Schools are managed by a cluster management committee composed of a cluster-centre principal and satellite school principals in the cluster. Other structures to promote participation of all stakeholders in the management of education are student representative councils at secondary schools, school boards, and regional educational forums (Angula, 1999).

Organisation of the general education system

The general education system is organised into eight years of primary education (pre-primary to grade 7, three years of junior secondary education (grade 8-10) and two years of senior secondary education (grade 11-12). Education is compulsory from the age of six up to the end of junior secondary phase or up to the age of 16, whichever is sooner.

Learner enrolment

Learner enrolment has been increasing since 2001. There were 528,958 learners in 2001, while in 2007 the number of learners had increased to 570, 623. The average annual growth rate between 2001 and 2007 has been 1.3%, but between 2006 and 2007, the national enrolment has increased by 2.3% (Ministry of Education, 2007).

The school curriculum

The school curriculum for general education seeks to promote core skills and key learning areas, which are essential for a knowledge-based society (Ministry of Education, 2008). The core skills include personal skills, social skills, cognitive skills, communication skills, numeracy skills, and information and communication technology skills. The key learning

areas are Languages, Mathematics, Natural Sciences, Social Sciences, Technology, Commerce, Arts and Physical Education.

Language in education

At independence, Namibia adopted English as the medium of instruction. The language policy in education promotes teaching in the home language from grade 1 to 3, with grade 4 being a transition year after which teaching should be in English.

Pedagogy

Since independence, different teaching methods and approaches have been implemented. Teaching and learning has been informed by participatory learning approaches that place the learner at the centre of learning. The goal of introducing these teaching and learning approaches was to enhance understanding, problem solving and democratic learning (Angula, 1999).

Teacher Education

At independence, the Ministry of Education and Culture introduced a common teacher preparation program known as the Basic Education Teacher Education Diploma (BETD). The BETD program is offered at the four colleges of education. The program aims at preparing teachers for basic education, while the Faculty of Education at the University of Namibia has been given the responsibility for preparing teachers at the senior secondary level (Angula, 1999). An in-service basic education teacher education program (BETD INSET) for upgrading teachers' qualifications has been implemented since 1995. Various teacher continuous professional development projects and activities have been implemented to update teachers' teaching skills and subject matter knowledge.

Teacher qualifications

There are 20,333 teachers in Namibia. The number of teachers who have formal teaching qualifications has been increasing since the introduction of the BETD INSET. For example, in 2001, the number of teachers who did not have formal teacher training was 1, 982, while in 2007 only about 894 of the teachers did not have formal teacher training. 15,460 out of 20, 333 have grade 12 plus 3 or more years of tertiary education (Ministry of Education, 2007).

Though there is substantial progress in increasing the proportion of qualified teachers since independence, improvements in teacher qualifications have not yet translated into effective teaching (Marope, 2005). A large proportion of qualified teachers still lack essential competencies such as mastery of their teaching subjects, good English proficiency, reading skills, elicitation skills, curriculum interpretation and setting student tests (Marope, 2005; Leu and van Graan, 2006).

Examinations

There is no certification for completing primary education. However, a national Grade 7 examination was introduced in 2000, to monitor learner acquisition of the basic competencies at the end of the primary phase. The national grade 7 examination will be replaced by national summative and diagnostic tests in Grades 5 and 7 in 2009. Learners write the junior secondary examinations at the end of Grade 10, and at end of Grade 12 learners take the Namibia Senior Secondary Certificate examination. All subjects are available at the Ordinary level of the examination (NSCCO), and most subjects are also available at the Higher level (NSCCH).

Resource allocation

Inequalities inherited at independence still persist and are evident in the distribution of access, learning outcomes and resource inputs. Although resource allocation to schools in different parts of the country is on enrolment basis, schools which were historically privileged have still better facilities than schools which were previously disadvantaged (Angula, 1999). The Namibian general education is also characterised by a shortage of book and instructional materials. There is a dearth of books and instructional materials especially in primary schools. Some schools do not provide a physical environment that is conducive to teaching or learning (Marope, 2005). A large proportion of schools in Namibia do not have toilets, water, telephones or electricity.

1.5 Overview of the thesis

The thesis is organised into nine chapters. Chapter 1 discusses the background context of the study, its purposes, the rationale for the study and brief outlines of the main topics addressed in the thesis.

Chapter 2 presents a comprehensive literature review on education decentralisation reforms, the implementation of these approaches and the effects of the decentralisation reforms on improving teaching.

Chapter 3 discusses the research design, the study sample, the methodologies and procedures used to collect and analyse the data in order to examine how Namibian primary schools implement cluster-based school management reform, and whether the school management reform relates to improvement in the teaching practices of teachers.

Chapter 4 discusses the perceptions of school principals and lower primary teachers on the implementation of cluster-based school management reform in the primary schools and the extent to which cluster-based school management reform improves the quality of teaching in primary schools.

Chapter 5 analyses the contextual features and dynamics of each of the three primary school clusters and how these contextual features and dynamics in each cluster shape the implementation of cluster-based school management reform and the extent to which the contextual features and dynamics influence the quality of teaching in the three primary school clusters.

Chapter 6 analyses how the ideologies of key role players influence the implementation of cluster-based school management reform and the extent to which the ideologies of key role players affect the implementation of cluster-based school management reform and the extent to which these ideologies influence the quality of teaching in the three primary school clusters.

Chapter 7 discusses the perceptions of teachers about the teacher support strategies introduced by cluster-based school management reform to improve teaching and the extent to which the teacher support strategies influence improvement in the quality of teaching practices of teachers in the three primary school clusters.

Chapter 8 discusses the characteristics of the teaching methodologies employed by teachers in the three primary school clusters and the extent to which cluster-based school management reform has brought improvement in the quality of teaching practices of teachers in the three primary school clusters.

Chapter 9 discusses the conclusions drawn from the data on: (1) implementation of cluster-based school management in primary schools and (2) the extent to which cluster-based school management reform improves the quality of teaching practices of teachers. The chapter also discusses the contributions of the present study to the existing knowledge base on: (1) the implementation of cluster-based school management reform in developing contexts and (2) the relationship between school clustering and improving teaching. Also discussed are the areas for future research and the limitations of this study.

CHAPTER 2:   EDUCATION DECENTRALISATION: A LITERATURE REVIEW

This chapter presents a review of literature on education decentralisation. It begins with the discussions on definitions and basic concepts of decentralisation and continues discussing the arguments for decentralisation of education, the implementation of decentralisation reforms in developing contexts and research evidence about the effects of decentralisation reforms on the quality of teaching. The major part of the literature review focuses on discussing the origin, purposes and models of school clustering and the empirical findings on the implementation of school clustering. The review also provides a synthesis of theoretical perspectives and the findings of previous research on school-based management, the link between school-based management and teaching and concludes with a summary of lessons learnt through the literature review and the justification for the present study.

2.1   Definitions and basic concepts of decentralisation

People have defined decentralization differently. Walberg et al (2000) analyse twenty-two definitions of decentralisation. The analysis includes definitions of decentralisation as obtained from scholarly papers and prominent organisations from late 1960s to late 1990s. The analysis suggests that there have been several shifts of focus over the meanings, definitions and motives for decentralisation (Dyer and Rose, 2005). Some definitions tend to be more general, emphasising shifting decision-making power and authority from central government to local levels, while some definitions specify functions that need to be redistributed from central governments to lower levels of governments. The analysis also indicates that some definitions suggest partial distribution of decision-making authority and power, and specific functions from central government to local levels, while others suggest

total distribution of decision-making authority and power and of specific functions from central government to local levels. The commonly-cited definition of decentralisation, provided by Rondinelli and Cheema (1983) specifies issues such as planning, decision-making, or administrative authority as needing to be transferred from central governments to local units. In his conceptualisation of decentralisation, Zajda, (2004:206) puts emphasis on 'the distribution and the use of resources' (finances, human resources and curriculum) from the central government to local schools. Geo-jaja (2004:309) in his description of what decentralisation entails, refers to a 'process of re-assigning responsibility and corresponding decision-making authority for specific functions from higher to lower levels of government', but the author does not specify which functions are transferred from central government to lower levels of government. McGinn and Welsh (1999:18) tend to be general in their conceptualisation of decentralisation. McGinn and Welsh describe decentralisation as the transfer of authority from central government to provincial, district and schools.

In summary, decentralisation involves the transfer of decision-making powers and responsibility from central government to lower levels of government institutions or private institutions. This could be a transfer of responsibility such as that of distribution of resources, administrative and management tasks, and planning (Dyer and Rose, 2005; Abu-Duhou, 1999). The local entities may be provinces, regional offices, municipalities, districts or schools; depending on the context of a country.

 As implied in the discussion above, the concept of decentralisation is complex and may take four degrees of transfer of authority and power, namely de-concentration, delegation, devolution and privatisation. De-concentration involves a transfer of administrative authority and responsibility to lower levels that is to government agencies or institutions

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without giving them the final responsibility for decision-making (Rondinelli and Cheema, 1983*;* Bray and Mukundan, 2004; Abu-Duhou, 1999; Lauglo, 1995*;* Dyer and Rose, 2005). This implies that the final decision-making function remains with the central authorities, but the workload is shifted to the lower level; for example, district offices or schools are given a certain work load to carry out within the central authority's work line therefore, de-concentration is a weak form of decentralisation which does not allow local autonomy. The argument for this type of decentralisation is to improve efficiency or effectiveness of the administration of public institutions. The concept of de-concentration is important for this study as it provides an understanding of how school clusters relate to head, regional and circuit offices in the Namibian context.

Delegation refers to the transfer of managerial responsibility for specific functions to local units, local government or non-governmental organisations which are not directly under the control of the central authorities (Rondinelli and Cheema, 1983; Bray, 1987). Under delegation, central authorities remain accountable for the decentralised activities delegated to the government or non-governmental organisations, the decision-making powers transferred to the local units can be withdrawn at any time (Bray, 1987). The difference between de-concentration and delegation is weak. Although delegation of powers may imply stronger local autonomy, 'the power still rests with the central authorities which have chosen to "lend" them to the local one' (Bray, 1987:132). The argument for delegation of activities to local level is the same as for de-concentration.

Devolution involves the central state giving full decision-making power and management authority to sub-national levels, which allows local decision-makers to make decisions on their own without asking higher-level approval; the transfer of authority over financial, administrative or pedagogical matters is formalised (Rondinelli and Cheema, 1983*;* Abu-

Duhou, 1999; Bray, 1987; Dyer and Rose, 2005). Under devolution, local units of governments are autonomous and independent, central authorities exercise only indirect, supervisory control over such units Abu-Duhou (1999:25). Under devolution, decentralisation is justified on the grounds of efficiency and effectiveness in the use of resources and responsiveness of public education to local needs.

Privatisation is a form of decentralisation which involves government giving up responsibility for certain functions and transferring them to certain units, namely private enterprises (Rondinelli and Cheema, 1983; Abu-Duhou, 1999; McGinn and Welsh, 1999; Lauglo, 1995). Privatisation is justified on the grounds of increasing competitiveness and efficiency, which is assumed to be achieved better in private sectors.

The description of the four forms of decentralisation indicates how degrees of decentralisation relate to levels of central control. Where the central authorities wish to exercise control, they may choose a de-concentrated or a delegated system rather than a devolved one (Bray, 1987). De-concentrated or delegated systems make public service systems bureaucratic because central authorities still retain decision-making powers although management responsibilities are spread over different levels (regional offices, district offices, clusters and schools).

2.2 Arguments for decentralisation of education

Overall, the main arguments cited for education decentralisation are based on efficiency, effectiveness, quality and access issues. The advocates of decentralisation assume that shifting authority and management responsibilities to local levels will enhance: (1) the quality of education; (2) effective and efficient use of resources (Ainley and McKenzie, 2000; Bjork, 2004); (3) responsiveness of public education to local needs (Chapman, et al.

2002; Walberg et al., 2000); and (4) teacher and school level professional autonomy (Walberg et al., 2000; Zajda, 2004). As far as the quality improvement argument is concerned, advocates of decentralisation believe that 'schooling quality can be improved by locating decisions to the point where they will be carried out, enabling those with experience and expertise to provide professional knowledge' (Dyer and Rose, 2005: 107). From the above-mentioned arguments, the advocates of decentralisation assume that any form of decentralisation may ensure the transfer of decision-making powers to a local level. One may question whether this can also be true of a delegated or a de-concentrated system where local decision-making power is little or absent.

Drawing on the experiences of the implementation of decentralisation in some developed countries, Caldwell (1990) (in Govinda, 1997) identifies six factors underlying the rationale for decentralisation of educational management: (1) 'the perceived complexity of managing the modern education system from a single centre and the government's acceptance of decentralisation as a practical means of improving the efficiency of the system'; (2) the concern to 'ensure that each individual student has access to the particular rather than an aggregated mix of resources in order to meet the needs and interests of that student'; (3) 'findings from studies of school effectiveness and school improvement have been mentioned as justification of decentralisation'; (4) 'increased autonomy for teachers and fewer bureaucratic controls have been included as elements in the case for the enhancement of the status of teaching as a profession; (5) 'popular demand for freedom to choose schools according to varying perceptions of quality of education by the general public'; and (6) 'the education sector should follow the developments in other fields which were earlier presumed to be the concern of the central government exclusively'.

However, the critics of decentralisation argue that 'decentralisation alone does not make sense, but a decentralisation process combined with a clear government role in setting standards, provision of materials, support, training and supervision' (Govinda, 1997: 281).

Some commentators on decentralisation in education argue that successful implementation depends on strengthening the capacity of local units and the capacity of central governments to facilitate and support decentralisation (Dyer and Rose, 2005).

Other arguments underlying decentralisation are that: (1) 'central governments are increasingly unable to direct and administer all aspects of mass education, decentralisation of planning and programming will result in improved service delivery by enabling local authorities to perform tasks for which they are better equipped'; (2) 'decentralisation will improve economies of scale and will result in better service delivery; (3) 'by engaging active involvement of community and private sector groups in local schooling, decentralisation will generate more representativeness and equity in educational decision-making and thus foster greater local commitment to public education' (Govinda, 1997:13).

The above-mentioned arguments for decentralisation were also criticised. A strong argument against the belief of increasing community involvement is that 'delegation does not automatically lead to stakeholders' empowerment and commitment' (Govinda, 1997: 281). Some critics of decentralisation point out that decentralisation may accentuate inequities or may create new forms of social exclusion in the contexts where inequities and social exclusion had existed before (Sayed, 1999; Soudien and Sayed, 2005). In the context of South Africa and Namibia, decentralisation to local levels has to be implemented with care. Regions or provinces which were less advantaged (during the

colonial period) may need more support from central government in order to be able to stand on their own, than those which were advantaged. If these regions are left on their own, they would continue be disadvantaged or isolated.

2.3 Decentralisation of education: International trends

Decentralisation has its roots in a neo-liberal view of schooling. This view rejects the role of state over education and favours strong local government, use of market forces, professional autonomy and private provision of education (Lauglo, 1995:10). Neo-liberal policies which advocate decentralisation emphasise that school systems should be reformed in order to be: (1) democratic, efficient and accountable; (2) more responsive to the community and local needs; and (3) empower teachers, parents and others in the community for improving school quality (Ibid).

The implementation of decentralisation reforms can be traced back to the 1960s and were widely implemented in many countries in the 1980s (Zajda, 2004: 203). This wide implementation of decentralisation had led to different models of decentralisation focusing on decentralisation of power and decision-making processes concerning organisation of curriculum, financial management, personnel management and resource allocation (Ainley and Mckenzie, 2000; Zajda, 2004).

Drawing on the International Institute for Educational Planning (IIEP) (1999) study, there are variations in the way in which countries have been distributing authority and responsibilities for education management at different levels (McGinn and Welsh, 1999: 51). The study conducted in 10 industrialised and developing countries showed that 'in five of the countries (Zimbabwe; Senegal; Malaysia, France; Namibia) central and (district or) local organisations made most of the decisions about education'. In other words, the study

established that education management in the five countries mentioned above reflects a centralisation-decentralisation notion. The study further established that 'in three countries (Mexico; Nigeria; India), authority was shared primarily between central and regional states' (Ibid: 54). The same study revealed that 'in the United Kingdom, decisions about the curriculum were made by the central government, while in the USA they were shared between state and district organisations' (Ibid).

According to Naidoo (2005: 240) devolution of management responsibilities appears to occur less frequently than de-concentration in most Sub-Saharan Africa countries. Decentralisation reforms in Ghana, Nigeria, Niger, Tanzania and Zimbabwe take de-concentration reform, while in South Africa, Uganda, Senegal and Mali decentralisation reforms put emphasis on devolution of education management (Ibid). Naidoo (2005) further argues that decentralisation reforms tend to focus more on distribution of administrative functions. He identifies the following management functions that are being distributed among the levels of education management in Sub-Saharan Africa:

> 'organisation of instruction, personnel management (hiring/firing, pay, assigning teaching responsibilities, pre-service and in-service training), planning and structures, resource management, and monitoring and evaluation, while management functions such as curriculum authority, personnel management and financing responsibility remain firmly located at the centre in most countries' (Ibid: 242).

In the Namibian context, the education is managed through de-concentrated structures of the Ministry of Education. As mentioned previously, the national Ministry of Education transfers certain functions to regional directorates, circuits, clusters and school levels, while retaining control over key functions such as curriculum development, financial management, resource allocation, policy formulation, procurement services, pre-service teacher training, examinations, quality determination and setting standards. The regional

offices are given the management responsibilities over personnel management, organisation of instruction, evaluation of school system and teacher recruitment.

2.4 Implementing education decentralisation reforms in developing countries

Many developing countries have engaged in attempts to decentralise the management of their public services with the purpose of making the management of their education systems more efficient and effective. Decentralisation initiatives in most of the Southern African Development Communities (SADC) countries have begun with administrative de-concentration. For example, there is greater de-concentration in Zimbabwe, Namibia and South Africa at the district level, although schools in South Africa and Namibia have been given responsibilities for routine administrative decisions and substantial powers (Naidoo, 2005). This study is about decentralisation at the sub-district level; the discussion on decentralisation below focuses on the transfer of administrative responsibilities and authority at district level.

Different countries use the term 'district' differently. In some contexts, for example in Zimbabwe and Tanzania, districts are decentralised structures between regional education/provincial education offices and schools (De Grauwe, 2001), while in South Africa, the term 'district' is used to describe 'geographical subunits of provincial education departments that lie between schools and provincial head offices'(Narsee, 2006: 214). In Namibia, the term ''circuit' (a decentralised structure between schools and regional educational offices) is used more often than the term 'district'. In Namibia, South Africa and Zimbabwe districts are de-concentrated units of the provincial education offices/regional education offices. One of the reasons districts in these countries are de-concentrated structures is because the countries did not transform their local education system in a manner that is different from the colonial model, but adopted colonial public

service system, which emphasises the role of central administration while local education structures merely act as agents of central authorities (Naidoo, 2005; Narsee, 2006). As a result of the de-concentrated nature of districts, these units 'did not receive original powers or authority in terms of provincial legislation, and none have been established as tiers of education governance in provincial head office' (Narsee, 2006: 94).

Narsee (2006:214) identifies the characteristics of South African local education, which is relevant to the present study. She describes South African local education as follows:

> There is no real system of local education in South Africa. Local education is not governed by common norms and standards. No provincial sub-structure enjoys significant autonomy through the devolution of powers and from provincial education departments. No sub-structure possesses original powers or authority in terms of provincial legislation'.

Narsee (2006) argues that local education in South Africa and Namibia does not have local autonomy, but rather a mere 'taking' over of administrative authority and responsibility from central government. Grant Lewis and Naidoo (2004) make a similar point of reference to the nature of local autonomy in education governance in South Africa by arguing that local participation has been focusing more administrative functions of schools rather than extending democratic participation.

In the Namibian context, it has been difficult to determine the extent to which political administrative authority has responsibility and authority over clusters, because cluster boundaries do not correspond with constituencies' boundaries (the local administrative structures). Therefore the constituencies do not have control over education matters.

District education offices in Namibia, as in countries where district offices are de-concentrated units of central offices, are expected to carry out multiple functions. In

addition to administrative responsibilities, district officers are not only expected to supervise the implementation of policies, but also to provide supervisory and pedagogical guidance to schools (Carron and De Grauwe, 1997; Narsee, 2006). Because of the multiple tasks that district education offices have to carry out; district offices have been facing difficulties in achieving the quality of teaching improvement and efficiency objectives. The difficulties include: insufficient number of officers at district education offices, heavy work load of officers, inadequate resources, lack of management capacities at the district levels, lack of autonomy and authority to make decisions (De Grauwe, 2001; Naidoo, 2005; Narsee, 2006).

In other words, the work of district education officers has been 'involved in a number of sources of tension, which are heightened with decentralisation: administrative versus pedagogical, supervision versus support, and central administration requirements versus the school level priorities' (Naidoo 2005: 260). Since developing countries have inherited the system of controlling schools rather than supporting them, district education officers tend to be concerned with monitoring and policy compliance activities, to the detriment of support (Naidoo, 2005; Narsee, 2006).

A study conducted by the International Institute for Educational Planning (IIEP) in 2001, reported poor supervision of schools and teachers in Namibia. The study argues that 'supervisory staff has too many schools and teachers to cover to be able to visit them all regularly' (De Grauwe, 2001: 143). It identifies a number of difficulties that district education officers in Namibia are facing. The difficulties include: weak supervision and support services to schools; lack of co-ordination between services and regions, coupled with insufficient central guidance; lack of influence over the material aspects of schools and lack of resources (De Grauwe, 2001).

Other challenges that developing countries are facing with the implementation of decentralisation reforms include: lack of commitment and capabilities for building genuine partnerships in decision making; lack of clarity on the roles and responsibilities of key implementers in implementing decentralisation reforms and lack of capacity at the decentralised level (Govinda, 1997).

Bjork (2004) also identifies other challenges that developing countries are facing: insufficient support provided by central authorities to local offices; central authorities being unaware of lack of support felt by local educators; lack of commitment to the ideas that underpin decentralisation; lack of mechanisms to ensure sustainability of decentralisation reforms; incapability of central offices to build the culture of education system to fit decentralisation reforms. Bjork's study (2004) in Indonesia provides an understanding of how schools in Indonesia responded to educational decentralisation reforms, which is relevant to the present study. Bjork highlights the issue of local dynamics as critical to the implementation of decentralisation reforms. He emphasises that if the enabling environment for the implementation of decentralisation reforms is not created, there would be a mismatch between central expectations and local realities (Bjork: 251). He argues that 'delegating authority to local levels required fundamental changes that go against the core values and structures that have anchored the foundation of the education systems' (p.257). All officials (including those working at the central authority offices) should undergo transformations in order for the objectives of the decentralisation reforms to be met (Ibid). Bjork's case study demonstrated a mismatch between central office expectations and the local realities. This means that although the autonomy was given to local administrators and teachers, these local actors continued to wait for instructions from the central authority. Bjork's study also revealed that local actors got fixed in the values

and traditions that served them well in the past and therefore to changes these values and traditions has been a difficult undertaking (Bjork, 2004). In his case study, Bjork found out that 'local educators acted in accordance with the norms that historically governed the Indonesia public school system' (Ibid: 256). In implementing the educational reforms, administrators and teachers showed conformity to the Ministry policy and little attempt was made to challenge the governmental authority (Ibid:257). Bjork (2004) therefore emphasises that 'transforming institutional cultures is an enormous undertaking and that decentralisation reforms are not likely to succeed unless core values and routines are modified' (Ibid: 254).

Naidoo (2005:242) identifies the following issues as negatively affecting successful implementation of decentralisation reforms in Sub-Saharan Africa: limited resources; bureaucratic resistance; lack of consultation and coordination between different levels; lack of adequately trained personnel; overwhelming multiple demands; lack of managerial skills and lack of technical knowledge and skills to implement decentralisation reforms.

Decentralisation has been heavily criticised because the impact of decentralisation reforms on education quality in general as well as on the quality of teaching has not been positive. Some of the reasons for little impact on education quality include: little focus of decentralisation reforms on education quality improvement (Di Gropello, 2006); primary focus on changing governance structures rather than improving classroom practice and pedagogical practices of teachers (Schiefelbein, 2004); focus more on teacher participation and empowerment, which alone does not improve the quality of teaching; lack of educational expertise in parents and community; lack of effective monitoring system (Bray and Mukundan, 2004); lack of capability to rebuild the traditionally isolated work of

teachers (Schiefelbein, 2004); and, absence of clear connection between education management reforms and improved education quality (Schiefelbein, 2004; Naidoo, 2005).

Efforts to create a link between decentralisation reforms and improving teaching in Sub-Saharan Africa have begun recently. Initiatives such as school-based curriculum development, local resource centres, local teacher groups and school cluster networks were established, each aiming at relating decentralisation reforms to learning and teaching process (Naidoo, 2005). However, there is no empirical evidence to show that these initiatives to decentralise in-service training of teachers has any effect on instructional practice (Ibid). Naidoo (2005) argues that:

> *…… establishing this connection in Sub-Saharan Africa is difficult, since the experience is relatively recent and uneven and often focused more on resource mobilisation than on improvements in quality. There is little to reason to believe that changes in education management alone will improve teaching practice and student learning' (p.255)*

As mentioned previously, Namibia has introduced school clustering, a sub-district level decentralisation strategy to improve school management, resource distribution and teaching.

2.5   Origin, purposes and models of school cluster

The concept school cluster has originated largely from the developments in educational planning. Advocates of micro planning argue that 'even in the smallest country it is impossible to know the specific circumstances of every school and community' (Bray, 1987:10). Micro planning has been considered as a tool for 'integrating all plans into a national framework, while treating each locality as an entity in itself' (Ibid). School mapping is used as a valuable instrument for micro planning to identify how schools relate to each other geographically, distribution of resources and major development gaps in a country

(Bray, 1987; Dittmar et al., 2002). Micro planning implies a degree of decentralisation of decision making and participation at local level of education system.

School clusters were first established in Great Britain and India as early as the 1940s to enable rural schools to pool resources for education (Giordano, 2008). In developing countries, school clustering has been regarded as a strategy for pulling together limited resources and improving access to materials and equipment. The term 'school cluster' refers to a grouping of neighbouring schools to form a cluster or network. One school in a cluster serves as the lead school or 'core', 'cluster centre' or central 'institution'. Usually, a lead school is the one which is large and better equipped (Giordano, 2008). The head of the core school is responsible for coordinating the activities in the cluster (Dittmar et al., 2002; Giordano, 2008). The schools which are linked and networked to a cluster centre are called 'satellite schools'. Cluster size varies depending on the geography and accessibility of the schools, but the usual size includes 2-15 schools (Giordano, 2008). It is assumed that school clustering brings supervision and support one step closer to the school level (Ibid).

In the Namibian context, the term 'school cluster' is similar to the above description. It refers to the grouping of schools in the same vicinity or neighbourhood for the benefit of sharing available resources (Dittmar et al., 2002). School clusters are *administrative units* of district education offices and responsible for managing resources, school supervision and promoting democratic participation.

Cluster schemes have been implemented in developed and developing countries for various purposes. For example, in England and Wales school clusters have been established in rural Local Education Authorities (LEA) to support small and isolated

schools or learners with special education needs (Ribschester and Edwards, 1998). In Pakistan, a cluster model was developed to improve the imbalance in resource access in schools by sharing resources, information and expertise and to develop a competitive culture among schools (Assefa, 2001: 27). In Philippines, Nepal and Indonesia school clustering was set up 'to share resources and carry out school evaluation and staff development for both teachers and principals' (Ibid, p. 28). In Cambodia, school clustering was developed 'as an organisational means of coordinating central government support, strengthening school management, managing scarce school resources, increasing capacity of local staff and enhancing teaching and learning' (Pellini, 2005: 207).

In African countries such as Botswana, Lesotho, Kenya, Uganda and Egypt, school clustering was intended to improve in-school supervision and conduct school-based professional development for teachers and school principals (Assefa, 2001). In Mozambique, school clusters were established as pedagogic units aimed at improving teacher competencies and dissemination of pedagogical experiences (Carron and De Grauwe, 1997).

As mentioned previously, school clusters have been established in many countries for administrative, political, economic and educational purposes (Bray, 1987; Chikoko, 2007; Dykstra and Kucita, 1998; Dittmar et al., 2002; Giordano, 2008). The purposes of school clustering are discussed below in detail:

Administrative objectives

As administrative units in the administrative hierarchy between the districts and the schools, clusters are responsible for collection of school statistics, distribution of school materials, coordination of personnel and curriculum issues. School clusters are also

responsible for supervising and monitoring schools (Giordano, 2008; Bray, 1987). It is assumed that school supervision improves, because school clustering makes the administration and supervision of school more efficient. The district education officers no longer deal with every school, but work through the cluster heads. Under the context of decentralisation, school clusters serve as de-concentrated units of district education offices, responsible for administrative tasks which were centralised at the district level.

Political objectives

Clusters are assumed to promote the involvement of teachers, parents, school communities and learners in the education process (Bray, 1987; Dittmar et al., 2002; Giordano, 2008). Advocates of this approach assume that school clustering reduces regional and social inequalities between schools by encouraging the well-endowed, prosperous schools to share their resources with the less fortunate ones (Dittmar et al., 2002; Bray, 1987; Giordano, 2008). It is also assumed that school clustering improves the quality of and access to education through participatory education management (Ibid). As sub-district units, clusters are assumed to foster *local decision making*, *collaboration* and *community participation* in the education process. In the Namibian context, structures such as circuit management, cluster management and cluster subject committees have been created to promote local decision making and participation and collaboration.

Economic Objectives

School clusters have been developed to enable schools to share facilities, resources and staff. It is assumed that grouping of neighbouring schools can enable schools to share costs and use of resources more effectively (Bray, 1987; Dittmar et al., 2002). Advocates of school clustering argue that the ordering and distribution of school books and materials can be more efficient and cost-effective when carried out by the cluster centre rather than

by individual schools (Dittmar et al., 2002). It is argued that in countries with limited resources, clusters can improve cost-effectiveness, by supplying resources to a core school instead of distributing them to individual schools (Giordano, 2008). Resource sharing is one of the goals of school clustering, because it is assumed to promote equitable distribution of resources. In a country like Namibia, which has a history of inequity, school clustering is assumed to promote greater equity, by providing resources to the cluster school so that every school in the cluster can have access to resources.

Educational Objectives

Advocates argue that school clustering can improve educational quality through *teacher development*, *curriculum development*, *pedagogical supervision and support*. It is assumed that cluster meetings can foster *co-operation* among teachers as well as promote more autonomy and professionalism (Bray, 1987; Dittmar et al., 2002; Giordano, 2008). It is also assumed that cluster meetings enable teachers to share ideas and solve problems and therefore such meetings act as a form of in-service training for teachers (Bray, 1987; MacNeil, 2004).

Advocates of school clustering believe that a cluster can provide a network of support for curriculum workshops at which new materials are tried out (Bray, 1987; Giordano, 2008). It is argued that district or regional education officers are often overloaded with administrative activities or are too far removed from schools; therefore supervision at the cluster level allows for close-to-school support because supervisors at cluster level may have a better understanding of issues faced by cluster teachers and cluster heads (De Grauwe and Carron, 1997; Dittmar et al., 2002). It is assumed that localised teacher support and in-service teacher professional development improves the quality of teaching and learning.

In summary, the goals of school clustering are to promote: *community participation*, *collaboration*, *collaborative teacher development*, *local decision-making* and *equitable distribution of resources*. The implementation of these goals requires education district offices and schools to have a different understanding of how power is distributed at the district and school levels. Participation and empowerment assumes that implementers (schools) have authority without having to get approval from district offices or head offices. It is also assumed that schools work in a collaborative manner to try out new ideas, because they have the authority to make decisions on new ways of managing schools. These are the themes that this study is concerned with.

Models of school cluster and cluster typology

Giordano (2008) identifies four models of school clusters: the national cluster model, the teacher group, the network and the rural cluster model. Each of the four models is discussed below.

The national cluster model

In this system, school clusters are established as part of a national reform strategy set up by ministries of education, with high levels of financial and technical support from the donor organisations (Giordano, 2008). Under this model, school clusters are organised as 'intermediate structure between the district (region) and the school level' (Ibid: 47). The feature of this model is similar to Bray's intermediate model, in which schools are formally grouped together by higher authorities (Bray, 1987). School clusters serve as a means for disseminating information from the district to the school as well as distribution points of materials and information, supervising and providing support to schools (Giordano, 2008). Clusters also serve as units for in-service training for school managers and teachers. Education district offices are expected to render assistance and support to the cluster activities. Cluster heads are selected on the basis of strong management and leadership

skills. Cluster schemes in Namibia, Zimbabwe and Cambodia are some of the examples of national cluster models.

The teacher group model

Teacher groups are regarded as a core activity in school clusters. Teacher groups are not formalised but they can serve as informal exchanges or project-based work (Giordano, 2008). Examples of teacher groups in other countries are *microcentros* in Colombia and Chile; head teacher groups in Kenya, and *micro groups* in Ecuador. Advocates of school clusters assume that these groups help break isolation of teachers in small schools as well as give professional recognition to teachers (Giordano, 2008). Cluster-based teacher professional development programmes are characterised by a model of networking and inter-school collaboration, whereby teachers working together in groups can share experiences and resources with each other within their schools as well as with teachers from other schools in the cluster (MacNeil, 2004). In Namibia, the school clustering system provides a framework for different cluster groups or committees. There are cluster groups for school principals and for teachers. Namibian teacher groups or cluster-based subject groups are considered to have potential for improving the quality of teaching and learning. Cluster-based subject groups are assumed to foster a culture of sharing, openness and mutual support; provide a framework for in-service training and a point of contact for advisory teaching services (Dittmar et al., 2002). The concepts of *collaboration* and *collegiality* are central to cluster-based teacher professional development.

The network model

This model is a new form of co-operation between schools. The model has emerged in several countries 'based on voluntary participation, peer exchange and absence of hierarchical relationships (Giordano, 2008: 68). The difference between school clusters and networks is that the development of networks is not initiated from the top and

networks can involve schools that are geographically disperse (Ibid). A network is based on three main components: the people, teams or institutions involved, are called 'nodes'; a shared purpose or set of goals – often based on improving performance; and the exchange among members, interaction, communication and co-operation (Ibid). Examples of networks are Education Action Zones (EAZs) in the United Kingdom, which are set up with Local Education Authority (LEA), and Redes in Latin America (Ibid). As in the case of teacher group model, networks are established to promote *collaboration and collegiality*.

The rural cluster model

The model has been developed to address the issues of access and quality of education in rural areas. Rural clusters have been set up to share resources for education and to save costs in managing isolated, rural and small schools (Giordano, 2008). The goal of efficient expenditure and distribution of resources is behind this model. This study examines how a rural cluster is similar and different from an urban cluster.

Cluster typology

Giordano (2008:88) identifies two major types of school clusters:

> those which are part of a heavily aided project initiated by the education ministry and donor organisations requiring the participation of schools in a cluster as part of larger education reform effort; and those which are initiated at the local level to exchange information and solve problems using limited resources and including schools that have expressed a desire to work together.

Clusters which are established by education ministries and donor organisations tend be top-down, financially supported by an outsider, integrated into the education administration, mandatory, high-intensity, tool for external control and therefore set up as a national reform strategy. Under this arrangement, school clusters become district sub-units established on the assumption that supervision and support would be brought closer to the

school level (Giordano, 2008). The Namibian model of school clustering is similar to this type of school cluster.

Clusters which are set up and initiated at the local level tend to be voluntary, selective coverage, financially autonomous and low-intensity. Under this arrangement, schools may collaborate with one another on specific projects, but remain independent for daily pedagogic and administrative purposes (Ibid).

2.6   Existing knowledge base on the implementation of school clustering

This section establishes the existing empirical evidence on the implementation of cluster schemes in terms of improving school management; sharing resources and school collaboration; teacher and parental involvement; and improving the quality of teaching. The themes were chosen because they relate to the objectives of cluster schemes discussed previously and to the purposes of cluster-based school management in Namibia.

Improving school management

The research evidence on the effect of school clustering on improving school management seems to be inconclusive. Some studies have found that school clustering improves school management. In these studies, improvement in school management is attributed to the fact that school clustering has created opportunities for school heads to share experiences and find solutions to common school management issues (Herriot et al., 2002; Mendelsohn and Ward, 2007). School clusters have been credited with improving information, statistics and materials flow between schools and district offices in Namibia (Mendelsohn and Ward, 2007). Other studies found that school clustering has done little to improve school management competences (Topnaar, 2004; Uriab, 2006; Chikoko, 2007).

Sharing resources and school collaboration

In a review of studies on school clusters and resource centres, Giordano (2008) found that sharing of resources has been taking places in rural clusters in Britain and France. This has been made possible by providing additional resources to rural schools. Some studies in a developing context also found that sharing of resources and information has taken place in some clusters in Namibia (Uriab, 2006; Mendelsohn and Ward, 2007). Chikoko (2007) found out that sound cluster leadership is critical in managing resources in school clusters. He argues that due to apparent dearth of sound leadership, available qualified staff who could share their expertise in the school cluster were underutilised in the Zimbabwean cluster case study. In her review of studies, Giordano (2008) found that sharing of resources has been difficult in school clusters due to transporting difficulties or poor co-ordination among cluster members. Transportation, limited resources and co-operation among cluster members are some of the factors that have contributed to unsuccessful implementation of school clustering in developing countries (Pellini, 2005). Bredenberd and Dahal (2000) (in Pellini, 2005:209) indicate that the following are pre-conditions for successful implementation of school clustering policy in a developing context: (1) political commitment to decentralised management of schools; (2) a reasonable transportation and communication network; (3) a reasonable level of population density; (4) a previously existing culture of cooperation and /or mutual support; (5) sufficient personnel in schools; and (6) availability of locally generated resources or state support.

In the Namibian context, financial constraints, limited or no resources, lack of incentives, lack of advisory services, communication problems and lack of support from head office are issues which have been cited as hampering the implementation of school clustering (Mendelsohn and Ward, 2007).

Increased teacher and parent involvement

Empirical evidence on the effect of school clustering on teacher and parent involvement in local decision-making processes has not been compelling. In her reviews of studies on school clusters, Giordano (2008) found out that school clustering has increased community involvement in education issues. Mendelsohn and Ward (2007) found positive influence of school clustering on teacher and parent involvement in Namibia. However, some studies found little evidence of increased parental involvement due to the implementation of school clustering (Topnaar, 2004; Pellini, 2005). Topnaar (2004) and Pellini (2005) argue that the legacies of the past centralised and hierarchical education systems have led to limited community participation in Namibia and Cambodia respectively.

Improving quality of teaching

The research findings on the effect of school clustering on teaching have not been conclusive. A review of studies conducted by Giordano (2008) on school clusters and resource centres, offers mixed messages on the impact of school clusters on teaching. The review points out that school clusters can have positive impact on teachers' classroom practice because teacher groups, in-class support and needs-based training can motivate teachers and enhance their professionalism (Giordano 2008). It seems that improvement in the quality of teaching is attributed to the fact that teacher groups have motivated teachers and enhanced their professionalism. However, the same review points out that the study conducted in Zambia found teacher groups to be ineffective because they were irrelevant to teachers' immediate needs and there was not enough time to hold fruitful meetings (Giordano, 2008). The review also points out that cluster-based teacher development can influence teaching when combined with in-class follow-up support and feedback (Ibid).

An example of a teacher professional development program which combines in-class follow-up support is the whole-school improvement program (SIP), implemented in Namibia, Kenya and Uganda and funded by United States Agency for International Development (USAID). The whole-school approach to teacher development seems to be a promising model for improving teacher quality. A pilot study conducted in Namibia by Leu and van Graan (2006: 80) indicates that '*school improvement program (SIP), which is a school-based, whole-school oriented program, has made a positive difference in the way teachers think about teaching and practice it'*. Whole-school approach to teacher development is underpinned by a theory of learning communities or communities of practice which provides teachers with opportunity to 'explore collectively ways of improving their teaching and support one another as they work to transform their practices' (Leu and van Graan, 2006: 32).

School clusters (teacher groups) are considered to be learning communities, because teachers are provided with opportunity to engage in professional dialogue and collaborative problem solving in issues related to teaching and learning (USAID, 2004; Dittmar et al., 2002). Within the context of clusters as learning communities, it is argued that clusters (cluster teacher groups) have positive influence on teaching.

Mendelsohn and Ward (2007) found out that school clustering has improved the quality of teaching through collaborative interpretation of syllabi and subject policies; joint preparation of schemes of work; sharing of materials, teaching techniques and experience. However, chapters 6 and 7 of this study bring a different picture of teacher collaboration and its influence on teaching practices of teachers.

It is clear that there is little substantial research evidence on the impact of school clustering on teaching. The empirical evidence that is available is not compelling as reflected in the discussion above. In the Namibian context, cluster-based subject groups

are considered to be mechanisms for professional dialogue, teacher support and collaborative problem solving. However, there are questions outstanding about the content and organisation of cluster-based subject groups and the extent to which these subject groups support teachers to improve their teaching practice. The recent research that evaluated the implementation of school clustering focused on dimensions such as school leadership, parent involvement, school climate, decision-making processes and administration and management related issues (Topnaar, 2004; Uriab, 2006; Aipinge, 2007). The only recent study which assessed the impact of school clustering on teaching (as part of its study objectives) was the study conducted by Mendelsohn and Ward (2007). However, the study excluded the perspectives of teachers on the impact of school clustering on teaching. The study assessed the impact of cluster-based subject groups on teaching through the perceptions of cluster-centre principals and district education officers, and no other method was used to assess the impact of cluster-based subject group on teaching as well as examine how cluster-based subject groups operate in the Namibian context. This study aims to fill this gap by assessing the impact of school clustering on teaching from the perspective of teachers, through survey research and case study methods.

Shared and participatory leadership, equitable distribution of resources, collaboration and community participation, local decision-making, teacher involvement underpinned decentralisation reforms such as school clustering and school-based management. Reviewing the literature on school-level decentralisation provides an understanding of the link between school clustering (a sub-district level decentralisation strategy) and school-based management (school-level decentralisation reform).

2.7   School level decentralisation reforms

The concept school-based management

People define SBM differently. School-based management or site-based management is defined by various authors as: 'an externally-driven effort to change the organisational structure of schools from a traditional hierarchical bureaucracy to a form of collaborative or participatory democracy' (Stevenson, 2001); a system 'involves the transfer of decision-making power on management issues to school level' (De Grauwe, 2004:); 'school-level autonomy and shared decision-making' (David, 1989:46); 'a system involves shifting authorities from central offices to local schools' (Dee, et al., 2002:36); 'a systematic decentralisation to the school authority and responsibility to make decisions on significant matters related to school operations within a centrally determined framework of goals, policies, curriculum, standards, and accountability (Caldwell, 2005:1). Caldwell's definition is a modification of earlier definitions of school-based management, because it touches on the issue of centralisation-decentralisation, but still does not specify what should be decentralised at school level.

The concept 'school-based management' has many variations, namely school-site management, school-site autonomy, shared decision making, shared governance, school improvement, school budgeting and administrative decentralisation (Summers and Johnson, 1996: 76). Various countries use different terms to describe SBM, for example, site-based management is used mostly in the USA, while 'local management of schools' is mostly used in Britain and Scotland. In Australia terms such as 'self-governing school', 'self-determining school' and 'school-based decision-making' are used to describe this form of decentralised school management.   In Sub-Saharan Africa, 'school-based management' includes a variety of initiatives that enable school- or community-based

structures to assume powers related to school and educational decisions more broadly' (Naidoo, 2005: 243).

Naidoo (2004) clarifies the differences between school-based management (SBM) and school-decision making (SDM). He points out that school-based management involves structural and vertical decentralisation of decision making authority from the state to the school level, while shared decision making represents horizontal devolution of authority within the school from the principal to members of the school community (p. 70).

Assumptions for school-based school management

School-based management or 'site-based management' is based on the rationale that 'those who are closest to the primary business of schools will make the best-informed decisions' (Summers and Johnson, 1996: 76). However, the literature argues that simply shifting responsibility to local level does not make sense without developing the capacity of those involved in decentralised management. School-based management is adopted to increase school autonomy and to devolve decision-making to teachers and sometimes to parents, students and community leaders (Behrman et al., 2002: 25). School is seen as the central locus of control in decision-making, 'because it is the place where teaching and learning ultimately takes place, and hence SBM is thought to hold the key to improving the education system by engaging those closest to the action in key decisions' (Ibid). However, critics have identified that decentralisation does not automatically lead to community or teacher empowerment and commitment (Ibid).

According to Cheng (1996:51-58) school-based management is assumed to promote collegiality, activities which are school-based to enhance the quality of education; flexible planning; development of teachers and administrators; *participatory decision-making*;

multi-levels of leadership; the use of a variety of managerial skills; self-budgeting which provides schools the opportunity to use resources effectively according to their own characteristics and needs and different roles and responsibility for schools, central authority, administrators, teachers and parents. In school-based management, central authority serves as a supporter or adviser which helps schools to develop their resources and specialities to carry out effective teaching activities. As in the case of school clustering, advocates of school-based management are concerned with issues such as democratic participation, collaboration and equitable distribution of resources.

Leithwood and Menzies (1998: 325) identify four forms of SBM: *administrative control, professional control, community control, and equal control*. Administration control focuses on increasing accountability to the central district or regional office for the 'efficient expenditure of resources'. Leithwood and Menzies (1998) point out that the advocates of this form of SBM argue that such authority, together with an efficient use of resources, enables schools to get more resources into the direct service of students.

Professional control (teacher control) focuses on the use of teachers' knowledge in making key decisions in areas such as budget, curriculum and personnel (Leithwood and Menzies, 1998). This form of school-based management is based on the assumption that professionals closest to students have the most relevant knowledge for making such decisions. It is argued that teachers' knowledge and experience should be included in key school decisions and therefore 'teachers are expected to play a key role in staff development, mentoring, and curriculum development and become key partners in schools' (Behrman et al. 2002:26). It is assumed that increasing *teacher involvement* in school decisions would improve the quality of education.

Community control focuses on increasing accountability to parents and the community at large (Ibid). The basic assumption underlying this form of SBM is that the curriculum of the school should reflect the local values and preferences of parents and the local community. The advocates of this form argue that power to make decisions regarding curriculum, budget and personnel should be in the hands of parents and community members (Leithwood and Menzies, 1998). Equal control (balance control) includes both community control and professional control forms of SBM. From the point of view of the advocates of this form of SBM, balance control aims at making 'better use of teachers' knowledge for key decisions in schools, as well as to be more accountable to parents and the local community' (Leithwood and Menzies, 1998:333).

Administrative, professional, community and equal control, are the concepts used by the advocates of SBM to justify that decentralisation reforms improve efficient use of resources and promote democratic participation of stakeholders in the education issues.

Dominant theoretical perspectives on school-based management

The philosophy that supports school-based management originated in industry and business. The ideas of empowering factory workers to change their work roles became prominent during the 20th century (Cromwell, 2000). This industrial model of giving employees a greater role in decision-making was transplanted into school systems. The approach was named site-based or school-based management (Ibid). Site-based managed schools have been hoping to mirror positive results, such as participatory decision-making techniques, which have been implemented in corporations over the past 30 years (Vincent, 2000).

SBM is based on the premise that 'flattening the decision-making process and bringing it closer to the site where client needs are met, the effectiveness of the organisation is improved, as employees based on their knowledge and interactions with clients can reshape their products and services based on an understanding of client needs' (Walker, 2002). This premise is related to the social democratic principles of egalitarianism, which 'emphasises the need for local communities to have a voice in institution building and operation' (Ibid). The re-conceptualisation of decision-making and governance would call for the creation of democratic decision-making structures, which would result in a significant shift in the realignment of a power relationship (Ibid). While advocates of school clustering regard school clusters as structures which promote democratic participation of stakeholders, the advocates of SBM see the school as a structure for encouraging community participation and local decision-making.

Theoretical assumptions underlying SBM as a decentralisation reform are that: (1) schools are given power and responsibility to solve problems effectively and therefore make a greater contribution to the effectiveness of teaching and learning activities (Cheng, 1996:47) and (2) SBM increases school effectiveness through improvements in the quality of teaching and learning (Levacic, 1995: 19).

Other theoretical assumptions underlying SBM are drawn from political economy and organisational theory perspectives. From the perspective of political economy, SBM is seen as a means of ensuring optimal *efficiency in resource distribution*. The advocates of this view contend that 'centralised budgeting with relatively uniform allocations to schools and a minimal opportunity for re-allocation impairs the achievement of equality and efficiency' (Caldwell and Spinks, 1988: 6). The advocates argue that 'centralised budgeting frequently fails to foster diversity through more efficient and effective

approaches to teaching and learning which may be identified' (Ibid). They also argue that 'by bringing the decision-making process closer to the site where client needs are met, it improves the effectiveness of the organisation' (Walker, 2002, section1, par.3). While the proponents of SBM advocate that SBM is a tool for sharing power, organisational theorists say sharing of power is a complex issue. The evidence from the three case studies in this study indicates that district offices and school principals have been battling to cope with the issue of power sharing (see Chapters 5 and 6).

While the advocates of political-economy emphasise the decentralisation component of SBM, the organisational theorists argue for an appropriate balance of centralisation and decentralisation (Ibid). They point out that educational services are complex and there is no one way of dealing with educational issues. They argue for a 'centralised determination of broad goals and purposes of education accompanied by decentralised decision-making about the means by which goals and purposes will be achieved, with those people who are decentralised being accountable to those who are centralised for the achievement of outcomes' (Caldwell and Spinks, 1988:7).

From the point of view of both conflict theory and critical social science, site-based management cannot be seen as an unproblematic democratic educational reform. The critical social scientists argue that SBM is viewed as a form of participative decision-making occurring in a context of power inequality (Chapman, 1990:36). Conflict theorists argue that, 'power inequality in education tends to be disguised by the rhetoric of school-based management, because it assumes that equal participation is offered in an educational arrangement which is legitimate, neutral and free from power' (Ibid: 40).

Critical-political economic theorists such as Ball and Smyth argue that devolution of authority from central government serves to legitimatise state agencies in the following ways: (1) central government seems to be sensitive to the local needs, (2) by shifting decision-making responsibilities to schools, state agencies can distance themselves from failed policies by blaming schools for poor management and flawed decision-making (Walker, 2002). The critical-political economic theorists also argue that 'devolution of authority to schools places unfair burdens on schools in instances of resource scarcity (Ibid). Some analyses on the implementation of school-based management indicate that SBM has placed a heavy burden on the principals and teachers; and that teachers feel that their energy is distracted from classrooms, which matters mostly for them.

Fullan and Watson (2000:12) argue that implementing SBM in developing countries 'represents a radical change, because of the legacy of hierarchical or top-down models of education management from colonial days'. They further argue that implementing SBM in developing contexts may also be difficult due to the fact that 'those in power at central and middle levels of management have to give up control and those at the school and community level have to be willing and capable of operating in new ways' (Ibid: 13).

2.8 The existing knowledge base on the link between SBM and teaching

The literature on school-based management identifies the following variables as having indirect or direct effects on teaching and learning: *professional learning community*, ongoing support for teachers in learning new forms of pedagogy, ongoing support for principals, local capacity building, and establishing a learning culture, (Fullan and Watson, 2000; Brown and Cooper, 2000; Briggs and Wohlstetter, 1999).

The authors argue that the above-mentioned factors are seen as significant to the positive impact of SBM on teaching because teachers' knowledge, teachers' professional

development and the creation of school learning communities, have been considered to be necessary to refocus professional concerns and school-based management on teaching. Training, professional development and ongoing support are assumed to be significant in developing capacity for schools, school leaders and communities.

Even though being a part of a professional learning community is regarded as an important aspect of teacher professional development, most teachers maintain a strong culture of individuality and isolation. For teachers to 'see professional development as a collective rather than as an individual responsibility is a major shift from the way in which they used to do things' (Mohr et al., 1997: 13).

Other variables associated with a link between SBM and teaching are: clarity of roles and responsibilities of those who are actively involved with the implementation of SBM (Odden and Wohlstetter, 1995; Dee, 2002; Walker, 2002); *shared decision-making*, continuous improvement with school-wide training in functional and processing skills in areas related to curriculum and instruction (Wohlstetter, 1995); authority over the budget, personnel and curriculum, and leaders who introduce changes that affect teaching and learning (Wohlstetter, 1995; Holloway, 2000; Briggs and Wohlstetter, 1999); competent principals who are skilled in facilitating and managing change, *professional collaboration and learning* (Wohlstetter, 1995; Briggs and Wohlestetter,1999); focusing on instructional practices and development needs and support from within schools (Squires and Kranyik, 1999); efficient public authorities, with a wide outreach and a communications network, efficient schools with sufficient resources and qualified teachers (De Grauwe, 2001).

Fullan and Watson (2000: 8) state that external infrastructure has been receiving attention recently as an important variable that might contribute to instructional improvement.

Drawing on the work of both Wohlstetter et al., (1997) and Bryk et al., (1998), Fullan and Watson (2000) point out that provision for access to information and incorporating systems of accountability and control might support and stimulate school-level improvement.

Fullan and Watson (2000:29) further argue that SBM 'is a means of altering the capacity of the school and community to make improvements, it is something that requires training, support and other aspects of capacity-building over a period of time, and it is local improvement in the context of natural goals and accountability'.

Although the SBM literature has built up an extensive list of variables that may have direct or indirect effect of SBM on teaching, the literature has not been able to provide conclusive empirical evidence on the relationship between SBM reforms and improved teaching.

One of the proponents of SBM, De Grauwe has realised the limitations of SBM to affect teaching and learning. Grauwe (2005: 279) states that 'it should be kept in mind that SBM has been seldom introduced as a measure to directly improve the quality of teaching and learning'. He argues that there should be conditions, which can contribute to quality improvement. De Grauwe (2005) identifies the following factors as important in contributing to quality improvement: basic classroom resources and competent teachers; effective school-support system; regular feedback on how schools perform and motivation of school principal on management issues.

The research studies on the effects of school-based management on the quality of teaching have not been consistent. Some studies found little or no evidence of direct links between school-based management and improved teaching (Dellar, 1995; Levacic, 1995; Smylie and Perry, 1998; De Grauwe, 2004; Di Gropello, 2006), while other studies

established discernible relationships between school-based management and improving teaching (Squires and Kranyik, 1999; Mintrop et al., 2001).

The limitations of school-based management to improve teaching are that: 'the changes required to affect classroom level instructional changes are often not the focus of SBM reforms and hence, changes in teaching and learning are absent' (Paqueo and Lammert, 2000); school-based management may have only limited impact on what happens in school unless there is a specific focus to implement it within school change (Ainley and McKenzie, 2000); *teacher involvement in decision-making* processes is not a guarantee for improving teaching practices (Monk et al. 1997; Mohr and Dichter, 2001); unclear focus of SBM on teaching or absence of a clear focus on improving the quality of teaching (Leithwood and Menzies,1998); absence of purposeful links between capacities associated with SBM and what occurs in the classroom in learning and teaching and the support of learning and teaching (Levacic, 1995; Cheng, 1996).

2.9   Conclusion

This review concludes that the key concepts underlying decentralisation reforms are *community participation, collaboration, equitable distribution of resources, local decision-making, and teacher involvement*. The review establishes that the research evidence on the impact of decentralisation reform such as school clustering in achieving the goals of promoting democratic participation, improving school management through collaborative leadership, and improving equitable distribution of resources and teaching through localised and collaborative teacher development has not been compelling.

The review also establishes that until recently, the research evidence available on the impact of decentralisation, school clustering and school-based management on teaching

has not been conclusive. It is concluded from the review that the literature on school clustering has neglected the voices of teachers in judging the effectiveness of school clustering in improving teaching. It is also concluded that school clustering as other forms of decentralisation reforms, assumes that changing governance structure leads to power sharing, collaboration and democratic participation. The Namibian literature on school clustering has neglected to analyse the influence of ideological issues on the implementation of school clustering.

This study aims to contribute to the existing knowledge on the implementation of school clustering in a developing context by: (1) examining how school clustering goals have been implemented in the Namibian context, through survey research and case study methods; (2) assessing the impact of school clustering on teaching from the perspectives of teachers and other key role players; and (3) examining how the beliefs and perceptions of the key role players influence the way in which the goals of school clustering have been implemented in the Namibian school clusters. In other words, both survey and case study research focused on the implementation of: local capacity building, school supervision and support, shared and collaborative leadership, equitable distribution of resources (resource sharing), teaching involvement, professional collaboration and learning, teacher collegiality and localised teacher development and how these goals relate to improving teaching in Namibian schools. The survey questionnaire was developed based on the eight goals of cluster-based school management, while the case study research methods focused on capturing how these goals were implemented in three primary school clusters. The eight goals of cluster-based school management are referred to as eight dimensions in the survey questionnaires.

CHAPTER 3: RESEACH DESIGN AND METHODOLOGY

This chapter discusses the research design, the study sample, and the methodologies and procedures used to collect and analyse the data in order to assess the relationship between cluster-based school management reform and improving teaching. The chapter concludes with the discussion of the limitations and gaps in the data.

3.1   Research Design

The theoretical basis of the research design

There are different theoretical orientations, which have different claims about reality and how knowledge is acquired. The positivist orientation claims that reality can only be understood through scientific method and valid knowledge is acquired through direct observation and enhanced by measurement (Connole, 1998; Scot and Usher, 1996). The other orientations such as interpretive and critical paradigms claim that reality is understood through language, knowledge is acquired through discovery, and there are 'multiple realities which require multiple methods for understanding them, (Scot and Usher, 1996:18). Each of these theoretical orientations has its own justifiable basis and made significant contributions towards understanding reality and knowledge acquisition.

The study conducted here used research methods informed by both positivist and interpretive paradigms. The quantitative methods, which originated from the positivist paradigm emphasise clear conceptualisation of concepts, the precise measurement of observable behaviour, prediction of events and control of context, and the relationships between variables using experimental and statistical techniques' (Foster, 1996:6). Data collected through quantitative methods are believed to yield objective and accurate

information and that they can be replicated (Tashakkori and Teddlie, 1998). The researcher enters the field with predetermined categories in which behaviour and experiences are coded and described in numerical terms.

The qualitative methods originated from the interpretive paradigm with their emphasis on exploration of meaning (through language) and understanding of the context in which events occur (Foster, 1996: 6). The key feature of qualitative research is that the researcher does not enter the field with predetermined categories in which behaviour and experiences are coded. The researcher enters the field 'with a relatively open mind, to minimize the influence of preconceptions and to avoid imposing existing preconceived categories' (Foster, 1996:6).

The study adopted survey research and case study methodologies. In the survey research, the study used predetermined categories derived from the assumptions of cluster-based school management reform to examine the extent to which the Namibian primary schools implement the decentralisation reform (cluster-based school management reform). The researcher recognised the limitations of quantitative methods especially relying on survey data, which may be distorted by participants' opinions. The researcher used qualitative methods to gain in-depth understanding of the views and experiences of key implementers of the decentralisation reform. In the case study research, the researcher did not use predetermined categories, but was guided by the key research questions of the study. The key research questions were used as broad frameworks to 'minimise the influence of preconceptions and avoid imposing existing preconceived categories' (Foster, 1996:6).

3.2   The research strategy

As mentioned in the previous section, the study combined survey research and case study methods in order to: (1) obtain first hand data on the implementation of cluster-based school management reform; (2) gain in-depth understanding of the implementation of the reform in the Namibian primary schools, and (3) assess the extent to which the reform relates to improvement in the quality of the teaching practices of teachers.

The survey method collected information on how school managers and lower primary teachers perceived the implementation of cluster-based school management reform and whether in their experiences the reform had brought improvements in the quality of teaching. Surveys, however are flawed in relying too much on opinion-based data such as user perspectives which, while they may be useful in gaining first-hand accounts of 'what works', are also limiting by not providing the depth of inquiry available through other methods.

The case study methods were used to enable the researcher to gain in-depth understanding of important issues involved in the implementation of cluster-based school management reform and the subtle aspects of its effects on the quality of teaching. Punch (2005) emphasises the ability of case study methods in providing in-depth understanding of a case. Punch (2005:144) argues that 'a case study aims to understand the case in depth, and in its natural setting, recognising its complexity and its context'. Yin (2003:13) stresses that a case study is an empirical inquiry that: '*investigates a contemporary phenomenon within its real-life context, when the boundaries between phenomenon and context are not clearly evident, and in which multiple sources of evidence are used'.* The key features of case study research are that a case study aims to investigate a

phenomenon in a 'holistic' manner, with a specific focus using multiple sources of data and multiple data collection methods. Case study research includes both single-and multiple-case studies (Ibid). A single case study focuses within a case, while multiple-case studies involve multiple cases, where the focus is both within and across cases (Punch, 2005).

A multiple-case study design was adopted in which three clusters examined: (1) how Namibian primary schools respond to the introduction of cluster-based school management reform, (2) cluster contextual features and dynamics, (3) teachers' perceptions of the change process and (4) whether cluster-based school management reform relates to improvements in teaching practices of teachers. The multiple-case study design was adopted to understand different contexts in which the implementation of cluster-based school management reform had occurred and to examine the extent to which cluster-based school management reform relates to teaching. Each case study was selected carefully to capture diversities and contrasts that had emerged as a result of the implementation of cluster-based school management reform. The goal of the inquiry was to determine how each case would predict similar results or contrasting results of the implementation of cluster-based school management reform as well as to determine how cross-case conclusions could be drawn.

In order to gain in-depth understanding of how, circuit inspectors, school principals and teachers experienced, viewed and interpreted the implementation of cluster-based school management reform, the researcher adopted qualitative data collection techniques such as direct observations and interviews. In addition, the researcher combined the data from the interviews and observations with information from documents produced during the design and the implementation of cluster-based school management reform. By using a combination of data gathering techniques, the researcher hoped to capture the essence of

the implementation of cluster-based school management reform in Namibian primary schools.

3.3   Research Instruments

To collect data for the study the following instruments were used: a questionnaire, interview guides, observation of cluster subject meetings, classroom observation, focus group discussion and document analysis guides.

Questionnaire

A structured questionnaire was designed to collect information from school managers and lower primary teachers on the implementation of cluster-based school management reform in Namibian primary schools. In other words, the questionnaire was designed to collect information on how school principals and teachers perceived the implementation of cluster-based school management reform and whether in their experiences cluster-based school management reform had brought improvements in the quality of teaching.

The questionnaire was selected as the appropriate data collection tool in assessing the extent to which participants hold similar beliefs and opinions on the implementation of cluster-based school management reform. The questionnaire consists of three sections: (1) general and demographic information of the participants; (2) descriptions of dimensions; and (3) organisation of cluster-based school management reform. Each dimension consists of three items. Within each dimension, items were written, grouped and checked to ensure a comprehensive coverage of the dimension. Each item has a four-point rating scale with responses of 'to large extent' (with a rating score of 3), 'to some extent' (with a rating score of 2), 'to very limited extent (with a rating score of 1) and 'never' (with a zero rating) (*See Appendices A & B*). Three items were formulated for each

dimension in order to assess the levels of implementation of each of dimensions of cluster-based school management reform. Three items for each construct (dimension) were used as indicators for measuring the construct and a pre-test of the survey questionnaire was conducted in order to enhance its validity and reliability. The rating score of 3 indicates a high level of implementation of a dimension, the rating score of 2 indicates a moderate level of implementation of a dimension and a rating score of 1 indicates a low level of implementation of a dimension. The descriptions of the items on the questionnaire were derived from decentralisation literature and the policy document of cluster-based school management reform in Namibia. The items served as indicators for measuring the dimensions. The dimensions were as follows: shared and collaborative leadership (stakeholders' involvement); competent leadership; resource sharing; teacher involvement, teacher collective planning; teacher collegiality; school supervision and support and localised teacher development. These dimensions were derived from the goals of cluster-based school management. The goals include: fostering stakeholder collaboration through shared and collaborative leadership; promoting improve school management through competent leadership; improving cost-effectiveness; fostering teacher involvement in decision-making; breaking the isolation of teachers; fostering professional collaboration and learning; promoting local pedagogical supervision and support and promoting local teacher development and training. The eight dimensions were referred to as dependent variables, while the background items (sex, gender, educational qualifications, job status, years of school management or teaching experience, school geographical location, cluster condition, years of implementation of the reform and teacher support) were referred to as independent variables. The independent variables were categorised (*see Appendices A & B*).

Cluster Subject Meeting Observation Guide

Cluster subject meeting observation guide was designed to gather firsthand data on the activities carried out during cluster subject meetings in order to understand the nature of activities which teachers engaged in, which were assumed to contribute to the improvement in the quality of teaching. The cluster subject meeting observation guide consists of guiding questions for observing cluster subject meetings (*See Appendix C*). The purpose of the guiding questions was to establish a consistent line of inquiry as well as to allow events to unfold in order to document activities carried out during cluster subject meetings. The guiding questions were adapted from LeCompte and Preissle, 1993).

Interview Guides

A semi-structured interview protocol was designed to elicit information on teachers' perceptions of the implementation of cluster-based school management reform and whether from their experiences the change in school management had brought change in the quality of teaching. The questions were formulated to provide the researcher with insight into how teachers experienced, viewed and interpreted the implementation of cluster-based school management reform (*See Appendix D*).

Another semi-structured interview guide was designed to elicit information on the perceptions of circuit inspectors about the implementation of cluster-based school management reform; especially the role they played as the key facilitators of the reform. The questions were formulated to provide the researcher with insight on how circuit inspectors viewed and interpreted the change in school management and whether from their experiences the change in school management had brought improvement in the management of weak schools and the quality of teaching (*see Appendix H).*

A semi-structured interview guide was also designed to elicit information on the perceptions of school principals on the implementation of cluster-based school management reform; especially the role they played as the key implementers of the school management reform. The questions were formulated to provide the researcher with insight into: (1) how cluster-centre principals and satellite school principals viewed and interpreted the change in school management; (2) how they plan and organise cluster activities; (3) the support they receive during the implementation of the reform; and (4) whether from their experiences the change in school management had brought improvement in the management of their schools and the quality of teaching *(see Appendices I & J)*.

Classroom Observation Guide

The classroom observation guide was designed to provide data on the actual teaching methodologies employed by the lower primary teachers in the three primary school clusters.

In particular, the classroom observation guide was designed to collect information on how teachers teach literacy, environmental studies and mathematics lessons and the extent to which teachers are confident in using thematic teaching approaches[4]. The focus of the teaching of literacy, environmental studies, mathematics and thematic teaching was prompted by the survey data and the observations of the cluster subject meetings during the piloting of the instruments. The discussions and the sharing of ideas about how to teach reading and the use of thematic teaching approaches came out strongly in the survey data. It was also observed that teachers were keen to learn more about how to use thematic teaching approaches and teaching strategies for reading especially in grades 1

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[4] Environmental Studies, Literacy and Mathematics are considered as subjects in the lower primary school curriculum phase, where teachers can facilitate learners' understanding of the interrelationship between learning areas.

and 2 in bilingual classrooms. The classroom observation guide consists of questions which focus on: (1) teacher interaction with learners; (2) learners' responses to teacher instruction; (3) the use of teaching materials and resource to support learning; (4) what teaching strategies teachers use to enhance learning; (5) teachers' skills in responding to learners with different learning difficulties; (6) teachers' skills in assisting learners to make connections between what they know and new material; (7) teachers' skills in engaging learners in higher order thinking; and (8) teachers' skills in assisting learners to see the relationship between learning areas (*See Appendix E*).

Document Analysis Guide

The document analysis guide was designed to gather information about policy issues that underpin the design of cluster-based school management reform intervention and its actual implementation; in order to compare and corroborate data obtained through survey, direct observations and interviews. The document analysis guide consists of guiding questions to guide the researcher analyse policy documents; and documents (such as minutes from cluster meetings, cluster annual reports, cluster action plans) collected during the field work in order to gain insight into the contexts in which the reform was designed and implemented to enable the researcher make inferences on the link between cluster-based school management reform and improved teaching (*See Appendix F*).

Focus Group Discussion Guide

A guide consists of a list of question areas was designed to gain insights into the strengths and weaknesses of cluster-based school management reform, the teachers' expectations of the reform and suggestions on how to improve the reform. The purpose of the group discussion was to generate data and insights that could not be gained without group interactions with teachers as well as to corroborate data gathered from the interviews and

cluster subject meeting observations. A group discussion guide was designed to be conducted with lower primary teachers (who completed the lower primary questionnaire) from well-resourced and under-resourced schools (*see Appendix G*).

3. 4   The sample for the study

The management of the Ministry of Education in Namibia is decentralised into 13 education regions. There are 47 circuits (districts) and 280 clusters in Namibia, each region consists of about five to seven circuits, and there are five to seven clusters per circuit. Out of thirteen regions, five regions had implemented cluster-based school management reform for a longer period. In the five regions, there are 14 circuits and 64 clusters. The study focuses on the five education regions, which have implemented cluster-based school management reform for four years or more. The study was conducted into two phases. The phase one of the study focused on survey research and phase two focused on case study research.

Selection of the sample

The study targeted primary school principals and lower primary teachers. The reasons for targeting primary schools are as follows: (1) formal management structures were set up in support of the implementation of the cluster-based school management reform; (2) subject support groups for lower primary teachers were set up in most of the cluster centres, and (3) the lower primary teachers are likely to remain in the same grade or phase for a longer period. It was assumed that targeting primary schools which have in place structures for supporting the implementation of cluster-based school management reform would yield valuable data which could be used to assess the extent to: (1) which cluster-based school management reform was implemented in schools, and (2) whether the change in school management related to improvements in the quality of teaching.

However, it is recognised that excluding other school phases from the study, would limit the understanding of the implementation of cluster-based school management reform to primary schools only, leaving gaps in understanding how other school phases respond to the change in school management.

In order to establish the sample for the study, a total number of 173 primary schools (excluding combined, junior and senior secondary schools) in the five regions, was obtained from the 2003 Education Statistics of the Ministry of Education. The sample for the study was selected using a simple random sampling (SRS) method (*see Appendix K)*. In order to establish a sampling frame for the study a list of all primary schools was drawn up. Each school was given a unique number starting from one. In other words, each school was given a number ranging from 001 to 173. Since the highest number on the sampling frame is a three-digit number (173), each number assigned to each school should be a three-digit number. A sample size of 60 primary schools out of 173 primary schools was drawn.

A sample size was determined using published tables which present samples sizes that would be necessary for 10% precision levels where the confidence level is 95% and p=.5. In order to draw a sample of 60 schools, 60 numbers were selected from the table of random numbers.[1] In the table of random numbers, all numbers are five-digits. In order to create three-digit numbers out of five-digit numbers, the researcher decided to pick the third number on the first column for example, 42130 and then considered the left-most three digits, thus the 421. To progress through the table, the researcher moved down the column to the bottom of the table, then continued at the top of the next column up to the bottom, and then followed the same procedure until 60 random numbers were selected.

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[1] A table of random numbers was obtained from Babbie (1998), Appendix E, abridged from Handbook of Tables of Probability and Statistics, 2nd Ed, edited by William H. Beyer (Cleveland: The Chemical Rubber Company, 1968).

Numbers that appear twice or those that are larger than the population number were ignored. The sample consists of primary schools, which corresponded to those random numbers. A sample size of 230 lower primary teachers was selected from the population of 660 primary teachers in the 60 sampled schools. A sample size was determined using published tables which present samples sizes that would be necessary for 5% precision levels where the confidence level is 95% and p=.5.

Selection of Case Studies

As indicated earlier, the case study research was carried out in three primary school clusters. Each case was selected carefully to capture unique diversities and contrasts that had emerged because of the implementation of cluster-based school management reform. The three primary school clusters were selected based on four criteria: (1) geographical location of the school clusters; (2) socio-economic and cultural backgrounds of teachers and learners in the primary school clusters (3) unique characteristics of clusters as revealed in the survey data and (4) the geographical proximity of clusters in relation to the researcher's workplace. To ensure *anonymity* of each cluster, the researcher assigned a different name to each cluster. In other words, the names of the clusters indicated in this study are not real names. Table 1 below outlines the rationale for selecting each of the three case studies.

Case Study	Rationale for selection
Makalani cluster consists of eight primary schools, located in an urban area	An urban cluster was selected because it represents a rich cluster with resourced schools, strong leadership, qualified and experienced teachers in the study. Teachers and learners come from mixed ethnic backgrounds. The socio-economic background of teachers and learners in some schools ranges from middle income groups to low income groups.
	The case study was selected to bring to the study an in-depth understanding of how a rich cluster receives and delivers cluster-based school management reform. The cluster was also selected to assess the

	extent to which resourced schools support under-resourced schools as per intentions of the reform as well as the extent to which cluster-based school management reform within the context of a rich cluster of schools with strong leadership, qualified and experienced teachers relate to improvements in the teaching practices of teachers.
Hendrich cluster consists of five primary schools, located in a semi-urban area	An urban cluster was selected because it represents a poor urban cluster with only one school which is resourced, has strong leadership, and qualified and experienced teachers, while other schools do not have strong leadership, some teachers are qualified and experienced, while other are less qualified and experienced. Teachers and learners come from socio-economic backgrounds ranging from middle to very low income groups. Teachers and learners come from mixed ethnic backgrounds. This case study was selected to bring to the study an in-depth understanding of how schools in a cluster with only one resourced school receive and deliver cluster-based school management reform. The cluster was also selected to bring an in-depth understanding of the extent to which cluster-based school management reform within the context of a poor cluster with weak schools under the leadership of a strong school relates to improvements in the teaching practices of teachers.
Otjimue cluster, consists of five primary schools, located in a rural and remote area	A rural cluster was selected because it is located in remote, isolated and impoverished communities with all schools not having strong leadership, teachers are less qualified, but some teachers are reasonable experienced. Teachers and learners come from predominantly one ethnic background. This case study was selected to bring to the study an in-depth understanding of how schools located in remote, isolated and impoverished communities receive and deliver cluster-based school management reform. The case study was also selected to bring to the study an in-depth understanding of the extent to which cluster-based school management reform implemented in context of a rural cluster with weak schools, allocated in an isolated and impoverished communities relate to improvements in teaching.

Table 1: Rationale for selecting the three case studies

3.5 Data Collection Procedures

Access to schools, cluster meetings and classrooms was negotiated with the regional offices, cluster-centre principals and school principals. Prior to the research study, letters for permission to conduct research in primary schools were sent to the directors of the five education regions. A pilot study with twenty lower primary teachers and five school principals drawn from five different schools, trying out the *questionnaire* (for both lower primary teachers and school principals), was conducted prior to the survey research and then modified accordingly. Another pilot study with three teachers, trying out *the interview guide; the cluster subject meeting observation guide; the classroom observation guide and the document analysis guide,* was conducted prior to the case study research. The interview and classroom observation guides were administered to all three teachers. Two cluster subject meetings were observed and documents from the two cluster centres were analysed using the cluster subject meeting observation guide and document analysis guide respectively. The document analysis guide was modified slightly, while major changes were made to the interview guide, classroom observation and cluster subject meeting observation guides to ensure consistency in the instruments.

The research study took place in two phases. The first phase focused on the survey research and the second phase on the case study research. As soon as the permission to conduct research in the five regions was granted, data collection for the survey research began.

3.5.1 Survey Research Data Collection

The survey research data collection focused on gathering information about the perceptions of both school principals and lower primary teachers on the implementation of cluster-based school management reform and whether in their experiences the change in

school management had brought about improvements in the quality of teaching. The survey data were collected through a structured questionnaire, one for school principals and another one for lower primary teachers.

Data collection for the survey research took place from middle of September 2005 up to the end of April 2006. 260 questionnaires (for lower primary teachers) and 65 questionnaires (for school principals) were sent to 60 schools in the five regions by mail. A list of schools to which questionnaires were sent was drawn up to enable the researcher to monitor the return of questionnaires and record the questionnaires as they were returned.

Respondents were required to provide demographic information; information about the nature of their cluster centres, availability of resources in the cluster centres, number of years of the implementation of cluster-based school management reform, the structures in place to support the implementation of cluster-based school management reform and to state whether they had received professional support under the cluster-based school management arrangement. Respondents were also asked to rate their perceptions about the levels of implementation of the eight dimensions of cluster-based school management reform and whether in their experiences cluster-based school management reform had improved the quality of teaching.

To ensure anonymity of the respondents, as each questionnaire was received, an identification number was assigned to it; and the raw data were entered into the computer using Microsoft Excel program. Data about respondents' particulars and information about the delivery of cluster-based school management reform were entered separately from the data on the ratings of the items of the eight dimensions of cluster-based school management reform.

The first follow-up letters were sent to non-respondents together with additional questionnaires between January 2006 and February 2006.

The second follow up letters were sent to non-respondents together with additional questionnaires between March 2006 and April 2006. This period was also used to cross-check and refine data. The survey data collection was completed by the end of April 2006. The response rate was 61% for the school principal questionnaire and 57% for the lower primary teachers' questionnaire. The reason for low response rate could be attributed to the fact that mailed surveys, are subjected to the preferences of respondents.

3.5.2 Case study research data collection

As shown in section 2.2, the collective case study research was adopted and carried out in three primary school clusters with different contexts. Case study research was conducted in a total of *ten* primary schools in the three clusters. *Four* primary schools were selected from Makalani cluster (two resourced schools and two under-resourced schools); *three* primary schools from Hendrich cluster (one resourced school and two under-resourced schools)[5]; *three* primary schools from Otjimue cluster (three under-resourced schools)[6]. The case study research focused on collecting rich data on how the implementation of cluster-based school management reform had occurred in different contexts and to examine whether the change in school management relates to improvement in teaching practices.

The case study research data collection took place from February 2006 to mid-September 2006. Access to schools, cluster meetings and classrooms were negotiated with the cluster-centre principals and satellite school principals. The purpose and the benefits of

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[5] There is only one resourced school in Hendrich cluster.
[6] All schools in Otjimue cluster are under-resourced.

the study were explained to the school principals. It was also explained to the principals that the study would require the involvement of the teachers, and they have the rights to refuse to participate in the research. The researcher ensured the principals that the confidential information obtained from the participants would not be disclosed.

Observation of cluster subject meetings

Observation of cluster subject meetings focused on collecting data about the activities carried out during cluster-subject meetings. The observations of cluster-subject meetings were guided by the cluster subject meeting observation guide. The observations of cluster subject meetings focused on the following: how the activities were organised; what resources were used in the activities; what was discussed and what meanings teachers attributed to what they did.

Before the actual observations of cluster subject meetings began, the researcher visited the three cluster centres to obtain schedules for cluster activities for each of the three primary school clusters. A letter to get consent from teachers to attend cluster-based subject meetings was written to the chairpersons of the cluster-based subject groups. The researcher ensured that permission was granted to attend cluster meetings before observations began.

The researcher carried out repeated observations of cluster subject meetings. *Six* cluster subject meetings observations were carried out. *Three* observations of cluster subject meetings were carried out at Hendrich cluster; *two* observations of cluster subject meetings at Makalani cluster; and *one* observation of cluster subject meeting at Otjimue cluster.

Cluster subject meeting observations were carried out between February and September 2006. The first cluster subject meeting observations were carried out between 21 February and 10 March 2006. During the first cluster subject meeting observations, the researcher observed meetings at the two of three cluster centres. These two cluster centres are both urban clusters. The researcher was not able to reach the rural cluster centre because of the heavy rainfall experienced during that period. The cluster subject meetings were held in the afternoons after classes at the cluster centres. However, teachers in one cluster preferred to hold cluster subject meetings not only at a cluster centre, but at different schools within the cluster. Each cluster subject meetings was conducted for three hours.

The second cluster subject meeting observations were carried out between 30 May and 9 June 2006. During the second cluster subject meeting observations, the researcher observed cluster subject meetings at the three cluster centres. All three cluster subject meetings took place in the afternoon. Two cluster subject meetings were conducted for three hours, while one cluster subject meeting was conducted in one hour.

The third cluster subject meeting observations took place between 12 and 19 September 2006. During this period only one cluster (Hendrich cluster) held the cluster-subject meeting, the other two clusters cancelled the meetings.

The presence of the researcher in the meetings did not appear to have any significant influence on how the meetings were conducted and what transpired at the meetings. This is not to say that the presence of the researcher had no influence on the way in which the meetings were conducted. The chairpersons of the two meetings seemed to be anxious in the way in which they chaired the meetings. In order to minimise the influence of the researcher's presence on the way in which the meetings were conducted, the researcher

spent most of the time listening to what teachers discussed and jotted down key phrases to help remember afterwards what was discussed. When the observation ended, the researcher went to a quiet place and wrote as much as she could remember and then reviewed the field notes using the nine guiding questions on the cluster subject meeting observation guide.

During the visits to schools, the researcher also took descriptive and detailed notes of the case study sites: the condition of buildings, the facilities available at the cluster centres and the immediate physical environment around the cluster centres.

Interviews

Prior to the visit to schools, the researcher contacted the school principals to make appointments for interviews with teachers who completed the questionnaires. The identification of teachers interviewed was done during the informal visits to the selected schools in the clusters. The researcher met who the teachers, explained the purpose of the research and why their participation was important. However, it was explained to the teachers that they had they rights to refuse to participate in the research. The researcher also explained that their information would be coded and used, but their anonymity would be protected.

Face-to-face interviews were conducted with eighteen teachers in ten schools. The first set of interviews took place between 21 February and 10 March 2006; the second set of interviews were conducted between 30 May and 9 June 2006; the third set of interviews took place on the 12 and 13 July 2006 and the fourth set of interviews were conducted between 10 and 19 September 2006.

Initially, it was planned that interviews would be conducted after classroom observations in order to compare what the teachers said and what were taking place in their classrooms. In some cases, this could not be carried out easily, because of time constraints and the long distances between some schools.

At the beginning of each interview session, the researcher spent a few minutes establishing rapport to reduce tension and anxiety during the interviews. Interviews were conducted in classrooms and staffrooms during the class sessions or during breaks. Generally, there were few interruptions because in most cases learners were sent out into the playgrounds during breaks, though occasionally some learners entered the classrooms to pick up things. In a few cases teachers entered the staffrooms in the middle of the interviews. The interview processes were conducted as follows: (1) the researcher engaged in guided conversations with teachers in which the researcher asked specific questions as outlined in the interview guide, the researcher asked probing questions on issues that emerged as the interviews progressed; (2) the researcher also engaged in unguided conversations with teachers in which the researcher asked them to talk about their opinions about cluster-based school management reform: what they regarded as important about the reform; their understanding of the reform; its strengths and weaknesses; their expectations; what the reform meant to them as teachers; suggestions on how cluster subject meetings could be improved; what encouraged or discouraged them to attend cluster subject meetings; and questions on issues that emerged as the interviews progressed. Interviews took approximately 1 hour to 1½ hour. All interviews were tape recorded and the researcher also took field notes.

Face-to-face interviews were also conducted with *ten* principals who had completed the school principal questionnaire. At the beginning of each interview session, the researcher

spent a few minutes establishing rapport to reduce tension and anxiety during the interviews. Confidentiality and anonymity were ensured for all participants. Interviews were conducted in principals' offices during class sessions or breaks. The interviews were conducted as follows: (1) the researcher engaged in guided conversations with school principals in which the researcher asked specific questions as outlined in the interview guide, but the questions for the cluster-centre principals were different from the one for satellite school principals. The researcher asked probing questions on issues that emerged as the interviews progressed; (2) the researcher also engaged in unguided conversations with school principals in which the researcher asked school principals to talk about cluster-based school management reform: what they regarded as important about the reform; their understanding of the reform; what the reform meant to them as school principals; its strengths and weaknesses; their expectations; their suggestions on how to improve the reform; the importance of the reform to teachers and their classroom practices. Interviews took approximately 1 hour to 1½ hours. All interviews were tape recorded and the researcher also took field notes.

Because of time and resource constraints, telephonic interviews were conducted with two circuit inspectors responsible for the three primary school clusters. The researcher followed the same procedures; the researcher asked the inspectors specific questions as reflected in the interview guide, engaged in extensive probing on issues that emerged during the interviews as well as with the inspectors about their opinions about cluster-based school management reform: what they regarded as important; their understanding of the reform; what the reform meant to them as circuit inspectors; its strengths and weaknesses; their expectations; their suggestions on how to improve the reform; the importance of the reform to school principals and teachers. Interviews took place

approximately 1 hour to 1½ hours. The researcher took detailed notes during the telephonic interviews.

After interviews were completed, data were transcribed, checked and confirmed by participants and corrected. Data collected through face-to face interviews and observations were checked and confirmed with participants during the last round visits to cluster centres, while data collected through telephonic interviews were confirmed telephonically.

Focus Groups Discussions

Focus group discussions were conducted with teachers who had completed the lower primary questionnaires. The researcher requested permission from the principals and the teachers to hold group discussions. Group discussions were conducted with a group of 8 to 11 teachers from the same school (under-resourced or resourced school) in the afternoons after school periods. It was ensured that no information was shared from one focus-group session to another session. The teachers were informed that their information would be used, but their anonymity would be protected.

The focus group discussions were based on: the teachers' understanding of the reform; the importance of the reform to them; what they regard as strengths and weaknesses of the reform, their expectations of the reform, the benefits of the reform to their classroom practice and their suggestions on how to improve the reform. The researcher served as a moderator for the discussions. The views of the teachers from resourced and under-resourced were compared and contrasted. The researcher listened carefully to the different views, while trying to probe on certain issues. No attempt was made to interpret

the views of the different groups. The discussions were tape recorded and the field notes were also taken. These focus group discussions lasted for 1 to 1½ hours.

Classroom observations

Before classroom observations began the researcher requested permission from the principals and the teachers to access the classrooms. The teachers were informed that information from classroom observations would be coded and used, but their anonymity would be protected. Eighteen classroom observations were conducted between February and September 2006. The first set of classroom observations took place between 21 February and 10 March 2006; the second set of classroom observations were conducted between 30 May and 9 June 2006; the third set of classroom observations took place on 12 and 13 July 2006 and the fourth set of observations were conducted between 10 and 19 September 2006.

Classroom observations began after the first set of cluster subject meeting observations had been completed. It was planned that classroom observations would take place after the observations of cluster subject meetings in order to collect data on what teachers actually practiced in classrooms in relation to what they discussed during cluster subject meetings. This could not be carried out easily because some cluster subject meetings were cancelled without the knowledge of the researcher.

Classroom observations were carried out in Environmental Studies, Mathematics and Literacy lessons. The focus on the Environmental Studies, Mathematics and Literacy lessons was prompted by survey data and the discussions during cluster subject meetings. The discussions during the first cluster subject observations centred on the teaching of Mathematics, Environmental Studies and Literacy using thematic teaching approaches.

Teachers were keen to learn more about how to teach Mathematics, Environmental Studies and Literacy using thematic teaching approaches. The focus on the three subjects during cluster subject meetings was also highlighted in the survey data.

In order to determine the extent to which teachers' teaching practices related to what teachers discussed during the cluster subject meetings, the classroom observations focused on lessons in the above-mentioned subjects. In particular, classroom observations focused on: 1) teacher interaction with learners; (2) learners' responses to teacher instruction; (3) the use of teaching materials and resources to support learning; (4) teaching strategies teachers use; (5) teachers' skills in responding to learners with different learning difficulties; (6) teachers' skills in assisting learners to make connections between what they know and new material; (7) teachers' skills in engaging learners in higher order thinking; and (8) teachers' skills in assisting learners to see the relationships between different learning areas.

The presence of the researcher in the classrooms did not appear to have any significant influence on teacher behaviour. This is not to say that the presence of the researcher had no influence on teacher behaviour in the classroom. Some teachers observed appeared to be anxious. During classroom observations found herself a place from which she could observe, watched carefully what had happened in the classrooms and jotted down key phrases to help remember afterwards what happened during the class period. When the observation ended, she went to a quiet place and wrote as much as she could remember during the class periods and then reviewed the lesson observation notes using the eight guiding questions in the classroom observation guide.

The influence of the researcher on teacher behaviour in the classrooms was also minimised to a great extent by the researcher's repeated visits to schools. Teachers become familiar with the researcher and felt comfortable with her presence in the classrooms. Observations were conducted in lower primary grades taking forty minutes in single lessons and 1 hour and twenty minutes in double periods. In order to enhance the reliability and validity of the data, repeated classroom observations were carried out, involving eighteen lower primary teachers teaching in six primary schools in the three primary school clusters.

Document Analysis

Document analysis involved analysing policy documents underpinning the design of cluster-based school management reform and the documents produced during the implementation of cluster-based school management reform in schools. Documents were collected from the GTZ offices in the Ministry of Education and during visits to the cluster centres. Permission was requested to use the data in the documents as well as to cite information from them. The documents include the school clustering program document, the Ministry of Education national policy on school clustering, minutes of the meetings of cluster management committees and cluster subject groups, and the training manuals for cluster-centre principals. The researcher reviewed and wrote a summary of each document collected from each site, summarising the importance and the contents of each of document, taking detailed notes of what was documented about the actual implementation of cluster-based school management reform as well as problems and successes recorded during the implementation.

3.6   Data Analysis

The analysis of the data was based on quantitative and qualitative approaches. Quantitative data analysis involved coding of the numerical and non-numerical responses on the data from survey research; and using SPSS software to run frequency procedures for checking data entry errors and making summary statistics of the data and to compute the analysis of variance (ANOVA), a statistical technique for investigating the difference between groups on some dependent variables (Punch, 2005). A one-way analysis of variance examines the relationship between one independent variable and one dependent variable.   Therefore one-way ANOVA was used to determine the relationship between background independent variables and dependent variables as well as to establish the significance of the differences between the group means.

Qualitative data analysis was informed by the Miles and Huberman (1994) framework for qualitative data analysis.   The framework involves three interactive components: data reduction, data display, and drawing and verifying conclusions. In each of the three components, the following two operations: coding and developing propositions were used concurrently (Punch, 2005:199).

During the initial data analysis the researcher focused on summing up a set of field notes drawn from cluster-based subject group meetings observations; lesson observations; informal discussions and preliminary summaries from document analysis, transcribed data from interviews with lower primary teachers; school principals and circuit inspectors, and transcribed data from focus group interviews with lower primary teachers. This was the first-level coding to enable the researcher to summarise segments of data. The following *ten* questions below, which are linked to the study research questions, were used as a

general framework for coding the field notes and transcribed data from each of the three primary school clusters.

What are the characteristics of this primary school cluster? What are the strengths and weaknesses of this primary school cluster? What are the beliefs and views of school principals, circuit inspectors and teachers about the school management reform in this cluster? What explains the degree or absence of the implementation of the school management reform in this cluster? What are teachers' perceptions of change in this cluster? What changes did the cluster-based teacher support strategies bring into the teaching practices of teachers? What are the characteristics of the teaching methodologies of teachers in this cluster?

The analysis of data was based on three levels of coding. The first-level coding (open coding) involved assigning labels against pieces of data in order to attach meaning to the pieces of data and conceptualise the data. The initial data analysis resulted into the *summaries of data* from each of the *three primary school clusters* on: (1) the key characteristics of each cluster, including strengths and problems; (2) the views and beliefs held by different key implementers including strains and difficulties created by the implementation of the school management reform in the cluster; (3) types of teacher support strategies provided to teachers by the school management reform in the cluster and evidence of any change in the teaching practices of teachers; and (4) the characteristics of the teaching methodologies of teachers in the cluster. These summaries guided the researcher to sort and identify similar phrases; patterns and themes that emerged across the three primary school clusters. The first-level coding aimed to identify first-order categories.

The second-level coding (axial coding) focused on developing the first-order categories further into higher-order categories, discovering the connections between the categories in order to produce core categories (Punch, 2005). Thus, the second-level coding involved the researcher sorting and sifting the summaries to identify similar and different phrases; patterns and themes that emerged across the three primary school clusters. The researcher then isolated the tentative patterns, commonalities and differences across the three primary school clusters. These tentative patterns, commonalities and differences were reviewed during each subsequent field visit.

The *first* matrix was created to display a summary of data on how Namibian primary schools responded to the introduction of cluster-based school management reform. It was created to display data on the contextual features and dynamics of each primary school cluster. The matrix was developed to enable the researcher to illuminate the contextual features and dynamics of each cluster, and to make contrasts and cross-case comparisons as well as inferences on how primary school clusters responded to the introduction of cluster-based school management reform and the factors affecting its implementation. A summary of data was entered on the following matrix: the cluster contextual features and dynamics (*see Matrix 1*).

The *second* matrix was created to display a summary of data on teachers' views about the support provided by the school management reform in the three primary school clusters. The summary data on the matrix was compared and contrasted with the data from qualitative evaluation of the classroom observations to enable the researcher makes inferences on the extent to which the school management reform relates to improvements in the teaching practices of teachers. A summary of data was entered on the following matrix: the teachers' perceptions of cluster-based school management teacher support (*see Matrix 2*).

The third level coding (selective coding) focused on finding out the key concepts in the data in order to 'pull out' the central theme(s) in the data. The major themes that emerged from the subsequent reviews of the tentative patterns, commonalities and differences across the three primary school clusters include: (1) cluster contextual features and dynamics, (2) ideology of key role players and (3) teachers' theory of the reform.

In order to draw conclusions on the relationship between cluster-based school management reform and improving teaching, the researcher re-checked the recurring patterns and themes, compared and contrasted data on the major *three* themes. The tentative conclusions were verified through the following two sources of corroboration: triangulation and getting feedback from the informants. The use of different sources of information and methods has an advantage of increasing the credibility of data. In other words, the use of different data collection strategies enables a researcher to: (1) build on the strength of each type of data collection method; (2) use multiple source of evidence; (3) establish a chain of evidence; and (4) promote rigorous inquiry. The use of different data collection strategies during the data collection phase of this study enabled the researcher to obtain data from a multiple sources of information, establish a chain of evidence and engage in a rigorous inquiry, in assessing the relationship between cluster-based school management reform and improving teaching. In sum, triangulation enhances the validity of data and therefore enables the researcher to corroborate data from different sources of evidence.

The conclusions drawn from the interview data were corroborated with the conclusions drawn from observations and document analysis. The researcher also made sure that the summary of conclusions were checked and confirmed by key informants.

3.7   Limitations of the data

The study focused only on primary schools and lower primary teachers; excluding other phases of schooling and limiting the understanding of the implementation of cluster-based school management reform to the primary phase.

The design of this study was not based on experimental design in order to establish a clear cause and effect relationship between cluster-based school management reform and teaching. The study did not have baseline data on the teaching skills of teachers in the three primary school clusters before the implementation of cluster-based school management reform in order to make strong inferences on the extent to which cluster-based school management reform relates to improvements in teaching practices of teachers.

The researcher could not isolate variables/factors such as initiatives and program activities which took place at the same time as the implementation of cluster-based school management reform.

The other shortcoming in the data is that the study could not track changes in teachers' teaching practices systematically due to lack of baseline data, time and resource constraints and intervening variables that could not be controlled.

Classroom observations could not take place after the observations of cluster-based subject groups meetings in order to establish the link between what teachers discussed during cluster-based subject group meetings and what they actually practiced in classrooms, because cluster-based subject meetings were cancelled without the knowledge of the researcher. Insufficient data were collected on cluster-based subject

group meetings because meetings were cancelled or did not take place at all during the time of the study.

**CHAPTER 4:   THE SCHOOL PRINCIPALS AND TEACHERS'
                PERCEPTIONS ON THE IMPLEMENTATION OF
                CLUSTER-BASED SCHOOL MANAGEMENT REFORM**

4.1   Introduction

This chapter discusses the perceptions of school principals and lower primary teachers on the implementation of the goals of cluster-based school management reform. In the analysis of the data, the goals of cluster-based school management were grouped into four areas, namely: promoting stakeholder collaboration through shared collaborative and improved school management through committed and competent leadership in schools; increasing sharing of resources;   enhancing teacher involvement in school decision-making processes; and improving teaching through local teacher development and training, local pedagogical supervision and support, professional collaboration and learning, and breaking the isolation of teachers.

4.2   Promoting stakeholder collaboration and improved school management

Cluster-based school management reform assumes that cluster centre principals support, guide and supervise the satellite school principals; and improve their management practices by working in close collaboration with a well-managed school (cluster centre school).   Cluster-centre principals are required to have skills to manage clusters in a collaborative manner.

Table 2 below shows the frequency and percentage distribution of the extent to which stakeholder collaboration has been promoted though shared and collaborative leadership as reported by the school principals in the thirty seven primary schools:

Item	Ratings							
	To large extent		To some extent		To very limited extent		Never	
School managers, teachers and parent collaboration	8	22%	25	68%	4	10%	0	*0*
Delegation of tasks and responsibilities among satellite schools	10	*27%*	21	57%	5	14%	1	2%
Principals and teachers work as a team	14	*38%*	18	49%	4	11%	1	3%

N=37

Table 2:   Frequency and percentage distribution of principals' perceptions on the extent to stakeholder collaboration has been promoted through shared and collaborative school leadership in thirty seven primary schools.

The responses of the school principals on the extent of collaboration among school managers, teachers and parents; delegation of tasks and responsibilities among satellite schools and principals and teachers work as a team are as follows:

90% of the 37 school principals said that *collaboration among school managers, teachers and parents* was enhanced through cluster-based school management reform to a large extent and to some extent. However, 10% of the 37 respondents reported that collaboration between schools and parents was enhanced to a very limited extent.

84% of the 37 respondents perceived that *tasks and responsibilities were delegated to satellite schools* through cluster-based school management reform to a large extent and to some extent. However, 14% of the 37 respondents reported that tasks and responsibilities were delegated to satellite schools to a very limited extent and only 2% of the respondents reported that tasks and responsibilities were never delegated to satellite schools.

87% of the 37 respondents said that *principals and teachers worked as a team* through cluster-based school management reform to a large extent and to some extent. However, 10% of the 37 respondents reported that principals and teachers worked as a team to a very limited extent, and only 3% of the respondents stated that principals and teachers did not work as a team.

It can be inferred from the perceptions of the school principals stakeholders' participation has been fostered through shared and collaborative leadership during the implementation of cluster-based school management reform. The extent of collaboration among school managers, teachers and parents, between principals and teachers, and delegation of tasks and responsibilities to satellite schools was reported to be great. To determine the relationship between the background independent variables and the dependent variables and to establish the significance of the differences between groups[7], a one-way analysis of variance (ANOVA) was computed.

The results of ANOVA revealed that educational qualifications, $F(1.693)=.188$, $p=.5$; $F(2.614)=.68$, $p=.5$, school geographical location, $F(1.855)=.172$, $p=.5$; $F(5.354=.10$, $p=.5$ and cluster condition, $F(2.456)=.126$, $p=.5$; $F(4.180)=.48$, $p=.5$, were factors influencing the ratings of the school principals on the extent of delegation of tasks and responsibilities among satellite schools, and collaboration between principals and teachers and the differences between groups were statistically significant. The analysis also showed that the above-mentioned factors did not have significant influence on the ratings of the school principals on the extent of collaboration among school managers, teachers and parents.

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[7] Independent variables were categorised in groups as indicated on the questionnaires for both school principals and lower primary teachers

The results of ANOVA also revealed that years of implementation of cluster-based school management, $F_{(1.462)}=.246$, $p=.5$, was a significant factor influencing the ratings of school principals on the extent of school managers, teachers and parent collaboration and the differences between groups were statistically significant.

Table 3 below shows the frequency and percentage distribution on the extent to which cluster-based school management reform promotes stakeholder collaboration through shared and collaborative school leadership as reported by the lower primary teachers in the thirty seven primary schools:

Item	Ratings							
	To large extent		To some extent		To very limited extent		Never	
School managers, teachers and parent collaboration	9	7%	74	57%	32	25%	15	12%
Delegation of tasks and responsibilities among satellite schools	22	17%	65	50%	28	22%	15	12%
Principals and teachers work as a team	56	43%	48	37%	16	12%	10	8%

N=130
Table 3:   *Frequency and percentage distribution of lower primary teachers' perceptions on the extent to which stakeholder collaboration has been promoted through shared and collaborative school leadership in thirty seven primary schools.*

The responses of the lower primary teachers on the extent of collaboration between school managers, teachers and parents; delegation of tasks and responsibilities among satellite schools and principals and teachers work as a team are as follows:

64% of the 130 respondents said that *collaboration between school managers, teachers and parents* was enhanced through cluster-based school management to a large extent and to some extent. However, 25% of the 130 respondents reported that collaboration

between school managers, teachers and parents was enhanced to a very limited extent and 12% of the 130 respondents reported that collaboration between school managers, teachers and parents was never enhanced.

67% of the 130 respondents perceived that *tasks and responsibilities were delegated among satellite schools* through cluster-based school management reform to a large extent and to some extent. However, 22% of the 130 respondents reported that tasks and responsibilities were delegated among satellite schools to a very limited extent and 12% of the 130 respondents reported that tasks and responsibilities were never delegated among satellite schools.

80% of the 130 respondents reported that *principals and teachers worked as a team* through cluster-based school management to large extent and to some extent. However, 12% of the 130 respondents reported that principals and teaches worked as a team to a very limited extent and only 8% of the 130 respondents stated that principals and teachers did not work as a team.

It can be concluded from the data that stakeholder collaboration has been promoted through shared and collaborative leadership and management during the implementation of cluster-based school management. The extent of collaboration between principals and teachers was reported to be greater than collaboration between school managers, teachers and parents; and delegation of tasks and responsibilities among satellite schools.

The results of ANOVA revealed that educational qualifications, $F(1.075)=.372$, $p=.5$; $F(2.294)=.63$, $p=.5$, school geographical location, $F(2.272)=.107$, $p=.5$;$F(2.610)=.77$, $p=.5$, years of implementation of cluster-based school management reform, $F(2.117)=.125$, $p=.5$;

F(1.934)=.149, p=.5 and teacher support, F(2.056)= .154, p=.5; F(4.846)=0.30, p=.5, were factors influencing the ratings of the lower primary teachers on the extent of delegation of tasks and responsibilities among satellite schools and collaboration between principals and teachers and the differences between groups were statistically significant. The analysis revealed also that the above-mentioned independent variables did not have significant influence on the ratings of the lower primary teachers on the extent of collaboration among school managers, teachers and parents.

Overall, educational qualifications, years of implementation of cluster-based school management reform and school geographical location were factors which influenced the ratings of both the school principals and the lower primary teachers on the extent to which shared and collaborative leadership was enhanced through cluster-based school management reform and the differences between groups were statistically significant.

Table 4 below shows the frequency and percentage distribution of the extent to which the school management reform enhances committed and competent leadership through capacity building of the school principals in facilitating and managing change and in collaborative decision-making processes as reported by the school principals in the thirty seven primary schools:

Items	Ratings							
	To large extent		To some extent		To very limited extent		Never	
Preparation of roles and responsibilities in implementing the reform	13	35%	23	62%	1	3%	*0*	*0*
Professional support in facilitating and managing change	12	32%	20	54%	5	14%	*0*	*0*
Trained in collaborative decision-making, problem solving	10	27%	21	57%	4	11%	2	5%

N=37

Table 4:   *Frequency and percentage distribution of principals' perceptions on the extent to which cluster-based school management reform enhances committed and competent leadership through capacity building of the school principals in the thirty seven primary schools.*

The responses of the school principals on the extent of school principal preparation of tasks and responsibilities; professional support in facilitating and managing change and training in collaborative decision-making and problem solving are as follows:

97% of the 37 respondents reported that *principals were prepared for their roles and responsibilities* in implementing the reform to a large extent and to some extent. Only 3% of the 37 respondents reported that principals were prepared for their roles and responsibilities in implementing the school management reform to a very limited extent.

86% of the 37 respondents reported that *principals received training in facilitating and managing change* through cluster-based school management to a large extent and to some extent. However, 14% of the 37 respondents reported that principals did not receive professional support in facilitating and managing change.

84% of the 37 respondents reported that *principals received training in collaborative decision-making and problem-solving* through cluster-based school management reform to a large extent and to some extent. However, 11% of the respondents thought that principals received training in collaborative decision-making and problem-solving to a very limited extent and only 5% of the respondents stated that principals never receive training.

It can be inferred from the perceptions of the school principals that capacity of school principals was built through cluster-based school management reform, and the extent of preparation for roles and responsibilities in the implementation of the reform; training in facilitating and managing change and in collaborative decision-making and problem-solving, according to the data, was great.

The results of ANOVA revealed that educational qualifications, $F(1.515)=229, p=.5$, was a significant factor influencing the ratings of the school principals on the extent of training in collaborative decision-making and problem-solving, while school geographical location, $F(3.062)=.60$, $p=.5$; $F(3.667)=.36$, $p=.5$, and cluster condition, $F(9.699)=.04$, $p=.5$; $F(12.144)=.01$, $p=.5$, were significant factors influencing the ratings of the school principals on the extent of training in facilitating and managing change and in collaborative decision-making and problem-solving and the differences between groups were statistically significant. The analysis also revealed that the above-mentioned background independent variables did not have significant influence on the ratings of the school principals on the extent of school principal preparation for their roles and responsibilities.

Table 5 below shows the frequency and percentage distribution of the extent to which the school management reform enhances committed and competent leadership through capacity building of the school principals in managing change and facilitating collaborative

decision-making and problem solving as reported by the lower primary teachers in the thirty seven primary schools:

Items	Ratings							
	To large extent		To some extent		To very limited extent		Never	
Preparation of roles and responsibilities in implementing the reform	45	35%	52	40%	23	18%	10	8%
Professional support in facilitating and managing change	37	28%	57	44%	22	17%	14	11%
Trained in collaborative decision-making, problem solving	28	21%	62	48%	15	12%	25	19%

N=130

Table 5:   *Frequency and percentage distribution of lower primary teachers' perceptions on the extent to which cluster-based school management reform enhances committed and competent leadership through capacity building of the school principals in thirty seven primary schools.*

The responses of the lower primary teachers on the extent of school principal preparation for roles and responsibilities in the implementation of the reform; training in facilitating and managing change and in collaborative decision-making and problem-solving are as follow:

75% of the 130 respondents reported that *principals were prepared for their roles and responsibilities* to implement the reform to a large extent and to some extent. However, 18% of the 130 respondents said that principals were prepared for their roles and responsibilities to implement the reform to a very limited extent, and only 7% of the respondents reported that principals were not prepared to implement the reform.

72% of the 130 respondents reported that *principals received professional support in facilitating and managing change* through cluster-based school management reform to a large extent and to some extent. However, 17% of the 130 respondents reported that

principals received professional support in facilitating and managing change to a very limited extent and 11% of the 130 respondents reported that principals never received professional support.

69% of the 130 respondents reported that principals received *training in collaborative decision-making and problem-solving* through cluster-based school management reform to a large extent and to some extent. However, 12% of the 130 respondents reported that principals received training in collaborative decision-making and problem solving to a very limited extent and problem-solving and 19% of the 130 respondents perceived that principals did not receive training in collaborative decision-making and problem-solving.

It can be inferred from the data that capacity of school principals was built through cluster-based school management reform and the extent of school principal preparation for roles and responsibilities in the implementation of the reform; training in facilitating and managing change and in collaborative decision-making and problem-solving, according to the data, was great.

The results of ANOVA showed that years of teaching experience, $F_{(1.706)}=.153$, $p=.5$; $F_{(3.187)}=.016$, $p=.5$; $F_{(2.593)}=.040$, $p=.5$, school geographical location, $F_{(1.968)}=.144$, $p=.5$; $F_{(2.458)}=.090$, $p=.5$; $F_{(1.754)}=.177$, $p=.5$, years of implementation of cluster-based school management reform, $F_{(1.676)}=.191$, $p=.5$; $F_{(2.958)}=.56$, $p=.5$; $F_{(1.968)}=.144$, $p=.5$, cluster condition, $F_{(1.909)}=.152$, $p=.5$; $F_{(4.661)}=.011$, $p.5$; $F_{(1.894)}=.155$, $p=.5$, and teacher support, $F_{(7.286)}=.008$, $p=.5$; $F_{(10.770)}=.001$, $p=.5$; $F_{(6.204)}=.14$, $p=.5$, were significant factors influencing the ratings of the lower primary teachers on the extent of school principal preparation for roles and responsibilities in the implementation of the reform; training in facilitating and managing change and in collaborative decision-making and problem-solving and there were significant differences between groups.

Overall, school geographical location and cluster condition were factors influencing the ratings of both the school principals and the lower primary teachers on the extent to which capacity of school principals was built through cluster-based school management reform and the differences between groups were statistically significant.

4.3   Increasing resource sharing

The second argument for school clustering in the Namibian context was to promote resource sharing. The advocates of cluster-based school management reform argue that efficient use of resources would be made if schools share resources. It is argued that through cluster-based school management reform the administrative tasks in circuits would be efficient if coordinated through the cluster centre, therefore saving time and transport costs. It is also assumed that teaching improves when teachers share good teaching practices and teaching resources. Table 6 below shows the frequency and percentage distribution of the extent to which cluster-based school management reform enhances resource sharing as reported by the school principals in the thirty-seven primary schools:

Items	Ratings							
	To large extent		To some extent		To very limited extent		Never	
Teachers share teaching and learning materials	4	11%	23	62%	8	22%	2	5%
Under-resourced schools benefit from resourced schools	2	5%	22	59%	8	22%	4	11%
Cluster-centres equipped with additional facilities	3	8%	18	49%	12	32%	4	11%

N=37

Table 6:   Frequency and percentage distribution of school principals' perceptions on the extent to which cluster-based school reform enhances resource sharing in the thirty seven primary schools.

The responses of the school principals on the extent of teachers sharing teaching and learning materials; under-resourced schools benefiting from resourced schools and the provision of cluster-centres with additional facilities are as follow:

73% of the 37 respondents reported that *teachers shared teaching and learning materials* to a large and some extent through cluster-based school management reform. However, 22% of the respondents said that teachers shared teaching and learning materials to a very limited extent and only 5% reported that teachers never shared teaching and learning materials.

64% of the 37 respondents reported that *under-resourced schools benefited from resourced schools* through cluster-based school management reform to a large extent and to some extent. However, 22% of the respondents said that under-resourced schools benefited from resourced schools to a very limited extent and 11% of the respondents said that under-resourced schools never benefited from resourced-schools.

57% of the 37 respondents reported that *cluster-centres were equipped with additional facilities* through cluster-based school management to a large extent and to some extent. However, 32% of the respondents reported that cluster-centres were equipped with additional facilities to a very limited extent and 11% of the respondents said that cluster-centres were never equipped with additional facilities.

It can be inferred from the data that cluster-based school management reform increased sharing of resources. The extent of teachers sharing teaching and learning materials and under-resourced schools benefiting from resourced-schools, according to the data, was greater than the extent of provision of cluster-centres with additional resources.

The results of ANOVA revealed that school geographical location, $F_{(4.962)}=0.13$, $p=.5$; $F_{(2.518)}=.96$, $p=.5$; $F_{(1.705)}=.197$, $p=.5$, was a significant factor influencing the ratings of the school principals on the extent of teachers sharing teaching and learning materials, under-resourced schools benefiting from resourced-schools and provision of cluster-centres with additional resources and the differences between groups were statistically significant. The analysis also revealed that years of implementation of cluster-based school management reform, $F_{(2.225)}=.124$, $p=.5$; $F_{(1.339)}=.276$, $p=.5$, and cluster condition, $F_{(8.917)}=.005$, $p=.5$; $F_{(9.428)}=.004$, $p=.5$, were significant factors influencing the ratings of the school principals on the extent of teachers sharing teaching and learning materials and provision of cluster-centres with additional resources and the differences between groups were significant. However, these factors did not have significant influence on the ratings of the school principals on the extent of under-resourced schools benefiting from resourced schools.

Table 7 below shows the frequency and percentage distribution of the extent to which cluster-based school management reform resource sharing as reported by the lower primary teachers in the thirty seven primary schools:

Items	Ratings							
	To large extent		To some extent		To very limited extent		Never	
Teachers share teaching and learning materials	17	3%	58	45%	33	25%	22	17%
Under-resourced schools benefit from resourced schools	16	12%	66	51%	30	23%	18	14%
Cluster-centres equipped with additional facilities	25	19%	48	37%	31	24%	26	20%

N=130

Table 7: *Frequency and percentage distribution of teachers' perceptions on the extent to which cluster-based school management reform enhances resource sharing in thirty seven primary schools.*

The responses of the lower primary teachers on the extent of teachers sharing teaching and learning materials; under-resourced schools benefiting from resourced-schools and the provision of cluster-centres with additional facilities are as follow:

58% of the 130 respondents reported that *teachers shared teaching and learning materials* through cluster-based school management reform to a large and some extent. However, 25% of the respondents said that teachers shared teaching and learning materials to a very limited extent and 17% reported that teachers never shared teaching and learning materials.

63% of the 130 respondents reported that *under-resourced schools benefited from resourced-schools* through cluster-based school management reform to a large extent and to some extent. However, 23% of the respondents said that under-resourced schools benefited from resourced-schools to a very limited extent and 14% of the respondents said that under-resourced schools never benefited from resourced-schools.

56% of the 130 respondents reported that *cluster-centres were equipped with additional facilities* through cluster-based school management to a large extent and to some extent. However, 24% of the respondents reported that cluster-centres were equipped with additional facilities to a very limited extent and 20% of the respondents said that cluster-centres were never equipped with additional facilities.

It can be concluded from the data that cluster-based school management reform enhanced resource sharing. The extent of teachers sharing teaching and learning materials; under-resourced schools benefiting from resourced-schools, according to the

data was reported to be greater than the provision of cluster-centres with additional facilities.

The results of ANOVA revealed that educational qualifications, $F_{(1.685)}=.158$, $p=.5$; $F_{(2.345)}=.58$, $p=.5$; $F_{(1.786)}=.136$, $p=.5$; school geographical location, $F_{(1.801)}=.169$, $p=.5$; $F_{(7.422)}=.001$, $p=.5$; $F_{(6.324)}=.002$, $p=.5$, years of implementation of cluster-based school management, $F_{(.687)}=.505$, $p=.5$; $F_{(4.990)}=.008$, $p=.5$; $F_{(1.717)}=.184$, $p=.5$, were significant factors influencing the ratings of the lower primary teachers on the extent of teachers sharing teaching and learning materials; under-resourced schools benefiting from resourced-schools and the provision of cluster-centres with additional facilities and the differences between groups were statistically significant.

Overall, school geographical location and years of implementation of cluster-based school management were factors influencing the ratings of both the school principals and the lower primary teachers on the extent to which resource sharing was enhanced through cluster-based school management reform and the differences between groups were statistically significant.

4.4   Enhancing teacher involvement in school decision-making processes

Teacher involvement in decision-making processes is a key feature of cluster-based school management reform. School clustering emphasises the importance of devolving decision-making to teachers, parents and community, because of the claim that the education system improves by involving those who are closest to schools in decision-making processes. It is assumed that through cluster-based school management reform, teachers are involved in decision-making processes and teachers' knowledge and experience are included in key school decisions.

Table 8 below shows the frequency and distribution of the extent to which teacher participation in school decisions was implemented as reported by the school principals in the thirty-seven primary schools:

Items	Ratings							
	To large extent		To some extent		To very limited extent		Never	
Teacher involvement in decision-making processes	12	32%	20	54%	5	4%	0	0
Teachers' knowledge and experience included in key school decisions	12	32%	21	57%	4	11%	0	0
Teachers and school managers work together for school improvement	16	43%	18	49%	3	8%	0	0

N=37

Table 8:   Frequency and percentage distribution of school principals' perceptions on the extent to which teacher participation in school decisions was implemented through cluster-based school management reform in the thirty-seven primary schools.

The responses of the school principals on the extent of teacher involvement in decision-making processes, teachers' knowledge and experience included in key school decisions and teachers and managers work together for school improvement are as follows:

86% of the 37respondents reported that *teacher involvement in decision making* was implemented through cluster-based school management to a large extent and to some extent. However, 14% of the respondents reported that teacher involvement in decision-making was implemented to a very limited extent.

89% of the 37 respondents reported that *teachers' knowledge and experience* were included in key school decisions through cluster-based school management reform to a large extent and to some extent. However, 11% of the respondents said that teachers' knowledge and experience were included in key school decisions to a very limited extent.

92% of the 37 respondents reported that *teachers and school managers worked together for school improvement* through cluster-based school management reform to a large extent and to some extent. However, 8% of the respondents reported that teachers and school managers worked together for school improvement to a very limited extent.

It can be inferred from the perceptions of the school principals that teachers were involved in decision-making processes through cluster based school management reform. The extent of teacher involvement in decision-making processes, teachers' knowledge and experience being included in key school decisions and teachers and school managers work together for school improvement, according to the data, was great.

The results of ANOVA revealed that years of school management experience, $F_{(1.240)}=.314$, $p=.5$; $F_{(1.667)}=.182$, $p=.5$; $F_{(1.132)}=.359$, $p=.5$, school geographical location, $F_{(2.475)}=.099$, $p=.5$; $F_{(2.325)}=.113$, $p=.5$; $F_{(1.902)}=.165$, $p=.5$, were significant factors influencing the ratings of the school principals on the extent of teacher involvement in decision-making processes, teachers' knowledge and experience being included in key school decisions and teachers and school managers work together for school improvement and the differences between groups were statistically significant.

Table 9 below shows the frequency and percentage distribution of the extent to which teacher participation in school decisions was implemented as reported by the lower primary teachers in the thirty seven primary schools:

Items	Ratings							
	To large extent		To some extent		To very limited extent		Never	
Teacher involvement in decision-making	43	33%	60	46%	22	17%	5	4%
Teachers' knowledge and experience included in key school decisions	35	27%	57	44%	32	25%	6	5%
Teachers and managers work together for school improvement	35	27%	57	44%	35	24%	6	5%

N=130

Table 9: *Frequency and percentage distribution of lower primary teachers' perceptions on the extent to which teacher participation in school decisions was implemented through cluster-based school management reform in the thirty-seven primary schools.*

The responses of the lower primary teachers on the extent of teacher involvement in decision-making processes, teachers' knowledge and experience being included in key school decisions and teachers and school managers work together for school improvement are as follow:

79% of the 130 respondents reported that *teacher involvement in decision making* was implemented through cluster-based school management to a large extent and to some extent. However, 17% of the respondents reported that teacher involvement in decision-making was implemented to a very limited extent and 4% of the respondents said that teacher involvement in decision making was never implemented.

71% of the 130 respondents said that *teachers' knowledge and experience* were included in key school decisions through cluster-based school management reform to a large extent and to some extent. However, 25% of the respondents said that teachers' knowledge and experiences were included in key school decisions to a very limited extent and 5% of the respondents reported that teachers' knowledge and experience were never included in key school decisions.

71% of the 130 respondents said that *teachers and school managers worked together for school improvement* through cluster-based school management reform to a large extent and to some extent. However, 25% of the respondents reported that teachers and school managers worked together for school improvement to a very limited extent and 5% of the respondents reported that teachers and school managers never worked together for school improvement.

It can be inferred from the data that teacher participation in school decisions was implemented through cluster based school management reform. The extent of teacher involvement in decision-making processes, teachers' knowledge and experience being included in key school decisions and teachers and school managers work together for school improvement, according to the data, was great.

The results of ANOVA showed that educational qualifications, F(1.649)=.166, p=.5; F(3.677)=.007, p=.5; F(1.127)=.347, p=.5, years of teaching experience, F(1.980)=.102, p=.5; F(1.365)=.250, p=.5; F(1.074)=.372, p=.5, school geographical location, F(2.893)=.059, p=.5; F(2.381)=.097, p=.5; F(2.005)=.139, p=.5, years of implementation of cluster-based school management reform, F(2.121)=.124, p=.5; F(3.930)=.022, p=.5; F(1.812)=.168, p=.5, and cluster condition, F(1.773)=.174, p=.5; F(1.570)=.212, p=.5; F(1.465)=p=.5, were significant factors influencing the ratings of the lower primary teachers on the extent of teacher involvement in decision-making processes, teachers' knowledge and experiences being included in key school decisions and teachers and school managers work together for school improvement and the differences between groups were statistically significant.

Overall, school geographical location was a factor influencing the ratings of both the school principals and the lower primary teachers on the extent to which teacher

involvement in school decisions was fostered through cluster-based school management reform and the differences between groups were statistically significant.

4.5   Improving teaching

Like other forms of decentralisation reforms, cluster-based school management claims to improve the quality of teaching and learning. Cluster-based school management reform assumes that teaching improves when cluster-centre principals and subject facilitators monitor, supervise and support teachers. The reform also claims that teaching improves when: (1) a professional learning community for teachers is created; (2) there is ongoing support for teachers in learning new forms of pedagogy; (3) isolation of teachers is broken; and (4) schools themselves are the owners of efforts to improve teaching and learning. The school management reform has introduced teacher support strategies such as cluster-based management committees, cluster-based subject groups and cluster subject facilitators.

Table 10 below shows the frequency and percentage distribution of the extent to which cluster-based school management fosters supervision and support as reported by the school principals in the thirty-seven primary schools:

Item	Ratings							
	To large extent		To some extent		To very limited extent		Never	
Cluster-centre principals visit and support satellite schools	3	8%	17	46%	12	32%	5	14%
Cluster subject facilitators supervise and support teachers	1	3%	20	54%	14	38%	2	5%
Schools identify their own training programs	8	22%	21	57%	7	19%	1	3%

N=37

Table 10:   Frequency and percentage distribution of school principals' perceptions on the extent to which cluster-based school management fosters supervision and support in thirty seven primary schools.

The responses of the school principals on the extent of the support of cluster-centre principals and cluster-subject facilitators to schools and teachers and the extent of schools identify their own training programs are as follow:

54% of the 37 respondents reported that *cluster-centre principals* visited and supported satellite schools to a large extent and to some extent. However, 32% of the respondents said that cluster-centre principals visited and supported satellite schools to a very limited extent and 14% of the respondents reported that cluster-centre principals did not visit and support schools.

57% of the 37 respondents said that *cluster subject facilitators* supervised and supported teachers to a large extent and to some extent. However, 38% of the respondents reported that cluster subject facilitators supervised and supported schools to a very limited extent and only 5% of the respondents said that cluster subject facilitators did not supervise and support teachers.

79% of the 37 respondents reported that *schools identified their own training programs* to a large extent and to some extent. However, 19% of the respondents said that schools identified their own training programs to a very limited extent and 3% of the respondents reported that schools did not identify their own training programs.

It can be inferred from the data that cluster-based school management fostered supervision and support to schools and teachers. However, the extent of schools identifying their own training programs, according to the data was greater than the extent of the support of cluster-centre principals and cluster subject facilitators. It seems that the

school principals considered the support within schools to be greater than the one from outside.

The results of ANOVA showed that years of school management experience, $F(1.444)=.242$, $p=.5$, and years of implementation of cluster-based school management reform, $F(2.297)=.116$, $p=.5$, were significant factors influencing the ratings of the school principals on the extent of schools identifying their own training and there were significant differences between groups; while school geographical location, $F(2.119)=.136$, $p=.5$, and cluster condition, $F(2.519)=.121$, were factors influencing the ratings of the school principals on the extent of the support of cluster-centre principals and the differences between groups were significant. The analysis revealed that school geographical location and cluster condition did not have significant influence on the ratings of the school principals on the extent of the support of subject facilitators.

Table 11 below shows the frequency and percentage distribution of lower primary teachers' perceptions on the extent to which cluster-based school management reform fosters supervision and support:

| Items | Ratings | | | | | | | |
	To large extent		To some extent		To very limited extent		Never	
Cluster-centre principals visit and support satellite schools	31	24%	31	24%	33	25%	35	27%
Cluster subject facilitators supervise and support teachers	25	19%	46	35%	44	34%	15	12%
Schools identify their own training programs	41	32%	54	42%	26	20%	9	7%

N=130

Table 11:   *Frequency and percentage distribution of lower primary teachers' perceptions on the extent to which cluster-based school management fosters supervision and support in thirty seven primary schools.*

The responses of the lower primary teachers on the extent of the support of cluster-centre principals and cluster-subject facilitators to schools and teachers and schools identify their own training programs as follow:

48% of the 130 respondents reported that *cluster-centre principals* visited and supported satellite schools to a large extent and to some extent. However, 25% of the respondents said that cluster-centre principals visited and supported satellite schools to a very limited extent and 27% of the respondents reported that cluster-centre principals did not visit and support schools.

54% of the 130 respondents said that *cluster subject facilitators* supervised and supported teachers to a large extent and to some extent. However, 34% of the respondents reported that cluster subject facilitators supervised and supported schools to a very limited extent and 12% of the respondents said that cluster subject facilitators did not supervise and support teachers.

74% of the 130 respondents reported that *schools identified their own training programs* to a large extent and to some extent. However, 20% of the respondents said that schools identified their own training programs to a very limited extent and 7% of the respondents reported that schools did not identify their own training programs.

It can be inferred from the data that cluster-based school management reform fostered supervision and support to schools. The extent of schools identifying their own training programs, according to the data was greater than the extent of the support of cluster-centre principals and cluster subject facilitators. As in the case of the school principals, the

lower primary teachers seem to consider the support within schools to be greater than the one coming from outside.

The results of ANOVA showed that educational qualifications, $F_{(1.420)}=.231$, $p=.5$, was a significant factor influencing the ratings of the lower primary teachers on the extent of the support of cluster-centre principals, while years of teaching experience, $F_{(1.313)}=.269$, $p=.5$; $F_{(1.014)}=.403$, $p=.5$, was a significant factor influencing the ratings of the lower primary teachers on the extent of the support of cluster-centre principals and subject facilitators and there were significant differences between groups. The analysis revealed that the above-mentioned background variables did not have significant influence on the ratings of the lower primary teachers on the extent of schools identifying their own training programs.

The analysis further revealed that school geographical location, $F_{(.653)}=.522$, $p=.5$; $F_{(2.855)}=.061$, $p=.5$; $F_{(3.611)}=.030$, $p=.5$, years of implementation of cluster-based school management reform, $F_{(4.875)}=.009$, $p=.5$; $F_{(1.151)}=.320$, $p=.5$; $F_{(4.436)}=.014$, $p=.5$; cluster condition, $F_{(3.673)}=.028$, $p=.5$; $F_{(5.888)}=.004$, $p=.5$; $F_{(1.739)}=.180$, $p=.5$, and teacher support, $F_{(1.232)}=.269$, $p=.5$; $F_{(6.624)}=.011$, $p=.5$; $F_{(8.981)}=.003$, $p=.5$, were significant factors influencing the ratings of the lower primary teachers on the extent of schools identifying their own training programs, and the support of cluster-centre principals and subject facilitators and there were significant differences between groups.

Overall, school geographical location and years of implementation of cluster-based school management reform were the factors influencing the ratings of both the school principals and the lower primary teachers on the extent to which cluster-based school management

fostered school supervision and support and the differences between groups were statistically significant.

Cluster-based school management reform also assumes that the quality of teaching in schools improves when teachers are provided with opportunities to meet in cluster subject groups to share experiences and skills. It is assumed that subject groups may foster a culture of sharing, professional collaboration and learning; openness and mutual support as well as provides a framework for in-service training and a point of contact for advisory teaching services. Implicit in this assumption is that teachers: (1) value collaborative learning and teamwork; (2) and are competent and have expertise in their subject areas and skills in facilitating, sharing of knowledge and skills.

Table 12 below shows the frequency and percentage distribution of the extent to cluster-based school management fosters localised teacher development as reported by the school principals in the thirty-seven primary schools:

Item	Ratings							
	To large extent		To some extent		To very limited extent		Never	
Teachers learn new teaching skills through cluster meetings	1	3%	19	51%	13	35%	4	11%
Cluster meetings increase teachers' understanding of subject content & methods	2	5%	9	24%	18	49%	8	22%
Follow up support to teachers at classroom level	1	3%	9	24%	13	35%	14	38%

N=37

Table 12:   Frequency and percentage distribution of school principals' perceptions on the extent to which cluster-based school management supports teacher development in thirty seven primary schools.

The responses of the school principals on the extent to which teachers learn new skills through cluster meetings, cluster meetings increase teachers' understanding of subject content and methods, and follow-up support to teachers at classroom level are as follow:

54% of the 37 respondents reported teachers learned *new teaching skills* through cluster meetings to a large extent and to some extent. However, 35% of the respondents said that teachers learned new teaching skills through cluster meetings to a very limited extent and 11% of the respondents reported that teachers did not learn new teaching skills through cluster meetings.

29% of the 37 respondents said that *cluster meetings increased teachers' understanding of subject content and methods* to a large extent and to some extent. However, 49% of the respondents reported that cluster meetings increased teachers' understanding of subject content and methods to a very limited extent and 22% of the respondents said that cluster meetings did not increase teachers' understanding of subject content and methods.

27% of the 37 respondents reported that there was *follow-up support* to teachers at classroom level to a large extent and to some extent. However, 35% of the respondents reported that there was follow-up support to teachers at classroom level to a very limited extent and 38% of the respondents said that there was no follow-up support to teachers at classroom level.

It can be inferred from the data that cluster-based school management fostered localised teacher development. The extent of the support of cluster meetings for teachers to learn new teaching skills, according to the data, was greater than the extent of the support of cluster meetings to increase teachers' understanding of subject content and methods and

the extent of the follow up support to teachers at classroom level. While 35% of the respondents thought that the support of cluster meetings for teachers to learn new teaching skills was minimal, 49% of the school principals reported that the support of cluster meetings for increasing teachers' understanding of content and methods was little and 22% said that cluster meetings did not increase teachers' understanding of content and methods. As far as the follow-up support to teachers at classroom level was concerned, 35% of the school principals thought that follow-up support to teachers at classroom level was minimal, and 38% of the school principals said that there was no follow-up support to teachers at classroom level.

The results of ANOVA showed that educational qualifications, $F(1.127)=.352$, $p=.5$; $F(1.045)=.386$, $p=.5$, was a significant factor influencing the ratings of the school principals on the extent of the support of cluster meetings for teachers to learn new teaching and increase their understanding of content and methods and the differences between groups were significant, while years of school management experience, $F(3.120)=.028$, $p=.5$, was a significant factor influencing the ratings of the school principals on the extent of the support of cluster meetings to increase teachers' understanding of content and methods, and the differences between groups were significant. The analysis also showed that years of implementation of cluster-based school management reform, $F(2.116)=.136$, $p=.5$, was a significant factor influencing the ratings of the school principals on the extent of the follow-up support to teachers at classroom level and the differences between groups were significant.

Table 13 below shows the frequency and percentage distribution of the extent to which cluster-based school management fosters localised teacher development as reported by the lower primary teachers in the thirty seven primary schools:

Items	Ratings							
	To large extent		To some extent		To very limited extent		Never	
Teachers learn new teaching skills during cluster meetings	16	12%	49	38%	17	13%	48	37%
Cluster meetings increase teachers' understanding of subject content & methods	22	17%	42	32%	19	15%	47	36%
Follow up support to teachers at classroom level	19	15%	32	25%	37	28%	42	32%

N=130

Table 13: Frequency and percentage distribution of lower primary teachers' perceptions on the extent to which cluster-based school management supports teacher development in the thirty seven primary schools.

The responses of the lower primary teachers on the extent to which teachers learn new skills through cluster meetings, cluster meetings increase teachers' understanding of subject content and methods, and follow up support to teachers at classroom level are as follow:

50% of the 130 respondents reported teachers learned *new teaching skills* through cluster meetings to a large extent and to some extent. However, 13% of the respondents said that teachers learned new teaching skills through cluster meetings to a very limited extent and 37% of the respondents reported that teachers did not learn new teaching skills through cluster meetings.

49% of the 130 respondents said that *cluster meetings increased teachers' understanding of subject content and methods* to a large extent and to some extent. However, 15% of the respondents reported that cluster meetings increased teachers' understanding of subject content and methods to a very limited extent and 36% of the respondents said that cluster meetings did not increase teachers' understanding of subject content and methods.

40% of the 130 respondents reported that there was *follow-up support* to teachers at classroom level to a large extent and to some extent. However, 28% of the respondents reported that there was follow-up support to teachers at classroom level to a very limited extent and 32% of the respondents said that there was no follow-up support to teachers at classroom level.

It can be inferred from the data that cluster-based school management supported teacher development. The extent of the support of cluster meetings for teachers to learn new teaching skills, increase teachers' understanding of subject content and methods and that of the follow-up support at classroom level, according to the data, was great. However, 37% of the respondents said that teachers did not learn new teaching skills through cluster meetings and 36% of the respondents reported that cluster meetings did not increase teachers' understanding of content and methods, and 32% of respondents reported that there was no follow-up support to teachers at classroom level. It is evident that a number of the lower primary teachers thought that cluster meetings did not provide pedagogical support to teachers. It can be concluded that localised teacher development has little or no influence on improving teaching.

The results of ANOVA showed that educational qualifications, $F_{(2.559)}=.042$, $p=.5$; $F_{(2.194)}=.073$, $p=.5$; $F_{(1.171)}=.327$, $p=.5$, years of teaching experience, $F_{(2.211)}=.071$, $p=.5$; $F_{(2.196)}=.073$, $p=.5$; $F_{(2.483)}=.047$, $p=.5$, school geographical location, $F_{(.785)}=.458$, $p=.5$; $F_{(3.047)}=.051$, $p=.5$; $F_{(1,453)}=.238$, $p=.5$, and years of implementation of cluster-based school management reform, $(F_{(5.469)}=.014$, $p=.5$; $F_{(7.109)}=.001$, $p=.5$; $F_{(3.654)}=.029$, $p=.5$, were significant factors influencing the ratings of the lower primary teachers on the extent of the support of cluster meetings for teachers to

learn new teaching skills, increase their understanding of content and methods and follow-up support to teachers at classroom level and the differences between groups were significant.

Overall, educational qualifications and years of implementation of cluster-based school management reform were factors influencing the ratings of both the school principals and the lower primary teachers on the extent of the support of cluster meetings to teachers improve their teaching practices and the differences between groups were statistically different.

Table 14 below shows the frequency and percentage distribution of the extent to which teachers engage in collective planning activities as reported by the school principals in the thirty seven primary schools:

	Ratings						
Items	**To large extent**		**To some extent**		**To very limited extent**		**Never**	
Teacher collaboration in interpreting syllabi	11	30%	25	67%	1	3%	0	0
Teachers compile common schemes of work	14	38%	20	54%	2	5%	1	3%
Teacher collaboration in designing teaching and learning activities	10	27%	17	46%	10	27%	0	0

N=37

Table 14: *Frequency and percentage distribution of school principals' perceptions on the extent to which teacher collective planning was implemented in thirty seven primary schools.*

The responses of the school principals on the extent of teacher collaboration in interpreting syllabi, compiling common schemes of work and designing teaching and learning activities as follow:

97% of the respondents reported that *teachers collaborated in syllabi interpretation* to a large extent and to some extent, 3% of the respondents said that teachers collaborated in syllabi interpretation to a very limited extent.

92% of the respondents said that *teachers compiled common schemes of work* to a large extent and to some extent, and only 5% of the respondents reported that teachers compiled schemes of work to a very limited extent and only 3% of the respondents said that teachers did not compile common schemes of work.

73% of the respondents reported that *teachers collaborated in designing teaching and learning activities* to a large extent and to some extent. However, 27% of the respondents said that teachers collaborated in designing teaching and learning activities to a very limited extent. It can be inferred from the data that teacher collective planning was implemented through cluster-based school management reform. The extent of teacher collective planning in syllabi interpretation; compiling common schemes of work and in designing teaching and learning activities, according to the data, were great.

The results of ANOVA revealed that years of management experience $F_{(1.949)}=.126$, p=.5; $F_{(1.435)}=.245$, p=.5; $F_{(1.143)}=.354$, p=.5, school geographical location, $F_{(3.189)}=.054$, p=.5; $F_{(2.404)}=.106$, p=.5; $F_{(7.914)}=.002$, p=.5, and cluster condition, $F_{(6.034)}=.019$, p=.5; $F_{(6.217)}=.018)$, p=.5; $F_{(6.624)}=.014$, p=.014, p=.5, were factors influencing the ratings of the school principals on the extent of teacher collective planning

in syllabi interpretation; compiling common schemes of work and in designing teaching and learning activities and there were significant differences between groups.

Table 15 shows the frequency and distribution of the lower primary teachers' perceptions on the extent to which teacher collective planning was implemented in thirty seven primary schools:

Items	Ratings							
	To large extent		To some extent		To very limited extent		Never	
Teacher collaboration in interpreting syllabi	42	32%	52	40%	20	15%	16	13%
Teachers compile common schemes of work	47	36%	47	36%	23	18%	13	10%
Teacher collaboration in designing teaching and learning activities	43	33%	48	37%	31	24%	8	6%

N=130

Table 15: *Frequency and percentage distribution of lower primary teachers' perceptions on the extent to which teacher collective planning was implemented in thirty seven primary schools.*

The responses of the lower primary teachers on the extent of teacher collective planning in interpreting syllabi, compiling common schemes of work and designing teaching and learning activities are as follow:

72% of the respondents reported that *teachers collaborated in syllabi interpretation* to a large extent and to some extent. However, 15% of the respondents said that teachers collaborated in syllabi interpretation to a very limited extent and 13% of the respondents reported that teachers did not collaborate in syllabi interpretation.

72% of the respondents said that *teachers compiled common schemes of work* to a large extent and to some extent. However, 18% of the respondents reported that teachers compiled schemes of work to a very limited extent and 10% of the respondents said that teachers did not compile common schemes of work.

70% of the respondents reported that *teachers collaborated in designing teaching and learning activities* to a large extent and to some extent. However, 24% of the respondents said that teachers collaborated in designing teaching and learning activities to a very limited extent and only 6% of the respondents reported that teachers did not collaborate in designing teaching and learning activities.

It can be inferred from the lower primary teachers' perceptions that teacher collective planning was implemented through cluster-based school management reform. The extent of teacher collective planning in syllabi interpretation; compiling common schemes of work, and in designing teaching and learning activities, according to the data, was great.

The results of ANOVA showed that school geographical location, $F(1.129)=.326$, $p=.5$; $F(1.584)=.209)$, $p=.5$; $F(2.304)=.104$, $p=.5$, and cluster condition, $F(3.937)=.022$, $p=.5$; $F(1.916)=.151$, $p=.5$;$F(2.289)=.001$, $p=.5$, were significant factors influencing the differences in the ratings of the lower primary teachers on the extent of teacher collective planning in syllabi interpretation; compiling common schemes of work, and in designing teaching and learning activities and there were significant differences between groups.

Overall, school geographical location and cluster condition were factors influencing the ratings of both the school principals and the lower primary teachers on the extent to which

collective planning was enhanced through cluster-based school management reform and the differences between groups were statistically significant.

Table 16 below shows the frequency and percentage distribution of perceptions of the school principals on the extent to which teacher collegiality was implemented in the thirty seven primary schools:

Items	Ratings							
	To large extent		To some extent		To very limited extent		Never	
Teachers work in a supportive environment	5	14%	26	70%	6	16%	0	0
Teachers share ideas and are open to one another	11	30%	21	57%	5	14%	0	0
Teachers' morale and confidence in teaching is boosted as they work together with colleagues	9	24%	20	54%	8	22%	0	0

N=37

Table 16: *Frequency and percentage distribution of the school principals' perceptions on the extent to which teacher collegiality was implemented in thirty seven primary schools.*

The responses of the school principals on the extent of teachers working in a supportive environment, sharing ideas and teachers' moral and confidence in teaching being boosted through cluster-based school management reform are as follow:

84% of the respondents reported that teachers worked in a supportive environment to a large extent and some extent. However, 16% of the respondents said that teachers worked in a supportive environment to a very limited extent.

87% of the respondents said that teachers shared ideas and were open to one another to a large extent and some extent. However, 14% of the respondents reported that teachers shared ideas and were open to one another to a very limited extent.

78% of the respondents reported that teachers' morale and confidence in teaching was boosted as they worked together with colleagues to a large extent and to some extent. However, 22% of the respondents reported that teachers' morale and confidence in teaching was boosted as they worked together with colleagues to a very limited extent.

It can be inferred from the data that teacher collegiality was implemented through cluster-based school management reform. The extent of teachers working in a supportive environment, sharing idea and teachers' moral and confidence in teaching being boosted, according to the data, was great.

The results of ANOVA showed that school geographical location, $F_{(3.146)}=.056$, $p=.5$; $F_{(1.484)}=.241$, $p=.5$; $F_{(4.962)}=.013$, $p=.5$, cluster condition, $F_{(12.750)}=.001$, $p=.5$; $F_{(4.638)}=.038$, $p=.5$; $F_{(8.917)}=.005$, $p=.5$, and teacher support, $F_{(1.505)}=.236$, $p=.5$; $F_{(1.973)}=.155$, $p=.5$; $F_{(2.225)}=.124$, $p=.5$, were significant factors influencing the ratings of the school principals on the extent of teachers working in a supportive environment, sharing idea and teachers' moral and confidence in teaching being boosted and there were significant differences between groups.

Table 17 below shows the frequency and distribution of the perceptions of lower primary teachers on the extent to which teacher collegiality was implemented in the thirty seven primary schools:

Items	Ratings							
	To large extent		To some extent		To very limited extent		Never	
Teachers work in a supportive environment	32	25%	69	53%	18	14%	11	8%
Teachers share ideas and are open to one another	59	45%	48	37%	12	9%	11	8%
Teachers' morale and confidence in teaching is boosted as they work together with colleagues	41	32%	60	46%	14	11%	15	12%

N=130

Table 17: Frequency and percentage distribution of the lower primary teachers' perceptions on the extent to which teacher collegiality was implemented in thirty seven primary schools.

The responses of the lower primary teachers on the extent of teachers working in a supportive environment, sharing ideas and teachers' moral and confidence in teaching being boosted through cluster-based school management reform are as follow:

78% of the respondents reported that teachers worked in a supportive environment to a large extent and some extent. However, 14% of the respondents said that teachers worked in a supportive environment to a very limited extent and 8% of the respondents reported that teachers did not work in a supportive environment.

82% of the respondents said that teachers shared ideas and were open to one another to a large extent and some extent. However, 9% of the respondents reported that teachers shared ideas and were open to one another to a very limited extent and only 8% of the respondents reported that teachers did not share ideas and were not open to one another.

78% of the respondents reported that teachers' morale and confidence in teaching was boosted as they worked together with colleagues to a large extent and to some extent.

However, 11% of the respondents reported that teachers' morale and confidence in teaching was boosted as they worked together with colleagues to a very limited extent and 12% of the respondents reported that teachers' morale and confidence in teaching was not boosted.

It can be concluded from the perceptions of teachers that teacher collegiality was implemented through cluster-based school management reform. The extent of teachers work in a supportive environment, share ideas and are open to one another and teachers' moral and confidence in teaching being boosted as they work together with colleagues, according to the data, was great.

The results of ANOVA showed that educational qualifications, $F_{(3.473)}=.010$, $p=.5$; $F_{(2.814)}=.028$, $p=.5$; $F_{(1.685)}=.158$, $p=.5$, school geographical location, $F_{(4.468)}=.013$, $p=.5$; $F_{(5.442)}=.005$, $p=.5$; $F_{(1.801)}=.169$, $p=.5$, and cluster condition, $F_{(6.970)}=.001$, $p=.5$; $F_{(5.311)}=.006)$, $p=.5$;$F_{(4.643)}=.011$, $p=.5$, were significant factors influencing the ratings of the lower primary teachers on the extent of teachers work in a supportive environment, share ideas and are open to one another and teachers' moral and confidence in teaching being boosted as they work together with colleagues and there were significant differences between groups.

Overall, school geographical location and cluster condition were factors influencing the ratings of both the school principals and the lower primary teachers on the extent to which teacher collegiality was fostered through cluster-based school management reform and the differences between groups were statistically significant.

4.6   Conclusion

Drawing on the perceptions of the school principals and the lower primary teachers, it can be concluded that the goals of cluster-based school management reform were implemented in the sampled primary schools. The data revealed that the goals of improving stakeholder collaboration through shared collaborative leadership and management, promoting improving school management through competent leadership, teacher involvement in decision making and resource sharing. The data revealed that cluster-based school management fostered professional collaboration and learning, broke the isolation of teachers and that local school supervision and support was provided to schools and teachers. Although the data revealed that localised teacher development and training through cluster meetings was provided to teachers, it appeared that cluster meetings had little or no influence on improving teachers' understanding of content and methods as well as improving their teaching skills. The data also revealed that follow up support to teachers at classroom level had been insufficient or non-existent. The evidence from the survey research indicates that the relationship between cluster-based school management reform and improving teaching is poorly discernible.

The data revealed that there were variations in the perceptions of the school principals and the lower primary teachers on the implementation of school management reform in the sampled primary schools. The data also revealed that the school principals as well as the lower primary teachers rated various dependent variables differently. For example, the ratings of the school principals and the lower primary teachers on stakeholder collaboration, teacher involvement in decision-making, teacher collegiality and teacher collective planning were higher than the ratings on the support of cluster meetings. It

seems 'political' objectives of the reform have been achieved more adequately than pedagogical objectives.

The analysis of variance revealed that school geographical location was the most influential factor on the ratings of both the school principals and the lower primary teachers on the extent to which the goals of cluster-based school management reform were implemented and the differences between groups were statistically significant.

The data in this chapter were drawn exclusively on survey research. Survey, however are flawed in relying too much on opinion-based data such as user perspectives which, while they may be useful in gaining first-hand accounts of 'what works', are also limiting by not providing in-depth understanding of the implementation of the school management reform, contextual realities and how it was constrained or ignored. The following four chapters present data drawn from qualitative methodologies and therefore illuminate how schools respond to the introduction of the school management reform and the extent to which the findings from the implementation of the reform explain the relationship between the school management reform and improving teaching.

CHAPTER 5: HOW DID CLUSTER CONTEXTUAL FEATURES AND DYNAMICS SHAPE THE IMPLEMENTATION OF THE REFORM?

5.1   Introduction

In answer to the second question posed in this research, this chapter presents the detailed descriptions of each cluster's contextual features and dynamics, and how these features and dynamics shape the implementation of the school management reform. The chapter discusses how the reform goals of promoting democratic participation, collaboration and equitable distribution of resources have been implemented in the three primary school clusters as well as the relationship between the school management reform and teaching.

5.2   How did primary school clusters respond to cluster-based school management?

5.2.1   Makalani cluster

This is a rich urban cluster consisting of eight primary schools with strong leadership, qualified and experienced teachers. Six out of the eight schools are resourced schools and only two are under-resourced. As mentioned previously, this cluster is selected to bring to the study an in-depth understanding of how schools in a rich cluster receive and deliver cluster-based school management reform as well as how the resourced schools support the under-resourced schools as per intentions of the school management reform. The case study was also selected to assess the extent to which cluster-based school management reform implemented within the context of a rich urban cluster relate to improvements in the teaching practices of teachers.

Most of the schools are located in town, except one which is situated outside the town. The school buildings are in good conditions. All schools have high enrollment rates. The cluster centre is built on the premises of the circuit offices and is close to the Teachers'

Resource Centre (TRC). Some of the schools are situated within walking distance of the circuit offices and the TRC. Teachers and learners in the cluster have access to the TRC which has a library; reading room; big photocopier machine; four computers; study room and working rooms for teachers.

Socio-economic and cultural backgrounds

The cluster is located in a small town, which is characterised by outward looking economy. The economic activities in and around this town include bricklaying, carpentry, trading and farming. The town provides the following services: transport, communication and health services. It also has two supermarkets and some general dealers, accommodation and banking facilities. The socio-economic background of teachers and learners in some schools ranges from middle-income groups to very low income groups. Some of the learners in this cluster are from family backgrounds of artisans such as bricklaying, carpentry, electricians, while other learners come from families who farm for a living.

Some of the schools in the cluster are located in the same cultural (ethnic) communities; two schools are located in mixed cultural backgrounds. The majority of teachers and learners in the cluster come from predominantly one language and cultural background. The language, which is dominant in these communities, is Afrikaans. However, some learners come from the following different language backgrounds: *Otjiherero*, Oshiwambo and Khoekhoegowab. Afrikaans is the medium of instruction in the lower primary phase in all except one school.

Teaching and learning environments

School and classroom conditions

As indicated earlier, six of the eight schools are resourced schools. The resourced schools are quite big primary schools, but the school which is headed by the cluster-centre principal is bigger and better-resourced than the other resourced schools. The physical conditions of the classrooms at the resourced schools are good and neat. There is a library at each of the resourced schools. Classrooms are big, with enough space to store teaching materials and learners can move about easily. The class size ranges from 30 to 35 learners. There are enough cupboards for keeping teaching materials. Classrooms are full of teaching materials such as posters, books, puppet containers and flashcards. Each learner has a workbook for reading and mathematics exercises. There are enough textbooks for learners.

The physical conditions of some classrooms at the two under-resourced schools are good, but need renovations. There are no libraries at the under-resourced schools. The classrooms are small with limited space to store teaching materials and for learners to move. The class size ranges from 38 to 40 learners. Classrooms are decorated with teaching materials, but there are few cupboards for keeping teaching materials. Each learner has a workbook for reading and mathematics exercises. There are some collections of teaching materials, but fewer than at the resourced schools. The textbooks are not enough for all learners. Most of the schools and classroom conditions in this cluster indicate that they are conducive to teaching and learning. The class size is reasonable.

Organisational and implementation arrangements

Inspectors of education are the main facilitators for the implementation of the school management reform at the cluster level. Circuit inspectors being at the middle management level, immediately in charge of clusters are expected to play an important role in supporting the implementation of cluster-based school management reform. Circuit inspectors are supposed to manage cluster centres in collaboration with cluster centre principals and cluster management committees. The circuit management committee is the management structure, consisting of circuit inspector and cluster-centre principals, which is responsible for supervising and monitoring cluster activities at the circuit office level.

However, in this cluster the circuit management committee had not been established. Makalani cluster represents a less supportive context for the implementation of the school management reform. The inspector of the circuit in which Makalani cluster located, took an 'ease off' approach in the way in which he facilitated the implementation process (Miles and Huberman, 1994). He knew what was expected of him, but he did not do much to facilitate the implementation of the cluster system:

> '*I was supposed to head the circuit management committee; work together with the cluster-centre principal….. for example to identify training needs in the cluster; involve in the establishment of the subject groups, because of my workload, I couldn't do that….the system is not really effectively as it is supposed to be' (*Inspector of education).

The inspector ignored his responsibility as a facilitator for the implementation of the school management reform in his circuit. He perceived the reform as interfering with his other roles and responsibilities as a circuit inspector.

The circuit inspector has a reserved attitude towards the school management reform. He indicated that there was no need for cluster-based school management reform if schools have strong leadership and qualified and experienced teachers. He argues that in the rural

areas and where schools are isolated and far from the circuit offices, cluster centres 'are distributing and collecting points'. He also argues that in towns, especially in a situation where all the schools in the cluster have good facilities and are well managed, the need for the cluster system is minimal: '*schools call the circuit office directly if they experience a problem, they can easily pick up and collect things from the circuit office.*'

The inspector argues that cluster-based school management reform becomes insignificant if schools are already self-sufficient and have easy and direct access to resources. He therefore further argues that there was no need for cluster-based school management reform to be introduced in Makalani cluster: '*the schools have strong leadership, and are more or less on par, the clustering may not work properly; schools can come to the circuit if they need information or need to submit something to the circuit office*'.

The inspector does not believe in delegating his responsibilities to cluster-centre principals, because he still believes that he has the responsibility to supervise and support schools.

The inspector influenced the way the schools implemented the school management reform. At the cluster level, the cluster management committee is the management structure which is responsible for managing, supervising and monitoring the cluster activities. The cluster management committee consists of cluster-centre principal, satellite school principals and head teachers as co-opted members. However, in this cluster the management structure was established informally. The school principals resisted the appointment of a cluster centre and cluster-centre principal: '*it was not easy to appoint a cluster centre and cluster-centre principal for the schools in this town because the leadership and school resources are more or less on par*' (Inspector of education).

School principals were not prepared to give up their authority and to be under the authority of another principal. In order to deal with this challenge cluster rotational leadership was introduced and the cluster centre was built on the premises of the circuit office and not on the premises of a school.

The cluster lacks a definite structure, the cluster management committee meets when needs arise:

> …'.we act on ad hoc basis….there is no plan of action or year plan. There is a management committee….but we work informal…when there is something that needs to be discussed, me and the other cluster-centre principal and the secretary meets, plan and set up an agenda and other principals just attend the meeting' (current cluster-centre principal).

The cluster-centre principal still believes in hierarchical bureaucratic approaches to management as opposed to participatory approaches. The satellite school principals are not involved in the planning of cluster meetings.

In this cluster teachers are also not involved in the activities of the cluster and therefore do not have enough information on how cluster-based school management reform works: 'the CCP and my principal do not manage the cluster together… I know there is a cluster management committee…. but I don't have any idea what they discuss in meetings' (a teacher from one of the resourced schools).

The other structure that is supposed to coordinate activities at the cluster level is the cluster-based subject groups. In this cluster, although the cluster-based subject groups are established, this structure also lacks proper operational strategy and therefore is not also working well:

> ….cluster groups are established… but don't operate effectively and regularly '

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'Cluster meetings should take place more regularly and subject facilitators must be knowledgeable to help us learn more…we need to understand how we can implement the new syllabus in our classrooms' (a teacher from one of the under-resourced school).

The reason why cluster-based subject groups do not have clear operational strategies can be explained by the fact that the cluster does not have proper management structure in place, because both the inspector and the cluster-centre principal lack commitment to the school management reform. Lack of clear operational strategies can also be explained by the fact that the school principals and teachers view the school management reform as not having a significant role in their practices. The schools in this cluster feel self-sufficient and therefore do not see the purpose of cluster-based school management reform.

It is evident that the school management reform was not implemented successfully in this cluster. The inspector did not facilitate the implementation of the reform because he did not see the need for the school clustering system due to the fact that the schools in the cluster have resources, strong leadership and have easy access to other resources. His attitude towards the school management reform has influenced the way in which the schools have responded to the reform. As indicated above, the schools resisted the appointment of the cluster-centre principal, because the school principals did not want to accept the authority of the other principal. The cluster established informal management structures and the cluster-based subject groups lack operational strategy.

Institutional commitment

This sub-section discusses the commitment of the cluster to implement the school management reform. As already indicated, the structure for implementing the school reform was established informally and there was little commitment on the part of the managers responsible for implementing the reform. Commitment to education

decentralisation initiatives is identified as one of the conditions for successful implementation of decentralisation reforms in developing countries (Pellini, 2005).

As shown in the previous sub-section, the circuit inspector and the schools showed little or no commitment towards the school management reform. One needs to understand whether lack of commitment to the reform has resulted from lack of understanding of the reform or whether the cluster has decided to ignore the reform because the circuit inspector and schools have perceived that the management reform as a threat to their autonomy.

Both the cluster-centre principal and satellite school principals in this cluster pointed out that (since the inception of the cluster-based school management reform) the roles and responsibilities of the cluster-centre principal and satellite school principals were not clearly defined: '*we need to be clear about what we should do, what are roles and responsibilities in the cluster; the roles and responsibilities of the CCP' (a* satellite school principal*)*.

The cluster-centre principal indicated that he did not understand what was expected from him as a person who was expected to manage the cluster in a collaborative manner. In his own words, he indicated that there was a need for the training of both cluster-centre principal and satellite school principals in order to understand the expectations of the management reform:

> ….'*there is need for proper training on roles and responsibilities of satellite principals and cluster-centre principals in the cluster system and how the cluster is really supposed to work, I don't think I have the authority to identify and deal with problems of other schools'* (cluster-centre principal).

It is clear from the words of the cluster-centre principal that he did not understand the school management reform as well as the level of authority he was supposed to have over other schools since his status as a cluster-centre principal was not clearly defined. Understanding of the school management reform is essential to the implementation of the reform. One of the satellite school principals expressed this sentiment clearly:

> …'*the former cluster-centre principal seemed to have some clarity on how to manage the cluster; the cluster activities were planned and well organised, each school principal was given responsibilities in the cluster, we got guidelines from him, he explained to us what each one of us was supposed to do; but this stopped….the current one does not really have clarity on how to manage the cluster; there is no planning, we just attend to issues'* (one of the satellite school principals).

The words of satellite school principals confirms that without deep understanding of the change, the key implementers are likely not to have commitment to implement it successfully.

One could argue that school principals may loose commitment to implement change, because the school management reform was implemented with little consistent support. The school principals clearly pointed out that cluster-centre principals were expected to implement the reform without support:

> '*The authority acknowledges that we are not up-to-date with the cluster system; we just operate on our own way*' (cluster centre principal).
>
> '*I was not formally trained as cluster-centre principal; I was led by my own experiences*' (former cluster-centre principal).
>
> '*Cluster-centre principals are appointed, but were not provided any support; they are just left on their own*' (one of the satellite school principals).

Clearly, the school management reform was introduced with little or no support provided to the key implementers. School principals could not be expected to undertake new

challenges and practices if their capacity and commitment was never developed and therefore the school principals might choose to ignore the implementation of the reform.

Though the school principals in this cluster feel adequate, it becomes evident that they, like other principals in the other two clusters, do have a clear understanding of how cluster-based school management reform is supposed to work.

Institutional responses to school management reform

Transfer of power and authority to cluster level

The inspector in this cluster believes that he has the full authority to manage schools; school principals have to report directly to him and cannot delegate the responsibilities of his office to the cluster centre principal:

> *'I feel that I have to do what I am supposed to do….. I cannot delegate my tasks and responsibilities to the cluster centre principal…. and I don't feel comfortable for a cluster centre principal to act on my behalf….she or he has to be at his school'* (Inspector of education*).*

In this cluster, the inspector perceived that the reform interfered with his roles and responsibilities as a circuit inspector. He perceived the school management reform as a threat to his power and authority over schools. From the inspector's point of view, the cluster-centre principal does not have a different status from other school principals. According to the inspector, the cluster-centre principal's primary responsibility is to manage his school like other school principals.

The transfer of authority and power to cluster level received resistance from school principals. The school principals resisted the appointment of a cluster-centre principal and were not prepared to give up their authority and to be under the authority of another principal: '*school principals were reluctant to accept the authority of another*

*principal….there was strong competition among the schools in the cluster and the schools did not cooperate effectively' (*circuit inspector).

The school principals in this cluster also responded in the same way as the circuit inspector. They resisted the appointment of the cluster-centre principal because they perceived the school management reform as a threat to their identities as school principals as well as disturbing their institutional organisational culture.

Resource sharing

The school management reform advocates that resourced and under-resourced schools should share resources; in this way, resources are better utilised. The resourced schools perceived the reform as a threat to their resources. They felt self-sufficient and were concerned about extra burden that would be placed on the resources of their schools. The under-resourced schools were positive about the school clustering system and regarded the system as a means for upgrading the standards of their schools.

The resourced schools came up with strategies to protect their resources. The schools avoided being involved in the administrative tasks of cluster activities. The Teachers' Resource Centre was made responsible for running the administrative duties of the cluster activities such as copying and distribution of the minutes of cluster meetings, and coordination of cluster meetings for various cluster-based subject groups.

There is no collaboration among school principals. Schools operate by themselves, they feel self-sufficient, and there is no need to get support from other schools. The schools used to compete with each other and therefore find it difficult to cooperate. The following

extract from the transcripts of the interviews with the circuit inspector, describe the relationship among the schools in the cluster:

> …'the system in this cluster is not working properly. I don't know….. attitudes may be?....there is a strong competition between schools…the schools find it difficult to cooperate…you know.. .all most of all schools in this town are on par in terms of strong leadership and resources' (Inspector of education).

The teachers from the resourced schools do not value the idea of sharing information at cluster-based subject group meetings, because they argue that schools have different circumstances. The teachers feel adequate, because they have experiences and skills in lower primary phase: 'schools have different conditions, different textbooks and different teaching materials… we are force to go to meetings…..we are forced to communicate… we have experience and skills to teach lower primary' (a teacher from one of the resourced schools).

Like in the case of school principals in the resourced schools, the culture of mutual support and collegiality was little or absent in teachers in the resourced schools. The teachers from resourced schools were reluctant to share ideas and resources with other teachers because the felt that they were self-sufficient. Teachers from under-resourced schools perceived the reform as a means to learn from teachers in the resourced schools, but lost confidence in the school management reform because no improvement was done at the schools: 'it doesn't help to go to meetings if classroom conditions stay the same, you go to a meeting …you discuss good ideas….. but when you come back to your classrooms…you have different situations' (a teacher from an under-resourced school).

One can argue that although under-resourced schools embraced the reform, the fact that the reform did not provide additional resources to their schools, they lost confidence in the reform.

Case study conclusions

The response of this cluster to the implementation of cluster-based school management reform has not been positive. The cluster resisted the implementation of the school management reform because it was perceived as a threat to its existing tradition and culture in schools. The circuit inspector resisted the school management reform because he perceived it as a threat to his power and authority over schools. The school principals also resisted the school management reform because they perceived the reform a threat to their power over their schools. The resource schools did not accept the reform because they perceived it as a threat to their resources. The resourced schools felt self-sufficient and resisted working together with under-resourced schools. The schools in this cluster are competitive and lack a spirit of collaboration and cooperation.

Makalani cluster as a rich urban cluster, with strong leadership, qualified and experienced teachers find it difficult to work within the framework of collaboration and mutual support. This case study demonstrates clearly that competitiveness and individualism are incongruent with the theory of cluster-based school management reform and therefore hamper the spirit of mutual support and cooperation. The case study also demonstrates that although the majority of the schools in this cluster have resources, strong leadership, qualified and experienced teachers, and under-resourced schools could not get support from the resourced schools, because resourced schools do not value mutual support and collegiality. Chapter 6 elaborates more on how the ideologies of competitiveness and individualism impede the implementation of cluster-based school management reform.

The school principals lacked understanding of their roles and responsibilities in the school management reform as well as commitment to the change. It is evident from this case

study that this cluster feels self-sufficient and regards cluster-based school management reform as being insignificant to their context.

It is clear from this case study that there is sufficient evidence to draw conclusions that the school management reform has not been successfully implemented in this cluster. It is also clear that there is not sufficient evidence to draw conclusions that the school management reform relates to teaching, because: (1) schools in this cluster have contested authority, power and resources and there was no attempt to come up with strategies to improve the teaching practices of teachers; (2) teacher support structures such as cluster-based subject groups lack operational strategies to improve the teaching practices of the teachers; and (3) no additional resources were provided to under-resourced schools to improve the teaching practices of teachers.

5.2.2 Hendrich Cluster

This is a poor urban cluster consisting of five primary schools. The cluster has only one school, which is resourced with strong leadership, qualified and experienced teachers, while other schools do not have strong leadership, some teachers are qualified and experienced, while others are less qualified, but have ten or more years of teaching experience. The cluster centre is the school which has better facilities and resources than other primary schools. The school buildings of the cluster centre are in better conditions in relation to school buildings of the under-resourced schools. The cluster-centre principal is appointed on a permanent basis. As mentioned previously, this cluster was selected to bring to the study an in-depth understanding of how schools in a cluster with only one resourced school, receive and deliver cluster-based school management reform. The cluster was also selected to assess the extent to which cluster-based school management reform implemented in this context relate to improvements in the teaching practices of teachers.

The cluster centre is situated in a close proximity to the Education Centre, which houses the Teachers' Resource Centre, the Circuit Inspector's office and Community Library. Teachers and learners in the cluster have access to the community library, which has children books, few copies of school textbooks and reading books. The TRC is recently built and has a computer lab, which is heavily used by the TRC staff. The under-resourced schools are located in the township separated from the resourced school by a river and railway. The teachers and learners in the under-resourced schools have to travel about 7km to access resources at the community library and the cluster centre.

Socio-economic and cultural backgrounds

The cluster is located in a small town characterised by inward looking economy. Teachers and learners come from socio-economic backgrounds ranging from middle income to very low/no income groups. The economy depends on small-scale tourism and has very limited trading shops to cater for surrounding commercial farms. The town provides the following services: transport, communication and health services. It also has one supermarket and some general dealers, accommodation and banking facilities.

Schools are located in different cultural (ethnic) backgrounds, with one or two dominant languages. Teachers and learners in the cluster come from different language backgrounds, which include Otjiherero; Oshiwambo; Khoekhoegowab; German and Afrikaans. English is the medium of instruction as from Grade 1.

Teaching and learning environments

The physical conditions of some classrooms at the under-resourced schools are good, but need some renovations. All schools in the cluster have high enrollment rates. One of the

under-resourced schools has double shifts. The class size ranges from 38 to 42 learners. There are no libraries at the under-resourced schools. Classrooms are decorated with pictures and there are cupboards for keeping teaching materials. Each learner has a workbook for reading and mathematics exercises.

The resourced school which is the cluster centre is a big primary school. The physical conditions of the classrooms at the resourced school are good and neat. There is a library and a conference room. The school also has two photocopier machines. Classrooms are big, with enough space for learners to move. The class size ranges from 30 to 35 learners. The classrooms are decorated with posters and pictures. There are cupboards for keeping teaching materials. Classrooms are full of teaching materials such as posters, books, puppet containers and materials from the surrounding environment.

Organisational and implementation arrangements

Hendrich cluster represents a supportive context for implementing the school management reform. The inspector is a strong advocate of cluster-based school management reform and embraced the delegation of authority to clusters. Unlike Makalani cluster, there is a circuit management committee under the leadership of the circuit inspector in this cluster, which is responsible for providing guidance to cluster-centre principals regarding the management of clusters. The inspector is excited about the reform and her level of commitment is remarkable. She was instrumental in the implementation of the school management reform and being a strong advocate of the school management reform influenced the way schools received the school management reform.

In this cluster the cluster management committee that is supposed to be responsible for managing, supervising and monitoring the cluster activities is established. The cluster

management committee consists of school principals, heads of departments and subject convenors from different schools under the leadership of cluster-centre principal. Parents are not members of the management committee. In this cluster, the cluster management committee meets twice a term under the leadership of the cluster-centre principal. The committee meets always after the meetings of subject groups in order to get feedback from cluster-subject meetings. Unlike Makalani cluster, this cluster has a year program for cluster activities. All cluster activities including cluster management committee meetings are scheduled in the cluster year program. The year program shows that all the major administrative activities, which take place in various schools, are coordinated by the cluster-centre principal and not by the cluster management committee.

Like in the case of Makalani cluster, various cluster-based subject groups for primary and lower primary phases were set up to develop common schemes of work; set question papers and enable teachers to come together and share ideas and problems. The cluster-based subject committees meet twice a term under the leadership of the subject convenors. Subject group meetings are held before the cluster management committee meetings. All the cluster subject committee meetings are scheduled in the cluster year program. Unlike the case of Makalani cluster, the cluster-based subject groups seem to operate well.

Institutional commitment

As indicated earlier, the Hendrich inspector was instrumental in the implementation of cluster-based school management reform. Unlike the inspector of Makalani cluster, she has a high level of commitment towards the school management reform. However, the inspector lacks the managerial skills and expertise required to facilitate the implementation of the reform within the framework of shared and collaborative leadership.

Unlike in Makalani cluster, it seemed that Hendrich cluster made an attempt to prepare the school principals for their roles and responsibilities to implement the school management reform:

'We conducted induction workshops for cluster-centre principals in which we explained the roles and responsibilities of the cluster-centre principals; we also explained to them that they have power over school principals in their clusters…they can assign tasks to satellite principals and can be acting circuit inspectors… we also visited other regions, like the region which implemented they cluster system for the first time' (inspector of education).

Cluster-centre principals were given authority and power to manage clusters; therefore they were given the authority and power to delegate tasks to satellite school principals.

The views of the school principals regarding the training offered by the regional office are different from the one of the inspector. From the interviews with the school principals, they indicated that they did not receive sufficient support to enable them to implement the reform. The cluster-centre principal indicated that she received training as a school principal, but insufficient training on how to manage a cluster: '*I received training on stress management; national standards, performance indicators and discipline….but I still don't know whether what I am doing is right'* (cluster-centre principal).

Although the inspector claimed to have inducted the cluster-centre principal, it appeared that the capacity for the cluster-centre principal to undertake new challenges was not fully developed. One teacher interviewed also confirmed lack of capacity building in school principals. She indicated that she doubted whether cluster-centre principal and satellite school principals received training to manage the cluster: '*I don't think they received training; even our own principal does not know how to guide us' (a* teacher from the cluster centre*).*

Like in the case of Makalani cluster, the understanding to comprehend the reform, and the commitment and capacity of school principals to implement the reform was not fully developed. The inspector being a strong advocate of the reform remains ignorant about the low commitment, limited resources in schools and insufficient capacity of school principals to implement the reform. This finding is consistent with the findings from studies conducted in South Asia that lack of awareness about the lack of support felt by local educators is one of the obstacles to the successful implementation of decentralisation reforms in developing countries (Bjork, 2004).

Institutional responses to school management reform

Transfer of power and authority to cluster level

Unlike the inspector of Makalani cluster, the inspector responsible for this cluster supports the delegation of power and authority to clusters**.** She does not feel that her authority and power over the schools is threatened. She still believes that she has authority over the school principals. She believes that the school management reform would empower the school principals and lighten her workload: '*through this system we empower our managers…. the system has really made my work much easier, now I only sent six faxes… I only call six schools, instead of calling all the schools in my circuit'.*

The inspector perceived the distribution of authority and power to cluster level as a means to improve the management of satellite schools: '*I provide in-service training during circuit management meeting….I encourage the cluster-centre principal to put points on the agenda for their meeting, which will help other principals to grow…. Some principals do not even know how to deal with disciplinary issues'* (circuit inspector).

Like in the case of Makalani, the transfer of power and authority to cluster level also received resistance from school principals. The satellite school principals in this cluster also resisted the authority of cluster-centre principals, because they perceived the reform as a threat to their power and authority over own schools:

> *'We are not really involved in the management of the cluster; the CCP is the only one who coordinates the cluster activities'; we do not want the CCP to manage the cluster alone'* (satellite school principal).

> *'We want each and every principal to be allocated specific tasks and responsibilities, we have to be part of the management of the cluster, we feel we are left out and only one person manages the cluster activities'* (satellite school principal).

Though the satellite schools in this cluster are regarded as schools with weak leadership, the satellite school principals have responded in the same manner as satellite school principals in Makalani cluster. In other words, the satellite school principals in two clusters resisted the school management reform, because they perceive it as a threat to their authority and power over their schools.

As indicated in the previous sub-section, the induction workshop for school principals only explained the roles and responsibilities of the cluster-centre principals and did not explain to the satellite school principals what their roles and responsibilities would be in the implementation of cluster-based school management reform. Lack of clarity about the roles and responsibilities of satellite school principals causes confusion of what is expected from the satellite school principals. Ambiguity in the roles and responsibilities of satellite school principals has also created tensions among the school principals, because they felt excluded from the management of the cluster activities. Ambiguity in the roles and responsibilities has also defeated the goal of the school management reform. Instead of cooperating with the cluster-centre principal, the satellite school principals chose not to do

much regarding the cluster activities, because they perceived the reform to be a threat to their power and authority as school principals.

Resource sharing

Like in the case of Makalani cluster, the principal of the resourced school perceived the reform as a threat to the resources of her school and was concerned about extra burden that was placed on the resources of her school:

> *'Two schools in this cluster don't have fax machines; any information coming to the cluster centre needs a phone call to the other schools; this is very time consuming; other cluster schools sometimes make use of the photocopier at the cluster centre because their machines were out of order'.[8]*

In order to protect the resources of her school, a cluster fund was established '*so that the burden won't be on the school fund of one school only*'[9]. The school principal of the resourced school responded to the implementation of cluster-based school management reform in the same manner as the school principals of the resourced schools in Makalani cluster. This explains clearly that the resourced schools responded negatively to the implementation of the school management reform, because they perceive the reform as a threat to their resources. It also explains why the culture of cooperation and mutual support is poor or absent in schools.

Like in the case of Makalani cluster, the teachers from the resourced school felt adequate and expressed that they were the only ones who provided support to the others and they did not receive anything back: *'We don't benefit from the system……we are the only one giving our little resources that we have'.*

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[8] Cluster annual report, 2004
[9] Cluster annual report, 2004

The teachers from the resourced school perceived the reform as an exploitation of their resources and wasting of their time because they are not benefiting from the interaction with other teachers. From the interviews with the teachers from the resourced school, they indicated that they did not see the need for schools to share ideas if schools operated at different standards:

> 'We do not have confidence in the school clustering system……we receive little from other teachers and schools are not at the same level….. some schools do not make use of the exam papers drawn up at the cluster level; they say these are too difficult to their learners' (a teacher from the resourced school).

The teachers from the resourced school also felt that teachers from satellite schools were not interested in their help and were not cooperative:

> ….as a cluster centre, we find that teachers from other schools, who really need help, are not interested….sometimes it is so tiresome to try to drag them along to the expense of your school….. some teachers within the cluster make use of all information they can get, but the rest just carry on as before (a teacher from the resourced school).

Teachers from the resourced school felt adequate and were not prepared to continue working together with teachers from under-resourced schools. They felt that their resources would be overstretched and no commitment was shown from the teachers in under-resourced schools that they were making use of ideas they got from them to improve their teaching skills: 'some teachers do not implement the good advice from others that they get… I am not referring here to the teachers of my schools…but to others in different schools from our cluster' (a teacher from the resourced school).

Although teachers in the resourced schools showed their willingness to support teachers in the under-resourced schools, teachers in the resourced school in this cluster responded to the implementation of cluster-based school management reform in the same manner as teachers in the resourced schools in Makalani cluster. As mentioned previously, teachers

in the resourced schools felt self-sufficient and therefore did not value the contributions from the teachers in the satellite schools.

Teachers from under-resourced schools felt that they were not asked to contribute to the planning and preparations of cluster-based subject meetings: *'most of the time teachers are not asked to contribute on what will be discussed during the cluster meetings'* (a teacher from under-resourced school)

'We don't do a lot during the cluster meetings… sometimes there is no program, you just sit there and nothing is going on' (a teacher from under-resourced school).

Teachers argue that the cluster meetings lack proper structure and clarity and therefore meetings do not progress. While teachers from the resourced school argue that teachers from the satellite schools are not interested in the help provided them, though they (teachers from the satellite schools) are the ones who are in need of support, teachers from the under-resourced argue that cluster-based subject meetings lack clarity and therefore has little or no significant value to their work.

Like the teachers in the resourced school, teachers from the under-resourced schools were not keen to continue attending cluster-based subject group meetings. They argue that the meetings: lack structures and clear guidelines on how to conduct cluster-based subject group meetings; lack clarity on what support cluster-centre principals should provide to teachers; and lack strategies on how to facilitate subject meetings to be more meaningful to teachers and contribute to teacher learning. The teachers also felt that they did not learn much from the cluster-based subject group meetings. In sum, teachers from both resourced school and under-resourced schools are reluctant to continue with cluster-based subject group meetings because they feel that meetings are not productive and waste of time.

The data from the two case studies reveal that though the capacity of schools in terms of resources and leadership is different, the schools in the two clusters responded to the implementation of the school management reform in more or less the same manner. The two case studies demonstrate that the culture of mutual support and cooperation is little or absent in the schools. It can be concluded that schools have not yet upheld the values advocated by the school management reform. One may argue that teamwork or resource sharing is a complex exercise and that schools hold different values and beliefs about shared visions and collaboration.

Case study conclusions

Drawing on the data about the contextual features and dynamics of this cluster, one can conclude that the school management reform was not successfully implemented in this cluster: (1) though the inspector for this cluster was a strong advocate of the school management reform, she was ignorant of how the reform was received and delivered by schools, she lacks skills and expertise required to facilitate shared and collaborative school management reform and therefore did not provide enough support to schools; (2) the resourced school felt self-sufficient and resisted working together with the under-resourced schools, because they perceived the reform as a threat to their resources; (3) the cluster-centre principal did not have confidence in the managerial skills of the satellite school principals and therefore managed the cluster by herself with little involvement of the satellite school principals; (4) the satellite school principals resisted being under the authority of the cluster-centre principal because of they perceived the reform as a threat to their power and authority over their schools; (5) the resourced school felt exploited because it felt that the under-resourced schools relied too much on their resources; (6) the satellite school principals provided little support to the cluster-centre principal because

they felt that their contributions to the management of the cluster were not valued; (7) the teachers from the resourced school resisted sharing ideas and knowledge with teachers from under-resourced schools because they felt that teachers from the under-resourced schools were poor and their schools were below their standards; and (8) even though cluster-based subject groups were established, they lack structures and operational strategies and therefore were unproductive.

The data from this case study reveals that there is sufficient evidence to draw conclusions that the school management reform was not successfully implemented in this cluster (see the conclusions above). The data also reveals that there is not sufficient evidence to draw conclusions that the school management reform relates to teaching, because: (1) the resourced school was reluctant to share resources with the under-resourced schools; (2) the teachers from the resourced school were reluctant to share knowledge, ideas and resources with teachers from the under-resourced schools; (3) though the cluster established structures to support teachers, these structures were not working effectively to support teachers improve their teaching practices; and (4) no additional facilities and resources were provided to under-resourced schools and cluster-based subject group meetings lack guidelines on how to support teachers improve their teaching practices.

5.2.3 Otjimue cluster

Otjimue is a rural cluster, consisting of five primary schools. The cluster centre is one of the primary schools, which is bigger than the four other schools in the cluster. All schools in this cluster are under-resourced. As mentioned previously, the cluster was selected to bring to the study an in-depth understanding of how schools in a rural school, located in remote, isolated and impoverished communities respond to the implementation of cluster-based school management reform. The cluster was also selected to assess the extent to

which cluster-based school management reform implemented in this context relate to the improvements of the teaching practices of teachers.

The cluster centre building was erected at the school premises. The cluster centre has 12 computers, a photocopier, stationeries and cleaning materials. The cluster centre has also a small library. The cluster-centre principal is the principal from the cluster centre and is appointed on a permanent basis. The cluster-centre principal and the satellite school principals are qualified and have more than six years of school management experiences. The qualifications of teachers in the cluster range from Grade 12 plus two years of tertiary education to grade 12 plus three years of tertiary education. The teaching experience of the teachers ranges from six years to more than 20 years of teaching experiences. Teachers and learners in the cluster come from predominantly one language background. Otjiherero is the medium of instruction in the lower primary phase and English is taught as a subject.

Socio-economic and cultural backgrounds

The cluster is located in a remote area, with isolated communities, which depend largely on subsistence farming. The area does not have the following services: transport, communications (except one telephone booth) and banking services. There are no accommodation facilities, hospital, bookshops, Teachers' Resource Centre or community library. There are small shops with limited groceries. Schools are located in isolated and impoverished communities. The schools have feeding programs for learners from needy communities.

Teaching and learning environments

All five schools are under-resourced schools, with low enrolment rate and isolated. The primary school, which is the cluster centre, is bigger than the satellite schools. The class size ranges from 25 to 30 learners. However, the class size at the upper primary phase is smaller than the class size at the lower primary level. The physical conditions of some of the classrooms are in satisfactory conditions while some are in poor conditions. The classrooms are small with limited space for learners to move. There are few cupboards for keeping teaching materials. Learners share textbooks. Satellite schools do not have enough classrooms and because of low enrolment rate grades are combined in one classroom. In other words, there are schools with only two classrooms, one for grades 1 and 2 and another one for grades 3 and 4. The schools do not have offices and staff rooms. Some classrooms have a few cupboards for keeping teaching materials and some classrooms do not have any cupboards. Learners share textbooks. Some schools do not have school fences, electricity and sanitation facilities. The following section discusses cluster contextual dynamics and how these shape the implementation of cluster-based school management reform in Otjimue cluster.

Organisational and implementation arrangements

Otjimue cluster is located in the same circuit as Hendrich cluster. It also represents a supportive context for the implementing the school management reform, because the inspector is a strong advocate of cluster-based school management reform and the schools have embraced the school management reform.

As in the case of Hendrich cluster, the inspector was instrumental in the implementation of the school management reform and being a strong advocate of the school management reform influenced the way schools received the school management reform.

She facilitated the establishment of necessary structures for implementing the school management reform. The cluster management committee was established, consisting of school principals, heads of departments and subject convenors from different schools. Parents are not members of the management committee. Initially, the cluster management committee in this cluster was supposed to meet once a term under the leadership of the cluster-centre principal, but due to transport and communication problems meetings could not be held regularly. The cluster has an action plan. The action plan indicates the schedules for various cluster committee meetings. Unlike the year program of Hendrich cluster, the action plan for this cluster does not include the administrative activities taking place in various schools in the cluster. The minutes of the cluster management meetings indicate that cluster management meetings have focused more on administrative issues and organisation of social events in the cluster, and have been focused less on classroom practice related issues.

As in the case of Hendrich cluster, various subject groups for primary and lower primary phases were set up to develop common schemes of work; set question papers and enable teachers to come together and share ideas and problems. Initially, the cluster-subject committees were supposed to meet once per term under the leadership of the subject convenors, but due to transport and communication problems, meetings could not be held regularly.

Although schools in this cluster have embraced the school clustering system, they became frustrated, because cluster meetings could not be held regularly due to transport and communication problems. Therefore, the schools lost confidence in cluster-based school management reform as a means to upgrade the standards of their schools.

Institutional commitment

As indicated earlier, the inspector for both Hendrich and Otjimue clusters claimed that the regional office conducted induction workshops for both cluster-centre principals and satellite school principals. However, the cluster centre principal interviewed, indicated that she did not receive training from the regional office: *'I never received any training; we just meet in cluster meetings and discuss things. We invited the circuit inspector to come…. but she never comes to our meetings' (*cluster-centre principal).

Although the inspector claimed that the roles and responsibilities of school principals were explained during the induction workshops, the cluster-centre principal interviewed, said that she was still not sure how the cluster system could work: '*I am not really sure how the cluster system supposed to work….I was asked to evaluate how the cluster performs, but I did not know really whether what I did was correct'* (cluster-centre principal).

Like in the case of Hendrich cluster both cluster-centre principal and satellite school principals in this cluster lack clarity on how the school management reform is supposed to work:

> *'We are not really working well as we were supposed to do….. we don't have guidelines on how to manage the cluster as a team, but we try to talk about this in our meetings how we can improve this'* (satellite school principal).

Like in the case of Hendrich cluster, the commitment and capacity of school principals in this cluster to implement the reform was not developed and the regional office did not provide regular and consistent support. The inspector being a strong advocate of the reform remains ignorant about the low commitment, lack of resources in schools and insufficient capacity of school principals to implement the reform.

Unlike Makalani and Hendrich clusters, Otjimue cluster does not only lack the capacity to implement the reform in terms of knowledge, skills and experience of school principals, it also experiences capacity problem in terms of resources and financial means. The cluster encountered financial constraints. It struggled to cope with extra costs for maintenance of photocopier and fax machines. The inspector acknowledged that this cluster experienced financial constraints and indicated that the regional office provided financial support:

> ...'.the region has allocated a budget for the cluster activities….. schools must communicate their needs….the cluster was encouraged to make fundraising and encourage parents to contribute in kind… I think if you are a cluster-centre principal you should be visionary and have initiatives' (circuit inspector).

According to the cluster-centre principal the cluster tried to make fundraising, but the cluster continue experiencing limited financial contributions to cluster fund, because the schools are too small and most of the learners in the schools are from low income family backgrounds: 'the raising of funds is difficult. We are trying hard…. But there is no money; the schools are too small and most of the learners are from low income family backgrounds' (cluster-centre principal).

It is unrealistic to expect poor communities to raise funds to support the cluster activities. Even though the communities are encouraged to make in-kind contribution, there is no market in the area where the schools could sell whatever the communities have contributed.

Another resource constraint that this cluster is experiencing is transport. Schools are isolated and there are long distances between schools and the cluster centre. The schools do not have official transport to attend cluster meetings:

> ….'the schools are isolated, you want to know how other schools are doing, and that is why clustering system is a good thing for rural schools…teachers want to go and make use of

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the facilities at the cluster and also attend cluster meetings, but where do they go to get transport and time to go there ….our cluster centre is still far from some schools' (satellite school principal).

However, the circuit inspector claimed that the regional office also catered for the transport problem: *'the regional office has provided a government vehicle to the cluster centre.. as I said before schools do not communicate their problems… they don't plan in advance…why can't they plan well if they have transport problems?'*

It is clear that the inspector is ignorant about the difficulties schools are experiencing in implementing cluster-based school management reform. It is also clear that the regional office has not yet recognised that cluster-based school management reform put unrealistic demands on the cluster.

Institutional responses to the school management reform

Transfer of power and authority to cluster level

As indicated earlier, the inspector responsible for Hendrich and Makalani clusters supports the delegation of power and authority to clusters. She does not feel that her authority and power over the schools is threatened since she still believes that she has authority over the school principals.

Unlike the school principals of Makalani and Hendrich clusters, the satellite school principals in this cluster did not respond negatively to the transfer of power and authority to the cluster: *'we have good relationship in our cluster…. the only problems that we have is transport… we can't come together regularly because of transport problems'* (satellite school principal).

….'*the CCP sometimes give us some ideas when she visited some clusters and advise us on how to improve our schools*' (satellite school principal).

The school principals in this cluster are positive about the school management reform and have accepted the collaboration and team work approach, but find it difficult to maintain it because of lack of resources.

The teachers in this cluster are also positive about the clustering system and has regarded the system as a means of upgrading the standards of rural schools: '*the system could help rural schools to perform better because the resources are near…teachers could be encouraged to work together… the rural schools are isolated and far from town where resources can be obtained'* (a teacher from a satellite school).

Although teachers in this cluster are positive and enthusiastic about the school management reform, their interest and enthusiasm about the reform would not last for a long time because of resource constraints. Cluster meetings could not be held regularly and teachers are forced to finance their own transport to go to cluster meetings: '*We spend a lot time trying to get transport to go to cluster meetings….. you loose teaching time…. the time you reach the cluster centre there is no meeting ….because teachers did not turn up'* (a teacher from a satellite school*)*.

Cluster-based school management reform assumes that it would solve the problems of teacher isolation in rural schools. However, it is evident from this case study that the school management reform has created unrealistic demands to rural schools which they struggle to cope with. Cluster-based subject group meetings could not be held regularly due to transport problems and long distances that teachers have to travel. Teachers in the

rural schools are still experience problems accessing resources at the cluster centre. The advocates of cluster-based school management reform ignore the variations in contexts and assume that a single policy fits all contexts.

Case study conclusions

Drawing from the data on the contextual features and dynamics of this cluster, one can conclude that the school management reform was not successfully implemented in this cluster. Though the inspector for this cluster was a strong advocate of the school management reform, she was ignorant of resources and capacity constraints in the cluster and therefore did not provide consistent support to schools. Although schools in this cluster have embraced the school management reform, it has not yet solved the problem of isolation in rural schools. The reform also did not improve the accessibility of rural schools to resources. It provided insufficient resources to rural schools and therefore rural schools continue to operate under extremely difficult conditions.

This case study demonstrates that though the culture of mutual support and cooperation exists in schools, limited resources impede the implementation of cluster-based school management reform. The case study also demonstrates that not only lack of understanding of the reform leads to low commitment to the reform, but limited resources also suppress the interest of schools in the school management reform. School principals and teachers struggled to get transport to access resources at the cluster school as well as to attend cluster meetings. The sustainability of the reform in this cluster is questionable, because schools do not have enough resources and are located in isolated and impoverished communities.

The data from this case study reveal that there is not sufficient evidence to draw conclusions that school management reform relates to teaching, because: (1) the school management reform did not bring additional resources for teachers to improve their teaching practices; and (2) teachers in this cluster still do not have access to resources and support to improve their teaching practices.

From the discussion of the implementation of cluster-based school management reform in the three primary school clusters, it becomes clear that cluster contextual features and dynamics shape the implementation of cluster-based school management reform. The following section highlights the contextual dynamics of each primary cluster. In particular, the section highlights how different role players respond to the implementation of cluster-based school management reform.

5.3   Synthesis of the responses of the three primary school clusters to cluster-based school management reform

This section presents a comparative summary of the responses of the key role players in the implementation of cluster-based school management reform in the three primary school clusters. Table 18 below presents a synthesis of responses of the key role players:

Cluster-based school management implementation and cluster dynamics			
Role players	Makalani cluster	Hendrich cluster	Otjimue cluster
Inspector	The inspector resisted the school management reform and rejected the view of delegating authority to clusters	The inspector was a strong advocate of the school management reform, supported the delegation of authority to clusters, but employed bureaucratic and authoritarian approaches in the way she facilitated the delegation of authority to clusters	The same inspector was responsible for facilitating the implementation of cluster-based school management in Hendrich cluster
Cluster-centre principal	The first cluster-centre principal showed interest in the school management reform and regarded the reform as a tool for improving school administration, while the	The cluster-centre principal (CCP) did not show interest in school management reform and felt obliged to implement the school management reform. Because of the strong influence from the inspector,	The cluster centre principal lacked confidence in her leadership as a cluster-centre principal. Because of the strong influence from the

	second cluster-centre principal did not show interest in the school management reform as well as lacking clarity about his role as a cluster-centre principal	the CCP implemented the school reform through bureaucratic approaches.	inspector, the CCP implemented the school management through bureaucratic approaches.
Satellite school principals	Satellite school principals resisted the school management reform, felt adequate and were reluctant to accept the authority of the cluster-centre principal.	Satellite school principals resisted the school management reform, felt disempowered and were reluctant to accept the authority of the cluster-centre principal.	Satellite school principals embraced he reform, but felt disillusioned as the reform unfolded in schools.
Teachers	Teachers from the resourced schools resisted the school management reform, felt adequate and were reluctant to implement the school management reform. Teachers from under-resourced schools embraced the school management reform, but lost confidence in the reform because of lack of support.	Teachers from the resourced schools did not embrace the reform and felt obliged to implement the school management reform. Teachers from the resourced school also felt adequate and were reluctant to implement the reform. Though some teachers from the under-resourced schools embraced the reform, other teachers lacked confidence in the reform.	Teachers embraced the reform, but lost confidence in the reform, due to its inability to change the lives of teachers in the rural and isolated schools.

Table 18:   A summary of responses of the key role players in the implementation of cluster-based school management reforms in the three primary school clusters

Table 18 above shows how clusters were different and similar in the way in which they responded to the implementation of cluster-based school management reform. The cluster-centre principals in all three clusters showed low commitment to the school management reform, except the first cluster-centre principal of Makalani cluster. The satellite school principals in Hendrich and Makalani clusters resisted the reform, except the satellite school principals in Otjimue cluster. Teachers from resourced schools in Hendrich and Makalani clusters felt adequate and were reluctant to implement the reform, while teachers in Otjimue clusters embraced the reform, but later lost hope in the reform due to its inability to provide adequate resources in the rural schools. It is clear from table 18, that

the reform encountered strong resistance (due to shifts in power and incongruence between school traditions and the tenets of the school management reform), mainly in the resourced schools and this had negative impact on its implementation. The schools which embraced the school management reform also lost confidence in the reform, which led to its unsuccessful implementation. In other words, some of the main variables that cause the unsuccessful implementation of the school management reform in the three primary school clusters are resistance due to shifts in power and institutional values and traditions, low commitment of key implementers and the inability of the reform to provide adequate resources to schools.

5.4   Overall conclusions

One can conclude that the school management reform was not successfully implemented in the three primary school clusters. It is evident from the data from the three case studies that there are differences and similarities in the ways in which the three clusters responded to the introduction of the school management reform. The rich urban cluster ignored the school management reform because they totally rejected the tenets of the reform, which are contrary to their institutional culture, and character of individualism and competitiveness. Although the poor urban cluster was influenced strongly by the inspector responsible for the cluster to implement the reform, the satellite school principals, and teachers from the resourced school did not embrace the reform. Although the rural cluster was optimistic about the introduction of the school management reform, the schools became disenchanted by the fact that the reform could not solve the problems of the rural schools, but added more difficulties in rural schools.

The resourced schools in both rich and poor urban clusters resisted the school management reform because they perceived it as a threat to their resources. The school

principals in both rich and poor urban clusters resisted the school management reform because they perceived it as threat to their power and authority. There was little commitment from school principals in all three clusters to implement the reform. It is evident from the three case studies that no additional resources were provided to schools.

The regional offices remain ignorant about limited resources in schools and lack of capacities of school principals to implement the school management reform. It is also evident that the support from the regional offices has not been consistent in all three primary school clusters. There is strong evidence from the two urban clusters that schools competed over the limited resources and power. While the schools in the rural cluster seem to embrace the theory of collaboration and cooperation, they question the sustainability of reform due to lack of resources.

The key argument in this chapter is that schools in the three school clusters could not collaborate as per the intentions of cluster-based school management due to the threat of loss of power and resources. Availability of resources is regarded as one of the pre-conditions for successful implementation of school clustering in developing countries (Pellini, 2005; Govinda, 1997; Naidoo, 2005).

Drawing on the data from the three case studies, one could conclude that there is not sufficient evidence to draw conclusions that school management reform relates to improving teaching due to: (1) lack of collaboration among school principals and teachers to implement the reform; (2) lack of clarity of the school management reform on how to improve teaching; and (3) limited resources to improve the teaching practices of teachers.

The literature on school clustering emphasises the importance of resource sharing as a means for improving teaching (Pellini, 2005; Assefa, 2001; Dittmar et al., 2002). The findings from the three case studies show that schools did not share resources, because of the threat of the loss of power and resources. The goals of democratic participation, collaboration and equitable distribution of resources could not be achieved as per the intentions of cluster-based school management. The three case studies demonstrate that changing governance structures does not necessarily lead to equal distribution of power and resources in schools. While this chapter discusses how the three primary school clusters resist the reform due to loss of power and resources, the next chapter focuses on another source of resistance, a shift in ideology.

CHAPTER 6: IDEOLOGY OF THE KEY ROLE PLAYERS IN THE IMPLEMENTATION OF CLUSTER-BASED SCHOOL MANAGEMENT

The theory of cluster-based school management reform assumes that school management and teaching would improve through shared and collaborative leadership and management, equitable distribution of resources, and by creating collaborative learning opportunities for teachers. This chapter examines how beliefs and views held by the key role players influence their perceptions about cluster-based school management reform.

Before the Namibian independence in 1990, the colonial education system was centralised, technicist and bureaucratic. Beliefs in ideologies introduced by colonial powers had been accepted in the Namibian society and had become part of the national culture. It seems that the designers of cluster-based school management have not anticipated how ideologies existed prior to the design of the reform can become a barrier to its implementation. The designers of the reform have changed governance structures, assuming that key implementers will implement the goals of the reform as intended. However, the values and beliefs held by the key implementers about the reform have been influenced by authoritarian, bureaucratic and managerial ideologies that are different from the tenets of the reform. The different beliefs and views about the reform held by key implementers were not only observed across clusters, but also within the same clusters.

6.1   Authoritarianism

Respect and blind submission to authority underpin the authoritarian ideology. It opposes individual and collective freedom of thought, initiative and action (Ray, 1976). Stakeholders' participation in decision-making processes is not encouraged or promoted.

Authoritarianism frames the work practices of some of the key implementers and therefore influences the way they have implemented school management reform.

The introduction of cluster-based school management reform in schools presupposes a shift in authority and responsibility for making decisions to schools and broadening of stakeholders' participation in decision-making processes. The beliefs and views held by the circuit inspectors about the school management reform influenced the way in which they facilitated the implementation of cluster-based school management reform. Both the circuit inspectors of Makalani; Hendrich and Otjimue clusters have come from strong authoritarian backgrounds. The inspector responsible for Makalani did not accept the ideology of participative and democratic leadership. He interpreted the school management reform as a means of collecting and distributing resources rather than a school management system. The inspector viewed cluster centres as 'distribution and collecting points' rather than management venues. He still believes that he has authority over schools: *'schools should call the circuit office directly if they experience a problem'*.

The Makalani inspector does not believe in delegating power and authority to clusters and cluster-centre principal: '*I don't delegate tasks to cluster-centre principal, he already has his workload as a principal; this is an added responsibility… To devolve tasks and responsibilities to him… makes me uncomfortable. This disturbs the line of reporting to the appropriate authority' (Inspector*, Makalani cluster).

The Makalani inspector interprets delegation of power and authority to cluster-centre principal as 'added responsibility' and therefore regards delegation of power to cluster-centre principal as a burden to the cluster-centre principal who has already his workload as a school principal. The argument of the inspector is actually inherent in the view that

inspectors have power and authority over schools. The inspector interprets delegation of administrative tasks to cluster-centre principals as a threat to his power and authority over schools. Being a strong believer in authoritarianism, the Makalani inspector chooses to ignore the cluster-based school management reform and clings to the authoritarian style of management.

Although the inspector responsible for Hendrich and Otjimue clusters seemed to embrace the school management reform, she imposed change upon schools and expected schools to implement the reform through authoritarian approaches. There was little if any independent input from schools and teachers. The inspector stated:

> *'Satellite school principals have to accept that cluster-centre principals have supervisory capacity…therefore we do not have cases of principals who don't respect the authority of the cluster-centre principals….. in our circuit management meetings we talk about these things…we define the roles of cluster-centre principals' (Inspector, Hendrich & Otjimue clusters).*

Instead of facilitating the implementation of the school management reform in a manner that enable the school principals understood the need for the change; the inspector imposed the change on the school principals.

The authoritarian doctrine, which underpins the management styles of the two inspectors, impedes the successful implementation of the school management reform. The Makalani inspector chose to ignore the school management reform because he interpreted it as a threat to his authority over the schools. He did not put much effort to implement the school management reform, while the inspector responsible for Hendrich and Otjimue clusters interpreted the school management reform as an intervention that could be managed through authoritarian approaches, which did not match the democratic principles and therefore facilitated the implementation of the reform through authoritarian approaches.

According to cluster-based school management reform, cluster-centre principals are central to the implementation of the school management reform. They are responsible for the overall coordination of cluster activities in close collaboration with the inspectors and satellite school principals.

The second cluster-centre principal of the Makalani cluster believes in authoritarianism. He chose to respect the authority of the circuit inspector by not taking the school management reform seriously. The cluster-centre principal did not attempt to initiate shared and collaborative leadership and management in schools. He believes that he should get guidance from the authority: '*authority did not give us the necessary support'…*

Because of fear for operating against the authority of inspector, the current cluster-centre principal did not make any attempt to implement the school management reform as intended: '*we act on ad hoc basis….there is no plan of action or year plan… there is a management committee….but we work informal'.*

As in the case of the Makalani circuit inspector, the second cluster-centre principal also ignored the school management reform. One explanation could be that he believes that he does not have any power and authority over other school principals. Another explanation could be that he has accepted that the circuit inspector have power and authority over the schools.

Teachers in the Makalani cluster believe that they should respect authority. Though teachers in this cluster (from both resourced and under-resourced schools) seem to view the school management reform as having potential for creating collaborative learning

environments for teachers, they are not convinced that the school management reform would contribute to the improvement of their teaching practices. They implemented the school management reform, because they were obliged to respect authority: *'teachers go to cluster meeting because they are instructed to do so…they organise meetings and told us how important to attend cluster meeting'*…(teacher from resourced school, Makalani cluster).

Another teacher from one of the under-resourced schools in the Makalani cluster, also indicated that teachers implemented the school management reform because they were obliged to respect authority: *'teachers do not like to go to meeting because they don't learn much,…..but they have to go because it is ministerial order' (*teacher from under-resourced school, Makalani cluster).

It was clear from the observation of cluster meetings that teachers were not interested in cluster-subject meetings. Cluster meetings were not planned properly. Only a few teachers contributed to discussions during cluster meetings, some teachers sat quietly, while some engaged in private conversations. Because of fear to be disobedient towards authority, teachers did not communicate their dissatisfactions of the school management reform. They continued attending cluster subject meetings, though they were not learning much. Teachers also did not attempt to come up with initiatives to make cluster subject meetings meaningful to them because they expected to receive instructions from the authority on how to run cluster subject meetings: *'we are the only one gather at these meetings…with no extra support…..some problems teachers cannot solve without the support from the central authority on how these problems can be solved'…*

Other teachers from Hendrich and Otjimue clusters were also influenced by authoritarian ideology. Teachers in these two clusters also seem to view the school management reform as having potential for creating collaborative learning environments for teachers; however, they lacked initiatives to make cluster subject meetings meaningful for themselves. They indicated that they did not have the ability to make cluster subject meetings work effectively: '*we don't do a lot during the gathering; we don't know how to go about [implementing policies]…we need to be guided on what to do*' (teacher, from resourced school, Hendrich cluster).

Teachers, especially in Hendrich cluster, as in the case of Makalani cluster felt that they had to attend cluster subject meetings, because the authority requested them to do so. One teacher from the resourced school indicated that teachers had not been motivated to attend the cluster subject meetings, but they are obliged to do so:

> '*Attending cluster subject meetings has become a routine, there are no specific topics for cluster meetings, like today there is a meeting, but we do not know what we'll discuss, that is why people are not motivated to come to cluster meetings*' (teacher, from one of the resourced schools, Hendrich cluster).

Another teacher from one of the under-resourced schools said that teachers' attendance of cluster subject meetings has become a routine rather than a commitment because of its benefit to their classroom practices:

> '*During cluster meetings, we don't really learn much, we only share ideas…I don't remember learning something new…. Sometimes there is no program… you just sit there and nothing is going on ….we need input from subject advisors to make subject groups more worthwhile*' (teacher, Hendrich cluster).

Teachers from Otjimue, like teachers from the other two clusters felt obliged to attending cluster subject meetings. It also clear that teachers in this cluster, like other teachers in

Hendrich and Makalani clusters, lack initiatives to make cluster-subject meetings meaningful to their teaching practices: *'you see in our cluster, teachers do not have confidence in sharing ideas….we sometimes sit quiet in meetings…. we did not come to a point where we have really a workshop to support ourselves to improve our teaching practices'* (teacher from one of the schools in Otjimue cluster).

The ideology of authoritarianism that has been dominating the practices of teachers impedes the implementation of the school management reform. Teachers lack initiative to adjust the implementation of the school management reform, to suit their particular circumstances. Teachers respect authority and line management. They attend cluster subject meetings although they do not benefit much from these discussions. The school management reform assumes that school principals and teachers would come up with innovations to improve teaching because the responsibilities of improving school management are delegated to clusters and schools. School managers did not involve teachers in the planning of cluster-based subject meetings. Teachers were given little or no opportunities to plan professional development activities and were simply instructed to attend the meetings.

While the reform advocates shared decision-making, collective problem solving and collaborative management, there was little or no teamwork in the three school clusters. Cluster-centre principals organised cluster activities without involving school principals and teachers in their clusters, and teachers from different schools did not collaborate much.

6.2   Bureaucracy

Hierarchy and specialised division of labour are the two key characteristics of the ideology of bureaucracy. Another important feature is that initiatives and policy directives come only

from top down to the bottom of the education system. Bureaucracy is also characterised by a belief that schools, as organisations should be governed by set of rules, regulations and procedures (Haralambos and Holborn, 1995). As in the case of authoritarianism, bureaucratic control frames the work practices of the key implementers and therefore has influenced the way in which they have implemented the school management reform.

The two inspectors responsible for Makalani, Hendrich and Otjimue clusters strongly believe in bureaucratic control. The Makalani inspector rejected the idea of allowing cluster-centre principals to act on his behalf. He regards it as: '*un-procedural for the cluster-centre principal to be an acting inspector in my office…and therefore the cluster-centre principal must be at his school'*. The inspector believes in hierarchical style of management and a clearly defined division of labour. It was therefore "un-procedural" for the school principal to perform the tasks of the circuit inspector: *'Schools report directly to me, I do not allow cluster-centre principals to work in my office. The appointment of cluster-centre principals who are at the same level as other principals to supervise schools disturbs the line of authority'.*

Unlike the inspector responsible for the Makalani cluster, the inspector responsible for Hendrich and Otjimue clusters believes in delegating administrative tasks to cluster-centre principals and views the school reform as means of distributing administrative tasks among schools. She thought that the cluster-centre principals have a responsibility to carry out administrative tasks in the cluster. Although the inspector embraced the school management reform, she still expressed faith in bureaucratic control; she argued that '*cluster-centre principals have power over satellite school principals in their clusters …. they can assign task to satellite school principals'.*

She further argued that she had to control the work of the cluster-centre principal, and the cluster-centre principal in turn should control the work of the satellite school principals. She stated: *'they have to check and control the reports from other schools; the school statistics and I will also control these in my office'*. Central to the way she perceived her job was collecting the information and completing the forms required by the Ministry of Education. The circuit inspector also tried to implement the decentralisation changes through well-defined, linear processes. She explained:

> *'We do not have satellite school principals in my circuit who are not clear about the roles and responsibilities of cluster-centre principals. In our meetings we define the roles and responsibilities of cluster-centre principals. We have given cluster-centre principals extra power over the satellite school principals….they have to carry out the instructions from the cluster-centre principals because they are their supervisors'.*

One can argue that the beliefs and views held by the two inspectors about cluster-based school management reform demonstrate that although the reform advocates shared and participatory leadership, its implementation is not immune against a power struggle. The issue of power disguised by the rhetoric of school-based management is highlighted in the literature of school-based management. The critical theorists argue that 'school-based management cannot be seen as an unproblematic democratic education reform; it is viewed as a form of participative decision-making occurring in a context of power inequality' (Chapman, 1990:36). He further argues that 'it cannot be assumed that equal participation is offered in an educational arrangement which is legitimate, neutral and free from power' (Ibid:40).

One can also argue that the way in which the two inspectors facilitated the implementation of the school management reform has been influenced by inherent power and authority that they had been exercising over schools before the introduction of cluster-based school management reform. The beliefs of the two inspectors in bureaucratic control impede the implementation of the school management reform. Both inspectors discarded shared and

collaborative leadership and management styles in implementing the school management reform. The Makalani inspector rejected the view of delegating administrative tasks to cluster, while the Hendrich and Otjimue inspector employed bureaucratic control in supervising the work delegated to cluster level.

As in the case of the inspectors, the school principals and teachers also clung to the bureaucratic doctrines. Thus the Makalani cluster-centre principal excluded the satellite school principals from the planning of the cluster activities. He was the only one who had planned the cluster activities: *'when there is something that needs to be discussed, me and the secretary meet, plan and set up an agenda and other principals just attend the meeting'*.

The Hendrich cluster-centre principal managed the decentralisation according to the instructions of the circuit inspector. The circuit inspector instructed the cluster-centre principals to have authority and power over the satellite school principals. She took the responsibility of administering the cluster activities with little involvement of the satellite school principals. Though the cluster has created a year plan and formal structures for the coordination of cluster activities, the cluster-centre principal has done much of the coordination of cluster activities:

> ….'I have to visit satellite schools… I have to check school statistics from other schools and send these to the circuit office and write monthly report on cluster activities'. (cluster-centre principal, Hendrich cluster).

The power and responsibility of managing the cluster activities is invested in the cluster-centre principal. She has to supervise the work of the satellite school principals. From the words of the cluster-centre principal, the implementation of the school management reform

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has been carried out according to hierarchical bureaucratic control rather than through a participatory and democratic manner as per intentions of the school management reform.

However, the Hendrich cluster-centre principal recognised the shortcoming of using bureaucratic styles of management. She contends that the school management reform requires the efforts of all principals in the cluster. The fact that she has been running the cluster activities on her own, has created low commitment and dedication from the satellite school principals: *'some principals expect to be reminded by my secretary before cluster management meeting, although they have their own secretaries who don't take the cluster seriously'.*

She also asserts that the school management reform does not have any benefits for her school. She doubts the viability of proper collaboration and cooperation if schools have different conditions*.* She contends that teachers from satellite schools are also not cooperative and unwilling to participate fully in the cluster activities*:*

> *….'as a cluster centre, we find that teachers from other schools who really need help are not interested….sometimes it is so tiresome to drag them along to the expense of your schools.... ……why are most of the teachers from satellite schools unwilling to admit that they need help or that they don't know how to teach…..why do the cluster centre teachers get upset with the unwillingness of most of the other teachers to participate'* (cluster-centre principal, Hendrich cluster).

The cluster-centre principal maintains that her school remains a provider for other schools while other schools are just on the receiving end. From the point of view of the cluster-centre principal, the reform has not brought any benefits to her school.

One can conclude that the cluster-centre principal could not make a shift from bureaucratic styles of management to participatory leadership and management. The satellite school

principals rejected her bureaucratic style of management and showed little commitment to the cluster activities.

As in the case of the Hendrich cluster-centre principal, the Otjimue cluster-centre principal was also influenced by the doctrine of bureaucratic control. She took the management of the cluster activities upon herself, because she believed that she had power and authority over the satellite school principals. She was meticulous about defining her role and outlining her responsibilities:

> 'I am responsible for distributing information, check statistics of other schools, coordinating of ordering of stationers and materials of schools, reporting back to principals on developments, writing and submitting cluster reports to the inspector, coordinating activities in the cluster and arranging cluster meetings' (cluster-centre principal, Otjimue cluster).

The bureaucratic control has influenced the way in which the cluster-centre principal has implemented the school management reform. Instead of running the cluster activities in democratic and participatory manner, the cluster-centre principal has been controlling the administrative activities of the satellite schools. It is clear from the words of the cluster-centre principal that her management style is entrenched in the hierarchical bureaucratic control and top-down approaches.

Like in the case of the Hendrich cluster-centre principal, the Otjimue cluster-centre principal recognised that managing the school management reform, using bureaucratic styles of management has shortcomings. She lamented that the management reform put extra administrative burden on her as well as created dependency over her school resources:

> 'To be a cluster-centre principal… your school has to incur expenses on behalf of other schools…..I am now charging other schools for the use of the photo copier…. because I cannot continue using my school resources to support other schools' (cluster-centre principal, Otjimue cluster).

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As in the case of the Hendrich cluster-centre principal, the cluster-centre principal lacks skills needed for facilitating shared and collaborative leadership as well as skills and techniques needed to facilitate the implementation of school management reform and therefore clings to what have been familiar to her.

Though the Makalani satellite school principals regard that the school management reform as having potential of providing opportunities for collaboration and cooperation among schools, they believe that initiatives and directives on how to facilitate the implementation of the change process should come from top:

> *…..'The former cluster-centre principal gave us some guidelines…he explained to us what we supposed to do…..I know I have to advise teachers…the current cluster-centre principal is not really clear on what to do…what the cluster-centre principal should do and what satellite school principals suppose to do …we need more clarity'* (satellite school principal, Makalani cluster).

Another satellite school principal also states that although the school management reform has a potential for improving the school system, schools need guidance on how to implement it:

> *……'is a system of group schools together to share ideas and experiences and the system might be promising and can support teachers…. the problems are that there are no proper guidelines on how to manage it'* (satellite-school principal, Makalani cluster*).*

There is a strong belief among the satellite school principals that the cluster-principal should provide guidance to them as to what they must do. They expressed a preference for hierarchical styles of management and well-defined roles and responsibilities for the cluster-centre principal and satellite school principals. The satellite school principals said that initiatives should come from the cluster-centre principal, being at the top in the management of cluster activities. However, the cluster centre principal lacked initiative on

how to facilitate the implementation of the school management reform; because the inspector rejected the school management reform and therefore ignored its implementation.

The hierarchical bureaucratic style of management to implement the school management reform used by two cluster-centre principals of Hendrich and Otjimue clusters and lack of initiative among cluster-centre principals and satellite school principals on how to implement the school management reform, impede its the implementation. Instead of strengthening the management of the satellite schools, the bureaucratic styles of management created dependency among the satellite schools over the resources of the cluster centres. The two cluster-centre principals lack skills to implement the school management reform in a participatory and democratic manner. The satellite school principals especially in the Hendrich cluster resisted the management style of the cluster-centre principal and showed low commitment towards the implementation of the school management reform. The Makalani satellite school principals expect initiatives and directives on how to implement the school management reform to come from the top. Although the satellite school principals in the Otjimue cluster did not resist much the management style of the cluster-centre principal, their commitment towards the school management reform was also low due to lack of resources.

6.3   Managerialism

A technocratic ideology which concerns with efficiency of organisations and managers are regarded as critical agents for the efficient functioning of organisations. Its primary value is economic efficiency, or the pursuit of maximum output with minimum inputs as well as efficiency in public administration (Krantz and Gilmore (1990). Managerialism puts emphasis on the importance of the individual's freedom as opposed to group or social

interests. While the bureaucratic administration puts emphasis on managing institutions by set of rules, regulations and procedures, the managerial ideology emphasises the importance of the skills and techniques of the managers in managing institutions effectively.

School inspectors, school principals and teachers have expected the reform to improve the management of weak schools by providing them with managerial techniques and skills to carry out their work better.

The circuit inspector responsible for Hendrich and Otjimue clusters regards the school management reform as a means for improving the running of weak, poorly organised schools and as a means to empower the school principals: *'I see the system as a means of trying to put the management of weak schools on certain standards… therefore we assist our principals during cluster management meeting…we should educate them'* (Inspector, Hendrich & Otjimue clusters).

She believes that the school management reform would improve the efficiency and effectiveness of the weak schools. Here, the circuit inspector shows a mixed of bureaucratic and managerial beliefs.

The former Makalani cluster-centre principal interprets the school management reform as has a function of improving the administrative efficiency and effectiveness of schools:

> *……'clustering system is supposed to be an effective school administration through networking and sharing of information and expertise, and requires the commitment and co-operation of every principal in order to a strong team for decision making and the willingness to work hard to enhance the improvement of the quality of teaching'* (former cluster-centre principal, Makalani cluster).

According to the former cluster-centre principal, the school management reform could improve the management skills of the school principals. He says that knowledge, skills, commitment and willingness are important factors for successful implementation of the school management reform. The former cluster-centre principal also regards the school management reform as having potential to improve the quality of teaching. It is not clear how exactly this would take place. It was noted that teachers did not find the cluster meetings meaningful in enhancing classroom practices. Observations of all the cluster meetings suggested that specific intervention programmes on management and teaching that were followed through at schools and in classrooms might work better than discussions about the reform's broad goals (see Chapter 7).

The knowledge and skills referred to by the Makalani cluster-centre principal appears to be technical expertise as opposed to, for example, dealing with the web of social relations, or engaging with the purposes of decentralisation and its implementation in schools.

The satellite school principals and teachers criticized the reform because they said, while it had the potential to do so, it failed in providing them with the managerial skills required to carry out their work better. One of the satellite school principals commented on the inadequacy of the reform to improve the management of her school: *'cluster system did not influence the management of my school…..it did not upgrade my managerial skills…one workshop was held ….the cluster-centre principal does not provide support to school principals…….he does not have information on how to manage the cluster'* (satellite school principal, Makalani cluster).

A teacher from Makalani cluster also indicated that the school management reform did not improve the management of her school: *'the management remains the same ……the*

clustering did not influence the management of my school…..we are totally on our own' (a teacher from under-resourced school).

The satellite school principals were encouraged to compete among themselves. They believed they could work on their own, without the support from other schools. The desire to be self-sufficient is the key feature of how schools in the rich urban cluster responded to the introduction of cluster-based school management reform. The inspector responsible for Makalani cluster commented on the self-adequacy of satellite schools in Makalani as follows:

> *The system in this cluster is not working properly. I don't know …..there is a strong competition between schools…the schools find it difficult to cooperate….you know …almost of all schools in this town are on par in terms of strong leadership and resources.*

> *School principals have been reluctant to accept the authority of another principal ….there was strong competition among the schools in the cluster and the schools did not cooperate effectively.*

It can be argued that the competitiveness and individualistic oriented beliefs of the satellite schools in Makalani cluster impede the successful implementation of the school management reform. Competitiveness and individualism are not congruent with the tenets of the school management reform.

The satellite school principals in Hendrich cluster view the reform as having potential for providing opportunities for improving the management of weak schools: '*it is a system of grouping weak schools with strong schools so that the weak schools can benefit from strong schools'* (satellite school principal, Hendrich cluster).

The satellite school principals believe that they should be given the rights to participate in the management of the cluster activities:

> *…'.our ideas are that each principal has a responsibility in the management of the cluster, we have to be part of the management of the cluster and not only one principal' (satellite school principal).*

> *….'we are not really involve in the management of the cluster, the CCP is the only one who coordinate the cluster activities; we do not want the CCP to manage the cluster alone' (satellite school principal).*

The satellite school principals believe that their freedom to manage and participate in the management of the cluster activities is blocked. They felt disempowered, resisted the management styles of the cluster-centre principals and showed a low commitment to the implementation of the reform. The sentiment that the school management reform has not empowered the satellite school principals confirms some of the criticisms of 'decentralisation that it does not automatically lead to stakeholder empowerment' (Govinda, 1997:281).

Because satellite school principals felt disempowered, they resisted the management styles of the cluster-centre principals and showed low commitment towards the implementation of the school management reform. As indicated earlier, the satellite school principals in the Hendrich cluster believe that they should be given the rights to manage their own schools: *'the cluster system did not change the way I manage my school, … you see we are also principals of our schools, we have skills to manage our schools' (*satellite school principal, Hendrich cluster). School principals appear to be accustomed to individualism and independence in the organisation and management of their schools and resisted interference with their authority to run their schools.

As in the case of Makalani satellite school principals, the self-centredness and individualistic oriented mind-sets of the Hendrich satellite school principals impede the successful implementation of the school management reform. The satellite school principals in both clusters needed to make a shift in their beliefs and practices in order to support the implementation of the school management reform, which advocates shared and collaborative leadership.

The satellite school principals in Otjimue cluster, like their colleagues in the other two clusters, also view the school management reform as having potential for improving the management of rural schools: '*cluster system could help rural schools to perform better because the resources are near and teachers need to be encouraged to work together'* (satellite school principal, Otjimue cluster).

…'cluster system is a good system….if strengthened it will improve the standards of schooling in rural areas' (satellite school principal, Otjimue cluster).

The satellite school principals have had expectations that the management reform would improve the effectiveness of the rural schools. Unlike the satellite school principals in Makalani and Hendrich clusters, the satellite school principals made the point that the provision of more resources to rural schools was critical. As the implementation process unfolded they realised that the system might not be sustainable because of limited resources. The satellite school principals cited the following issues, which linked to limited resources: '*the meetings are not held regularly because of distance and transport'; 'there is no visit from cluster-centre principal because of transport problems'* and '*there are limited funds to sustain the cluster activities'*.

Though the intentions of the management reform were to break the isolation of schools in rural areas, these intentions were not realised. The management reform provided limited

resources to rural schools. The satellite school principals maintain that the management reform has little significant effects on the management of their school: '*we have skills to manage our schools….principals still manage their schools (satellite school principal, Otjimue cluster);* '*the CCP sometimes give us some ideas when she visited some clusters on how to improve our schools'* (satellite school principal, Otjimue cluster).

The satellite school principals in Otjimue cluster believe that the effectiveness and the efficiency of the school management reform depend on its ability to provide sufficient resources to schools. The fact that the school management reform could not provide sufficient resources to rural schools leads to low commitment among satellite school principals towards the implementation of the school management reform. The feeling of being disillusioned is the key feature embody in the response of the schools in the rural cluster as the implementation of cluster-based school management unfolds in schools.

As in the case of satellite school principals in Makalani and Hendrich clusters, the teachers from resourced schools felt adequate and were individualistic oriented. The teachers, especially from the Hendrich cluster strongly believe that they could improve their teaching practices without the interaction of teachers from other schools: '*our own teaching practices will improve more without the rest of the cluster…. If schools have different surroundings, can they really interactive in a* positive way?' (teacher, from the resourced school, Hendrich cluster).

Teachers from the resourced school maintain that the school management reform does not have any benefits for them. They also maintain that there is no co-operation from other teachers in the cluster and therefore argue that the school management reform has not promoted collaboration and co-operation among teachers as it predicts it would. They

preferred to remain self-sufficient in terms of resources and to work on their own. *'As a cluster-centre, we find that the teachers from other schools, who really need help, are not interested….sometimes it is so tiresome to try to drag them along…at the expense of your school'* (a teacher from a resource school).

The teachers from under-resourced schools maintain that the cluster-based subject meetings lack content and therefore teachers are not motivated to attend the meetings: '*there are no specific topics for cluster meetings …. we do not know what we should discuss …. that is why people are not motivated to come to cluster meetings'* (a teacher from one of the under-resourced school).

The teachers argue that the school management reform lacks clarity on how the meetings can be utilised to benefit teachers. The fact that the school management reform does not has a clear focus on how to support teachers improve their teaching practices causes low commitment among teachers from the under-resourced schools towards the school management reform in the Hendrich and Makalani clusters.

Cluster subject meetings are no longer held regularly, especially in Makalani cluster. From the observation of cluster subject meetings, it was clear that teachers did not have any clues on how to conduct cluster subject meetings to support each other improve their teaching practices.

The teachers from Otjimue cluster, like the satellite school principals, consider that the effectiveness of the school management reform depends on its ability to provide sufficient resources to schools. Teachers have had expectations that the school management reform would provide opportunities for rural schools and teachers to perform better.

However, as the implementation unfolds in the cluster, teachers have begun to doubt the extent to which the school management reform could be sustained in rural areas. The teachers stated the following drawbacks why the school management reform did not progress well as well as their doubts of the sustainability of management reform in the rural areas:

> *'Effective and regular well attended and organised meetings have not been conducted due to transport problems.'*
> *'We meet after a very long time to share and divide ideas and materials', and*
> *'The meetings took place, may be once a year or even not at all due to long distance and transport problems.'*

It can be argued that teachers from rural schools have lost their commitment towards the school management reform due to its inability to provide sufficient resources to rural schools.

6.4   Conclusions

Drawing on the data about the beliefs and views of circuit inspectors, school principals and teachers about the school management reform, one can conclude that authoritarian, bureaucratic and managerial ideologies (which existed prior to the introduction of cluster-based school management) had been deeply entrenched in school practices. The culture and practices that prevail in the clusters echo more with the past practices than with the goals of promoting democratic participation, resource sharing and collaboration. School inspectors, school principals and teachers continue operating as they used to prior to the introduction of cluster-based school management reform. The two inspectors continue practicing bureaucratic and authoritarian control, while school principals and teachers continue operating within the ideological frameworks of bureaucracy, authoritarianism and managerialism.

Two inspectors, who were responsible for facilitating the school management reform through democratic and participatory leadership, could not make a shift from authoritarian and bureaucratic control to democratic and participatory approaches. The Makalani circuit inspector rejected the idea of delegating authority and administrative responsibilities to cluster-centre principals and therefore regarded it as 'un-procedural' for the cluster-centre principal to perform the tasks of the circuit inspector. He did not accept cluster-centres as governing structures, but rather as 'distributing and collecting' points.

Although the inspector responsible for Hendrich and Otjimue clusters embraced the school reform and its participatory styles of management, she employed bureaucratic and authoritarian control in supervising the work delegated to the cluster level.

Cluster-centre principals could not make a shift from bureaucratic styles of management to participatory styles of leadership and management. They find it difficult to implement shared and collaborative management.

Satellite school principals and teachers have been accustomed to receiving instructions and directives from the central authorities, and they could not come up with initiatives to modify the school management to suit the needs of the schools and teachers. The bureaucratic styles of control and faith in the virtues of line management facilitated the creation of dependency in decision-making. Decision-making was perceived to originate and emanate from the top and to filter down.

Schools and teachers have been accustomed to working in isolation, being competitive and individualistic oriented, and have had trouble giving up their ethos of competitiveness and individualism in order to accommodate values of collaboration and cooperation. It is

evident that the resourced schools in Makalani cluster and the resourced school in Hendrich cluster find it difficult to accommodate the under-resourced schools because they feel self-sufficient and therefore continue to protect their resources.

While the advocates of cluster-based school management reform assume that school management improves through participatory styles of management, schools have expected the reform to improve the management of weak schools through providing 'technical' skills and techniques that can assist school principals to manage their schools better and therefore the reform had been criticised for not having done so.

One can conclude that the reform goals of promoting democratic participation, collaboration and participatory styles of management have not been implemented as intended. The ideological legacies of colonial system have proven to be resilient and have deeply entrenched in the practices of the key implementers, making it difficult for the democratic ideologies to take off the ground. The designers of the initiative did not anticipate that the values and beliefs that govern the school practices prior to the introduction of cluster-based school management reform could be a source of resistance to the reform. The decentralised structure based on consensual and participatory democracy was grafted on bureaucratic, authoritarian and managerial ideologies which existed prior to the implementation of cluster-based school management reform.

Traditional norms and values that previously governed schools are powerful factors that have influenced the implementation of cluster-based school management reform. The traditional norms and values upheld by schools are not congruent with the notions of shared decision-making and collaborative management and therefore could be powerful implementation constraints. School dynamics play an important role in determining how a

school operates and how it relates to other schools. Therefore, in order for schools to work in collaboration, schools are required to develop shared values and beliefs to uphold the participatory leadership and management, because histories and institutional organisational culture dictate whether schools will uphold the new values and beliefs.

Drawing on data on the ideologies of the key role players, one could conclude that there is insufficient evidence to draw conclusions that school management reform relates to teaching. The evidence from the three case studies shows that the strong convictions of circuit inspectors, school principals and teachers in the ideologies which are incongruent with the tenets of the school management reform have challenged the implementation of cluster-based school management reform. This finding is consistent with Bjork (2004:257) who argues that 'delegating authority to local levels required fundamental changes that go against the core values and structures that have anchored the foundation of the education systems'.

Advocates of the school management reform assume that teaching would improve through a framework of collaboration and democratic participation. The evidence from the three case studies revealed that the school management reform did not build the culture of sharing and teamwork in clusters and schools. Cluster-centre principals have been managing clusters with little or no involvement of satellite school principals and teachers. Individualism and competitiveness continued to dominate clusters and schools. Cluster-centre principals, satellite school principals and teachers were unable to work as a team to improve teaching.

Although cluster-based school management reform created structures for sharing and collaboration on the assumption that these structures would improve teaching, school

managers and teachers did not see the value of these structures in improving teaching. In addition, the reform lacks clarity and guidelines on how shared, collaborative and participatory ideology transforms teaching in schools.

The school management reform assumes that school principals and teachers would come up with initiatives to improve teaching, because the responsibilities related to improving school management and teaching are delegated to clusters. The data from the three case studies revealed that school principals and teachers could not come up with initiatives to improve teaching, because they had been accustomed to receiving instructions from the top. Because of strong belief in authoritarian and bureaucratic control, school managers did not involve teachers in the planning of cluster-based subject meetings (structures which are assumed to improve teaching). Teachers were given little or no opportunities to plan for their professional development activities, but were instructed to attend cluster-based subject meetings without being involved in the planning of the meetings.

CHAPTER 7: TEACHERS' PERCEPTIONS OF CHANGE

7.1 Introduction

This chapter presents the experiences of teachers on the teacher support structures introduced by cluster-based school management reform to improve teaching in schools. It analyses the extent to which teacher support structures relate to improving teaching and concludes with a comparison of the findings from this study with the literature on the relationship between decentralisation reforms and improving teaching.

7.2   Teacher support structures

It is assumed that cluster-based school management reform would create opportunities for schools to: (1) share good teaching practices and teaching resources, (2) create a culture of sharing and mutual support among teachers; (3) enhance teacher involvement in decision-making processes; and (4) provide opportunities for teachers to meet within groups and learn from each other.

The advocates of cluster-based school management reform identify the following as teacher support structures to improve the quality of teaching: cluster management committee, cluster-based subject group committees, and cluster subject facilitators.

7.2.1 Teacher support through cluster management committee

Cluster-management committee is the management level which is responsible for planning, organising, guiding and monitoring activities in a cluster. As indicated in chapter 4, formal cluster-management committees were established in Hendrich and Otjimue clusters, while Makalani cluster established an informal cluster management committee. The cluster management committee consists of the cluster-centre principal and the satellite school principals. It is assumed that the cluster management committee would: (1)

monitor the quality of teaching and learning; (2) improve the management of satellite schools; (3) empower teaching staff, parents and communities; (4) improve efficiency in rendering educational services; (5) improve staff utilisation and (6) support staff development activities. The following section discusses the experiences of the teachers about cluster management committee as a teacher support structure in the three primary school clusters.

How did teachers in the rich urban cluster experience the cluster management committee?

A teacher in the Makalani cluster said:

> *'The cluster-centre principal does not influence the management of our school ….our principal knows a lot and support us very well' (a* teacher from a resourced school).

This teacher experienced support from her own principal and not from the cluster management committee. From the point of view of this teacher, her school works independently from the cluster-centre principal. From the teacher's point of view the school management reform did not influence the management of her school or the support she received.

Another teacher in the same cluster holds similar sentiments regarding the support of teachers from the cluster management committee:

> *'The CCP and my principal do not manage the cluster together… I know there is a cluster management committee…. but I don't have any idea what they discuss in meetings'…*
> *'Our principal helps us with our teaching….the cluster-centre principal organise meetings and told us how important to attend cluster- subject meetings'* (a teacher from under-resourced school).

This teacher claims that she does not have any idea about the functions of the cluster management committee. From the point of view of this teacher, her principal plays an

important role in teachers' professional development, while the cluster centre principal seems to be concerned with administrative issues in the cluster. Teachers in this cluster did not experience any benefit from school management reform, which could support their teaching. The fact that teachers do not know how the cluster management committee functions, strengthens the argument that teacher involvement has been weak, although it is one of the dimensions of cluster-based school management which seems to relate cluster-based school management to teaching.

One could also argue that the values and attitudes needed for shared and collaborative leadership are not upheld in this cluster. School principals chose to operate on their own rather than collaboratively and therefore established an informal cluster management committee. In this cluster, the cluster management committee, as a teacher support structure did not have any significant influence on the improvement of the quality of teaching.

The schools in this cluster are competitive and individualistic oriented, though the school management reform assumes that school principals would work in collaboration to improve teachers' teaching practices. It is evident from the case study that school principals believe that their schools are quite strong in terms of leadership and teacher quality and therefore perceive that the school management reform has an insignificant role to play in the improvement of management of their schools and the teaching practices of teachers.

How did teachers in the poor urban cluster experience the cluster management committee?

While in Makalani cluster, individual principals are the ones who support their teachers; in Hendrich cluster the cluster-centre principal had been instrumental in providing support to teachers; although a cluster management committee has been established in the cluster.

'The cluster-centre principal guides us….she selects a team who guide others during cluster meetings' (a teacher from the satellite school).

…*'Our principal attends our cluster meetings with us and provide us … with some ideas'* (a teacher from the cluster school).

'I have not seen them coming together principals from various schools, our principal from the cluster in my area does help, I don't see any other principal, except our own principal who is attending the cluster-subject meetings with us' (a teacher from the cluster school).

'Only cluster-centre principal organise cluster-subject meetings, like today we have a cluster meeting at our school, I don't know whether our principal is aware….. I think the cluster-centre principal knows what to do, I don't know our principal' (a teacher from the satellite school).

Though the cluster management committee is established in this cluster, as a teacher support structure, the school principals have not been working in collaboration to support teachers improve their teaching practices. Teachers in this cluster experienced the support from the cluster-centre principal. Although the school management reform advocates shared and collaborative management, school principals did not uphold the values and attitudes needed for shared and collaborative leadership. The cluster-centre principal chose to work in isolation from other principals in the cluster and seems to possess no skills on how to manage the reform in a shared and collaborative manner; equally the satellite school principals chose not to support the cluster-centre principal because they interpreted the school management reform as a threat to their power and authority over their schools. Schools in this cluster could not work in collaboration to support teachers improve their teaching practices, the cluster centre-principal used centralised and bureaucratic management styles in facilitating the implementation of the reform, while the satellite school principals resisted the reform and paid little attention to the implementation of the reform.

Lack of collaboration in Hendrich cluster can also be explained by the fact that the cluster centre principal perceives herself as the only one with strong leadership and therefore ignored the contributions from the satellite school principals. It could also be explained that the cluster-centre principal lacks clarity on how schools could work together to support teaching in schools.

As in the case of Makalani cluster, the cluster-management committee, as a teacher support structure did not influence the teaching practices of teachers in this cluster significantly.

How did teachers in the rural cluster experience the cluster management committee?

Turning to Otjimue cluster, though the cluster management committee is established in this cluster, cluster management committee meetings were not being held regularly and some times there were no meetings at all. Therefore, teachers perceived that they have little information on how the cluster management committee functions:

> ……'I *know that they go to meetings… may be they discuss things in education'* (a teacher from the cluster school).
> ……'I *know that school principals attend meetings together sometimes… but don't know what they discuss' (a teacher from a satellite school).*
> *'Our principal informs us that they discuss about common exam that all schools should write'* (a teacher from the cluster school).

The fact that teachers have little information on how the cluster management committee functions, makes it is clear that they did not experience any support from the cluster management committee. Other teachers in the satellite schools have not even mentioned the cluster management committee may mean to these teachers that the cluster

management committee does not exist. They only talked about the cluster-centre principal and indicated that they did not receive any support from the cluster-centre principal:

> *'The cluster-principal did not visit my school….we are just on our own'* (a teacher from the satellite school).
> *'There is no encouragement from cluster centre principal except own principal' (*a teacher from the satellite school).

The teachers in the satellite schools in this cluster indicated that they did not receive any benefits from the school management reform. As in the case of the Makalani cluster, they only received support from their principals. Though the schools in this cluster seem to uphold the values and attitudes needed for shared and collaborative leadership, schools were limited in engaging in collaborative activities due to limited resources.

When the cluster-centre principal was asked whether she visited schools in her cluster, she indicated that: '*I am aware of that, but I don't have time and money to travel to schools. There are now allowances to do so, but it takes time to get the money when you claim'*.

It is ironical to expect rural schools to have more resources in order to implement the reform while limited resources were provided to schools. The school management reform puts unfair demands on under-resourced schools situated in impoverished communities. This confirms the argument of the critical-political economic theorists that 'devolution of authority to schools places unfair burdens on schools in instances of resource scarcity' (Walker, 2002).

This case study provides us with the insight that though the schools in this cluster respond to the implementation of cluster-based school management reform positively, the cluster could not implement the reform as intended due to limited resources. It also provides insight that the reform creates the structures to support teaching, but the structures lack resources to implement that support.

Drawing on the data from the three clusters, the cluster management committee as a teacher support structure introduced by cluster-based school management reform did not provide significant support to teachers to improve their teaching practices. The schools in the rich urban schools felt adequate and therefore did not take cluster-based school management reform seriously. Though the resourced school in the poor urban cluster supported the satellite schools, there was little collaboration in the cluster, because the satellite school principals felt that their contributions to the management of the cluster were not valued. Although the rural cluster responded positively to the introduction of the school management reform in their schools, the school principals could not attend cluster meetings regularly due to limited resources at their disposal.

7.2.2 Teacher support through cluster-based subject groups

Cluster-based school management reform assumes that teaching would improve when teachers engage in collaborative learning during cluster-based subject group meetings. The following sub-section discusses the experiences of the teachers about cluster-based subject groupings as a teacher support structure in the three primary school clusters.

What teachers from the rich urban cluster said about cluster-based subject groups?

In the Makalani cluster, teachers in the resourced schools perceived insufficient support from cluster-based subject meetings in helping them improve their teaching practices:

> *'I am not really picking up something new, we repeat the same thing.'*
> *'We need to learn new ideas, discussion alone is limited, we need help with actual teaching skills.'*
> *'We don't really do much during cluster meetings, we do planning or make sure that we know what should be included in the subject file….one needs to get something new and bring it into your classroom'.*

'Some issues are policy-related that teachers cannot solve without the support from central authority'.

'The system did not change my teaching, because I am a good teacher (laughed)…... you cannot copy from others and just implement in your class… just like that.'

Teachers' experience was that the cluster-based subject meetings focus more on discussions and administrative issues than on teacher professional development activities. Teachers argue that the meetings are not planned to help teachers learn new teaching skills. Cluster-based subject meetings lack proper structure and guidelines on how to support teachers learn new teaching skills. Teachers also argue that sharing of information and discussions is limited and does not contribute much to teacher learning and therefore is limited in improving teachers' teaching practices. Teachers also argue that though they try to support each other to solve classroom related problems, some of the problems they encounter in classrooms are policy related. Teachers cannot solve the problems by themselves without the support from policymakers.

Although teachers in the resourced schools feel adequate, they also argue that some of the problems that they face in their classrooms are policy-related issues and therefore the support from the central authorities is essential. Support from the central authorities is identified by De Grauwe (2004) as a key factor in the implementation of SBM reforms. He argues that the 'absence of an efficient and supportive state is risky not only for the individual schools, but also for the system as a whole' (De Grauwe, 2004:5).

As in the case of teachers in resourced schools, teachers in under-resourced schools stated that insufficient support from cluster-based subject meetings:

'Cluster meetings should take place more regularly and subject facilitators must be knowledgeable to help us learn more…we need to understand how we can implement the new syllabus in our classrooms.'

'There are no guidelines on how facilitators can assist teachers during cluster subject meetings'.

'Teachers may become motivated to attend cluster meeting if they can influence policies and can see improvement in classroom conditions'.

'What is happening in cluster meetings is not really 'teaching' or 'learning' it is just question and answer.'
'We can get some good ideas from cluster meetings, learners are from different socio-economic backgrounds'.

Teachers in the under-resourced schools argue that subject meetings are not planned properly and facilitators lack sufficient pedagogical knowledge as well as facilitation skills on how to support teachers learn new teaching skills. Teachers contend that teachers have low motivation to attend cluster-based subject meetings because they do not have power and authority to influence policies. Though the school management reform assumes that teachers would be empowered, teachers feel that they cannot influence policies. Teachers also argue that discussions and sharing of ideas at cluster-based subject meetings would not matter so much if 'there is no improvement in classroom conditions' and no additional resources are provided to schools to cater for learners from different socio-economic backgrounds.

It can be surmised from the experiences of the teachers in this cluster that cluster-based subject grouping did not improve teaching practices of teachers. As a teacher support strategy, it lacks structure and clarity on how to support teachers and that the school management reform cannot be implemented in isolation from existing policies, which may compete or contradict the school management reform policy.

What teachers from the poor urban cluster said about cluster-based subject groups?

Like in the case of teachers in Makalani cluster, the teachers in Hendrich cluster perceived that they received insufficient support from cluster-subject group meetings:

'We expect to get information from other teachers in other schools, we need cooperation from others; we are the only ones who give information to others and who have expertise in some subjects, we are not receiving anything back'.

'We don't get support from subject advisors, we need to learn new ideas, and discussion alone is limited. We need more help with actual teaching skills. Sharing of exam papers and information is not enough'.

'Some teachers feel poor when working with others, and therefore resist attending meetings, if they come to meetings they do not bring subject files, they do not contribute'….

'We need to learn new ideas concerning teaching and learning'.

'The quality of the improvement in my own class is not as a result of knowledge that I gained from the cluster teachers, but because of my own commitment. I always shared with the others, but they never implement that in their classes'.

'I am doing the same things in my classroom as I used to do before the introduction of cluster system'.

Teachers in the resourced school contend that there is no collaborative learning takes place during cluster meetings. They feel they are the only ones who provide information to the colleagues from satellite schools, but do not receive anything back. They experience cluster-based subject group meetings to be more exploitive than beneficial to them. It is clear from the views of the teachers in the resourced school that they feel self-sufficient and therefore do not value the contributions from teachers in the satellite schools.

As in the case of teachers in Makalani cluster, teachers feel that there is no clarity on how cluster-based subject groups can be utilised to support teachers improve their teaching practices. The teachers in this cluster also feel that they are compelled to attend cluster meetings from which they are not benefiting at all. They argue that they would not benefit from cluster meetings if they were the only ones who attend the meetings without the support of the subject advisors. Teachers feel strongly that they are not learning new teaching skills, what they do during cluster meetings is limited to discussion and sharing of exam papers which do not help them improve their teaching practices.

There are differences in perceptions among teachers in under-resourced schools on the support they received from cluster-subject group meetings. Some of the teachers in the under-resourced schools stated that insufficient support was received from cluster-based subject meetings:

> ...'there is no year program... there are no specific topics for cluster subject meetings'.
>
> 'Sometimes we come together everybody is quite, sometimes those who have problems don't turn up'.
>
> ..'we don't do a lot during the gathering, we don't know how to make cluster subject meeting effectively'.
>
> 'We need input from subject advisors to make subject groups more worthwhile.'
>
> 'There are no specific facilitators for cluster-based subject meetings.'
>
> 'No follow up at classroom level after cluster meetings'.
>
> ..'During cluster meetings, we don't really learn much, we only share ideas, I don't remember learning something new.'

As in the case of teachers in Makalani cluster, teachers in the under-resourced schools argue that cluster-based subject group meetings are planned poorly and lack clarity on how to support teachers improve their teaching practices. They also argue that there is a need for the support from subject advisors during cluster-based subject group meetings as well as the need for facilitators to have sufficient pedagogical knowledge and facilitation skills. Teachers argue that discussions and sharing of ideas during cluster-based subject group meetings would not improve their teaching practices if 'there are no follow up at classroom level after cluster meetings'. As in the case of the teachers in the resourced school, teachers in the under-resourced school argue that they do not learn much during the cluster-based subject meetings, because the cluster meetings are limited to sharing of ideas and information. However, some teachers stated that they received support from cluster-based subject meetings:

...'.we advise each other on various methods, for example methods of teaching reading. 'I think my teaching can improve, if I follow what others told me'.

…'I am now sure what to do in my classroom, especially how to deal with reading problems because I got help from strong teachers'.

'Teaching practice can improve if we try out ideas from cluster subject meetings in our classrooms'.

Some of the teachers in the under-resourced schools stated that they learned new ideas from cluster-based subject group meetings and were optimistic that their teaching practices could improve if they implement the advice of their colleagues. However, none of the teachers has provided evidence of an aspect of their teaching practice, which has improved because of attending cluster-based subject meetings.

As mentioned previously, there are differences and similarities in the ways in which teachers in this cluster view cluster-based subject grouping as a teacher support strategy. The differences in the perceptions could be attributed to the fact that teachers experienced cluster-based subject grouping differently. The similarities could be attributed to the fact that cluster-based subject meetings have become a routine and teachers have observed a particular pattern in the manner in which cluster-based subject meetings have been conducted most of the time.

What teachers from the rural cluster said about cluster-based subject groups?

As in the case of teachers in the two clusters, the teachers in Otjimue cluster stated that they have received insufficient support from cluster-based subject group meetings. Cluster subject meetings in this cluster were not held regularly or not at all. In order for cluster subject meetings to take place regularly, teachers need additional time and resources to enable them to carry out their teaching duties as well as attend cluster-subject meetings regularly:

…'the meetings took place, may be once a year or even not at all and we need to share learning and teaching problems'.

'We do not come regularly to meetings because of distance and transport problems'.

'We learned things during the cluster meetings, but we do not implement the ideas as they are, we have different needs, different learners'.

'There is no follow up support for teachers to master new teaching strategies'.

Teachers point out that their attendance of cluster-based subject meetings are constrained by distance and transport problems. They also argue that though teachers may learn new ideas from cluster-based subject group meetings, teachers emphasise that there is a lack of follow up at classroom level, which they argue to be an important aspect for supporting teachers improve their teaching skills.

It is evident from the available minutes of cluster subject meetings that cluster subject meetings are not held regularly or not at all. I could not attend one cluster subject meeting in this cluster, because meetings were cancelled most of the time.

However, teachers in this cluster are quite optimistic that cluster-based subject group meetings can improve their teaching practices:

'I *know what others are doing, what I should concentrate when I am teaching' …. I learned how to use learner-centred methods and how to integrate my subjects when I am teaching', but when I come to my classroom…. I do different things because the needs are not the same'.*

'We share ideas on how to do things in the classroom….but I don't do everything we discuss….you know what you can do with your learners, according to your understanding'.

Though teachers are optimistic about the potential of cluster-based subject group meetings in improving teaching, they assert that they do not implement the ideas from cluster-based subject group meetings uncritically. They argue that the needs of their

classrooms dictate the extent to which the ideas they receive from cluster-based subject group meetings are implemented in their classrooms.

As in the case of cluster-based management committee, the strength of cluster-based subject grouping as a teacher support strategy depends heavily on the availability of resources, which is problematic in rural schools. The school management reform imposes unrealistic demands on teachers in rural schools which they cannot cope with. Teachers in this cluster like teachers in the other two clusters need additional time and resources in order to cope with their teaching load and the expectations of the school management reform.

It is evident from the study that cluster-based school management reform has not alleviated difficulties that rural schools have been experiencing. The cluster-based school management reform has rather created more difficulties to rural schools. The finding from this case study supports the argument of De Grauwe (2004:2) that 'the introduction of decentralisation reforms such as SBM has led to deterioration especially in the weakest schools'.

It is also evident that cluster-based subject meetings have little or no significant influence on the teaching practices of teachers in this cluster. Teachers cannot attend cluster-subject meetings regularly because of limited resources. Teachers in this cluster experience difficulties accessing resources at the cluster centre due to lack of transport.

The following sub-section presents the evidence from the observations of cluster-based subject group meetings. The sub-section attempts to analyse the extent to which the

evidence from the observations of cluster-based subject group meetings is consistent with the teachers' experiences of cluster-based subject group meetings.

To demonstrate how qualitative evaluation of cluster-subject group meetings was carried out; an example of an in-depth observation of one of the cluster-subject group meetings is presented below:

Cluster-subject group meeting observations (14h30-16h30): General Overview
The cluster meeting was attended by teachers from the satellite schools and those from the cluster school. The cluster-centre principal also attended the meeting. The meeting was held at one of the satellite schools in the cluster. Some teachers came to a meeting without any notebooks or subject files. The meeting started with a prayer. The chairperson (one of the teachers) indicated that it was expected from teachers to provide him with agenda items for the meeting, but he did not receive anything. He invited agenda items from those who were present. There was no response. It was quiet for a while. The cluster-principal suggested that the focus of the meeting should be the 'lower primary reform'. There was silence for five minutes. The chairperson read the minutes of the previous meeting. After the chairperson read the minutes, there was again a moment of silence. The chairperson asked the teachers whether there were experiencing problems with the implementation of the revised syllabuses. The cluster-centre principal encouraged teachers to share experiences with one another regarding the implementation of the revised syllabuses. One of the teacher suggested that cluster meetings should be held according to the grades, not all lower primary teachers attended the same meeting. The meeting struggled to have a focus. Some teachers came late (10-30 minutes). One teacher indicated that she experienced difficulty to find teaching aids for some themes in the Environmental Studies subject. Another teacher also indicated that she found difficulties to find pictures and stories on the topic 'social groups' in the Environmental Studies subject and also talked to others that she also struggled to teach in a thematic approach and would like other teachers to assist her. The cluster-centre principal explained that the library at the cluster has some books and is accessible to teachers at the cluster school. The meeting followed a 'question and answer pattern' whereby one teacher asked a question and other teachers provided answers. The cluster-centre principal was dominating the discussions most of the time. The meeting continued in a haphazard way. The cell phone of the cluster-principal rang and she went outside. There was quietness again. When the cluster-centre principal came back, the discussions continued following the same pattern of 'question and answer'. Some teachers did not participate in the discussions; they sat quietly, appeared bored and didn't take any notes from the meeting. The teacher who indicated in the interview that she did not learn anything from attending cluster-subject group meetings; did not say anything throughout the meeting. The meeting ended and the chairperson thanked all who came to attend the meeting.

Cluster-subject group meeting evaluation

1. Cluster subject meetings were supposed to be venues for teacher professional development. There were no specific activities organised to enhance teachers' teaching skills. The discussions during cluster meeting followed a question and answer pattern.

2. There were no activities organised to engage teachers in professional discussions of their own practice. Though teachers discussed classroom practice related issues, the discussions were done in a haphazard way.

3. There were no materials or resources used in the discussions. There was no planning and preparations done for the cluster meeting except a list of agenda items.

4. The interaction among teachers was weak. Only a few teachers paid attention to what others said and contributed to the discussions, most teachers were not interested.

5. There were teachers who indicated (through their non-participation and body language) that the discussions were not worthy of their attention.

6. The meeting focused on sharing problems and ideas. There were no structured professional development activities, whereby teachers were actively involved in order to learn new teaching skills.

7. Most of the teachers did not seem to see the relevance of attending cluster meetings to their classroom practice and therefore were not paying attention to what was discussed.

8. From the observation of what was going on during the meeting teachers, did not learn new teaching skills. There was little effort from teachers to make contribution to the discussions during cluster meetings.

Drawing on the data from the observations of cluster-based subject group meetings, teachers learn very little from cluster-subject group meetings that may contribute to improvement in teaching practices. It seems that teachers do not regard cluster-based subject meetings as professional development activities, but rather routine activities that they are forced to attend.

It is evident from the example above that cluster-subject group meetings have done very little to support teachers improve their teaching practices. The fact that teachers come to cluster meeting with no notebooks and files, indicate that teachers do not regard cluster meetings as having a significant role in their professional development. The above example of a cluster-based subject meeting shows that the meeting lacks structure and focus as how to support teachers improve their teaching practices. It is clear that the meeting was more about listening to those who brought up issues/problems, and getting responses from a few who tried to support others, while the rest of teachers sat quietly and showed no interest in what was going on in the meeting. It is also clear from the example above that cluster meetings are unorganized and take place in a haphazard manner. Cluster meetings become routine activities and therefore teachers are not interested. There were no demonstrations of good teaching practices.

From observations of cluster meetings, it becomes clear that cluster meetings follow the so-called 'meeting procedures' where there is the chairperson and a secretary of a meeting; meeting agenda is adopted; minutes of the previous meeting are corrected and so forth. As indicated in the evaluation of the example of a cluster-subject meeting above, discussions during cluster meetings follow a question and answer pattern, in other words, the chairperson of the meeting invites teachers to raise their concerns and those who have information provide explanations. It is clear from the example above that teachers did not learn new teaching skills during the cluster-subject group meetings.

In another cluster meeting observed, the chairperson was the cluster subject facilitator. She came to the meeting with a list of agenda items. These were subject file, scheme of work, assessment, lesson planning and teaching of Handwriting. The chairperson asked the teachers to add other items on the agenda. This meeting also followed the so-called

'meeting procedures' and 'question and answer' pattern. However, in this meeting, the chairperson was the only one who provided explanations, while some teachers were listening and others were not interested in the discussions. Though the chairperson was the subject facilitator, the meeting also lacked structure and focus on how to support teachers improve their teaching skills other than verbal explanations to questions posed by some teachers. Teachers who claimed that they experienced problems with the implementation of the revised curriculum repeatedly interrupted the meeting. Though the chairperson provided explanations, interruptions from the teachers continued. Although the facilitator tried to respond to some concerns raised, teachers were not satisfied with theoretical explanations.

Like the case of the example of a cluster meeting provided above, this meeting also shows that cluster meetings lack structure and focus to support teachers improve their teaching practices; they are unorganized and conducted in a haphazard manner. Teachers were not interested in cluster meetings, because cluster meetings are routine activities that teachers are forced to attend even though they are not benefiting from attending the cluster meetings. The weakness of cluster-based subject group meetings is that these meetings are run based on a self-organised model, which assumes that teachers would work together and share resources and experiences without proper structures and resources in place.

The evidence from the interviews with teachers as well as evidence from observations of cluster-subject meetings shows clearly that cluster-subject meetings have little or no influence on the teaching practices of teachers. The school management reform introduces cluster-based subject group meetings as opportunities for teachers to learn teaching skills, but subject meetings are very poor to improve teaching.

7.2.3   Teacher support through subject facilitators

It is assumed that cluster-based school management reform would improve the teaching skills of teachers through the support of cluster subject facilitators. Teachers in Makalani cluster pointed out that they did not receive support from cluster subject facilitators:

> *'The teacher who is our convenor does not have time… you know she is also a teacher….*
> *where does she get time to go around many primary schools in our cluster.'*
> *…'We have our convenor, she can help where she can, she is also a teacher…she does not*
> *have time'.*

Teachers state that though subject facilitators are appointed in the cluster, they are limited in the amount of support they can provide to teachers. They need additional time and resources to visit all the teachers in eight primary schools. The facilitators already have their teaching load and therefore do not have time to support teachers at classroom level. The school management reform has created an extra load on teachers who are appointed as subject facilitators. It is unrealistic to expect teachers who are fulltime teachers to visit all lower primary teachers in eight primary schools. Apart from the teaching load, these teachers have to deal with issue of power relations. Teachers in this cluster are well qualified and the subject facilitators might see themselves as poor in dealing with teachers who are at the same level as they are or who are better qualified or experienced than them.

As in the case of the teachers in Makalani cluster, the teachers in Hendrich cluster have pointed out that they have not received support from cluster facilitators:

> *'We have a facilitator who is knowledgeable about lower primary, based at the TRC, the*
> *facilitator attends cluster meetings, but not really make follow up after cluster meetings, but her*
> *own school visit according to her schedule'.*

> *'Yes, we have a subject facilitator in our cluster, but does not visit us, she does not have time'.*

In this cluster, teacher support through cluster subject facilitators did not support teachers improve their teaching methods, because cluster subject facilitators could not support teachers at classroom level due to time and resource constraints.

Teachers in this cluster point out that they only have one cluster subject facilitator. As in the case of Makalani cluster the facilitator does not visit teachers, due to limited resources and her own workload. It can be argued that the facilitator has chosen to focus more on her own workload because of lack of clarity regarding her roles and responsibilities in the implementation of the school management reform. From the observations of cluster-subject meetings in this cluster, the cluster subject facilitator did not play any significant role during cluster subject meetings. In this cluster, the teacher support strategy through cluster subject facilitators did not improve the teaching practices of teachers, because the facilitator could not support teachers at classroom level due to time and resource constraints and lack of clarity regarding the roles and responsibilities of the cluster-subject facilitator.

Turning to Otjimue cluster, teachers in this cluster also pointed out that they have received limited support from the cluster subject facilitators:

> …'*you know she is also a teacher and a principal, they are only two teachers at their school and the school has grades one to four'.*
> '*When we have meetings…...she also attend meetings…because she teaches lower primary and she correct us where we are wrong'.*

Teachers argue that the subject facilitator cannot provide support to teachers due to the workload and limited resources. In the case of Otjimue cluster, the subject facilitator is a school principal whose school has limited teaching personnel. The situation in rural schools is even more complicated than that of urban schools, since schools are isolated and have very limited resources. As in the case of other teacher support strategies, the

support of the subject facilitators for teachers requires additional time and resources. However, the school management reform has not provided the schools with opportunities to create more time and additional resources.

As in the case of the two urban clusters, teacher support through cluster subject facilitators is limited to support teachers improve their teaching practices, due to limited time and resources.

7.3   Conclusions

There were differences in the way in which the three primary school clusters responded to the introduction of teacher support structures. As mentioned previously, Makalani cluster did not view school management reform as a management system. The cluster management committee was not formalised and therefore did not attempt to link it to the work of teachers. Schools in Makalani cluster felt adequate and disregarded the contributions of the school management reform to their schools and to teacher quality.

In Hendrich cluster, though the cluster management committee was established, the principles and values embedded in the school management reform were not realised by the school principals. As a result, the school principals were not working collaboratively to support teachers improve their teaching practices. In particular, the cluster-centre principal perceived her leadership skills to be stronger than that of satellite school principals. She disregarded the contributions from the satellite school principals and therefore the satellite school principals paid little attention to the management of cluster activities.

Although schools in Otjimue cluster responded positively to the introduction of cluster-based school management reform, they could not plan and manage the cluster in a

collaborative manner due to communication and transport problems. Therefore, teachers in this cluster have only a vague understanding of how the cluster management committee functions.

Teachers in the three case studies stated that they received little or no support from the cluster-management committee. Drawing from the experiences of the teachers in the three primary clusters, there is little or no clear link between the cluster management committee and the work of the teachers. Teachers in the three clusters do not have information on how the cluster-management committee works. What teachers experience is the support that they receive from either their own principal or the cluster-centre principal (in the case of Makalani cluster).

As far as the cluster-based subject group meetings are concerned, the teachers regard the meetings as having limited potential to affect their teaching practices because the meetings lack structure and clarity on how to support teachers improve their teaching practices. Besides the issue of vague focus, attendance at the cluster-based subject meetings requires schools and teachers to have additional time and resources at their disposal.

The perceptions of teachers on the support provided by cluster-subject facilitators were not positive. Teachers stated that they received little or no support from cluster subject facilitators. Teachers claimed that cluster subject facilitators did not provide support to teachers at classroom level because of their own teaching load, time and resource constraints. Besides time and resource constraints, it seemed that roles and responsibilities of subject facilitators in supporting teachers were not clearly defined.

It can be concluded that the teacher support structures introduced by cluster-based school management reform to improve teaching have little or no influence on the quality of teaching practices of teachers. Most of the teachers interviewed did not know about the cluster management committee, while some teachers view it as having an administrative function rather than a professional development function. Besides the fact that cluster management committees have been perceived as administrative structures rather than entities to support teachers to improve their teaching practices, schools have not yet upheld the values and attitudes that are needed for shared and collaborative leadership. Teachers have experienced little or no support from cluster-based subject group meetings because cluster subject meetings lack structure and clarity. Teachers also have experienced cluster-based subject group meetings as focusing more on discussions and sharing of ideas than on teacher professional development in order to improve the quality of teaching in schools. Teachers argue that the support from subject facilitators cannot be realised without additional time and resources provided to schools. In fact, all three teacher support strategies introduced by the school management reform require schools to have additional resources at their disposal.

In summary, teachers perceive the reform as a burden rather than a means to improve their teaching practices. Teachers clearly pointed out that the reform did not have clarity or focus on how to improve teaching.

It can also be concluded that school clustering, like other decentralisation reforms such as school-based management, lacks clear strategies and focus for improving the teaching skills of teachers; effective monitoring system (Bray and Mukundan, 2004); and capability to rebuild the traditionally isolated work of teachers (Schiefelbein, 2004). It focuses on

changing structures and promotion of democratic participation, which alone does not improve the quality of teaching (Mohr and Dichter, 2001; Anile and McKenzie, 2000).

The data from the three case studies reveal that the school management reform has introduced structures in schools, but these structures lack clarity on how to support teachers in improving their teaching practices. The school management reform does not have a clear focus on how to improve teaching in schools. The advocates of the school management reform did not realise that the implementation of the school management reform would require additional time and resources to be provided to schools if changes are to be affected in teaching practices of teachers.

It is safe to conclude that the school management reform has introduced inefficient and poor teacher support structures to improve the quality of teaching in schools. The reform overlooked *three* important aspects: (1) *clarity and guidelines* of how these structures can support teachers improve their teaching practices; (2) *sufficient resources* to support teacher support structures improve teaching; and (3) *support and effective monitoring system* of teachers' teaching practices at classroom level. It can also be concluded that there is insufficient evidence from the three case studies that teacher support structures introduced by the school management reform have improved the quality of the teaching practices of teachers.

It can be surmised that there is insufficient evidence from the three case studies that the school management reform relates to improving teaching. The evidence from the three case studies clearly illustrates a missing link between cluster-based school management reform and improving teaching. The evidence shows clearly that the school management reform changes structures of managing schools, but does not provide clear guidelines on how these structures support teaching in schools. The evidence also shows that the school management reform sets expectations for school principals to support teachers to

improve their teaching practices, but did not provide support and sufficient resources to improve teaching in schools. As mentioned previously, the evidence from the three case studies shows that the school management reform introduced teacher support strategies to improve teaching, but these strategies lack clarity, guidelines and resources to support and monitor teaching at classroom level. It can be surmised that there is insufficient evidence from the three case studies that cluster-based school management improves the teaching practices of teachers.

CHAPTER 8: DID THE CHANGE IN SCHOOL MANAGEMENT IMPROVE THE TEACHING PRACTICES OF TEACHERS?

8.1   Introduction

The school management reform assumes that teachers would learn new teaching skills by engaging in collaborative learning with teachers from other schools within the clusters. This chapter presents the characteristics of the teaching methodologies of teachers in three primary school clusters as revealed by the classroom observation data.

This study assumes that the teaching methodologies of teachers in the three primary school clusters would be effective if teachers are able to teach according to the following criteria: (1) teacher interacts with learners to promote active learners' participation in learning; (2) teacher stimulates learners' responses and keep learners on task; (3) teacher uses a variety of teaching materials and resources to support learning; (4) teacher uses a variety of teaching strategies to promote learning; (5) teacher assists learners with different learning difficulties; (6) teacher assists learners to make connections between what they know and new material; (7) teacher engages learners in higher order thinking skills; (8) teacher assists learners to see the relationship between different learning areas. These criteria were adapted from the literature on teacher effectiveness and effective teaching (Ndembele, 2005; Campbell et al., 2004; Schreens, 2000; Anderson, 1991; Kyriacou, 1986).

The above-mentioned criteria were used to assess the effectiveness of the teaching methodologies of teachers in the three primary school clusters. The study assumes that

teachers who teach according to the above-mentioned criteria would be regarded as effective teachers. The study also assumes that cluster-based school management reform would have supported teachers to teach according to the above-mentioned criteria.

However, in the eighteen (18) classroom observations that were carried out, the characteristics of the teaching methodologies of teachers, which emerged were dominated by: chalk-talk and teacher dominated teaching, excessive use of group work, limited individual learner instruction and limited mastery of the language of instruction.

8. 2   Chalk-talk and teacher dominated teaching

The teaching in the primary classrooms is still characterised by teacher directivity, which is limited to memorizing facts and reciting them back to the teachers. Teachers have limited skills to engage learners in active learning, which facilitates creative and challenging learning. Teacher dominated teaching limits learners in the development of conceptual understanding, critical thinking and analytical skills.

In classrooms when teacher dominated teaching is practiced most of the time, teaching is based on the following two traditional methods: un-interactive whole class teaching, and question and answer methods. The lesson described below represents chalk and talk teaching. The teacher is 46 years old. She has 17 years of teaching experiences and obtained a Lower Primary Teacher Certificate. She has been teaching Lower Primary for 17 years. The teacher is teaching in an under-resourced school in the Hendrich cluster. The teacher claimed that she did not receive support during the implementation of cluster-based school management reform and her teaching practice did not improve as a result of cluster-based school management reform. The literacy lesson below was presented to a Grade 1 class:

June 02 Observation (12h30 to 13h15): General Overview:

The classroom is small with limited space for teaching and keeping learning materials. The classroom has 38 learners. It is decorated with posters and pictures of animals. Other materials on the wall include: letters of alphabet and flash cards on days of the weeks and months of the year. There are two cupboards with teaching materials. There is a limited collection of teaching materials. The medium of instruction is English, but learners come from different language backgrounds: Otjiherero, Afrikaans, Oshiwambo and Khoekhoegowab. Learners sit permanently in groups and desks are arranged closely to one another. There are enough learner workbooks.

The teacher put a poster on the chalkboard. She asked learners to sound words as a whole group. She struggled to pronounce some words. Some learners were sounding words without looking at the chalkboard; some were busy playing with bottle tops in an ice-cream container. The teacher stood at the chalkboard most of the time. She continued putting posters with new words on the chalkboard without checking whether all learners could read, before she proceeded with new words. She continued asking learners to read words on the poster as a whole group. Some learners continued playing with friends. She only told one learner to concentrate. She went back to her seat for a while and then asked learners to identify words from the poster and paste them on the one side of the chalkboard as she was saying them. Most of learners struggled to read the words. The pattern of pasting words on the poster continued for a long time until the lesson was completed. The bell rang and the period ended.

The following is the evaluation of the lesson as per observation criteria:

June 02 Observation (12h30 to 13h15): Specific Evaluation

1. The teacher stood most of the time at the chalkboard. The interaction between the teacher and learners in this lesson was poor.
2. Some learners responded to the teacher's instructions by reading words from the chalkboard, while others said words without looking at the chalkboard.
3. The teacher only used whole class teaching, which was not interactive and limited to allowing learners to practice reading individually.
4. Little was done to assist learners to make connections between what they already know and new material.
5. In this lesson, there was no evidence of engaging learners in higher order thinking skills.
6. The teacher used posters to enhance learning; however these were not used effectively because the teacher spent most of the time standing at the chalkboard and asked learners to read words as a whole group.

7. In this lesson there was no evidence of the use of teaching strategies and materials to support learners see the relationship between different learning areas

8. The teacher did not adapt instruction to the variations in learners' abilities, because she used whole class teaching method most of the time.

In this lesson the teacher did not meet the criteria for effective teaching. The teacher-learner interaction was poor, and the teacher could not keep learners on task. Some learners were sounding words without looking at the chalkboard, while other learners were playing with friends. The teacher was limited in assessing or learning active participation of all learners. Consequently, she could not monitor learning effectively, because she could not react effectively to learners' responses to the lesson. The teacher did not use a variety of teaching strategies; she focused more on whole class teaching which was not interactive. The teacher requested learners to sound words repeatedly, without assessing whether they were learning. The teacher used only posters as indicated in the evaluation; these were not used effectively to enhance learning. The use of a variety of teaching strategies is associated with good teaching practices (Campbell et al., 2004; Kyriacou, 1986). Learners were given little time to practice reading individually. The teacher concentrated on teaching the whole class and provided little individual assistance. Monitoring of learning and support to individual learners is associated with good teaching practices (Anderson, 1991). The teacher was not able to assist learners make connection between what they already know and new material as well as to see the relationship between different learning areas. The lesson described above was of poor quality and therefore the teacher did not teach effectively.

One pattern observed when teachers use whole class teaching is that teachers ask learners to say words after her/him as a group and this is repeated many times in lessons. It was also observed that when teachers use whole class teaching, they were limited in using a variety of teaching strategies. Whole class teaching and limited teacher learner

interactions were common practices in most of the classrooms visited. Most teachers were limited to shallow questioning techniques and only a few teachers used different levels of questioning. In most cases learners responded as a whole group and teachers requested them to repeat the answer more than once. Teachers were unable to guide learners to realise the correctness or inadequacy of their answers. This kind of teaching is limiting learning for understanding, as well as impeding learners in making connections between what they already know and new material.

Inappropriate whole class teaching was not only observed in under-resourced schools, but also in resourced schools. It was also used in the classrooms of those teachers who claimed to have received professional support through cluster-based school management reform as well as those who claimed that their teaching practices have been improved as a result of the implementation of cluster-based school management reform.

Only *seven* teachers out of the eighteen teachers observed, taught lessons which showed evidence of promoting active participation of learners in lessons, keeping learners on task, using a variety of teaching strategies, seeking active participation of learners in learning, using of varied questioning techniques, and using teaching materials and resources to enhance learning. *Four* of the seven teachers were teaching in Makalani cluster (*three* lessons were observed at the resourced schools and *one* was observed at one of the under-resourced schools); while *two* teachers were teaching in Hendrich cluster (*one* lesson was observed at the resourced school and the other *one* lesson was observed at one of the under-resourced schools) and *one* teacher was teaching in Otjimue cluster.

One example of the lessons referred to above, was the Mathematics lesson observed in Makalani cluster. In a Mathematics lesson, on the topic measurement, the teacher put the

weight scale in front of the class to enable each learner weigh up his/her weight on the scale. The teacher explained the functions of the scale and facilitated the lesson in a manner in which learners could relate what they were learning to their own experiences. The teacher used varied questioning techniques, engaged learners in variety of learning activities, sought active participation of the learners in learning, supported learners to connect new ideas to their prior knowledge and experience, provided feedback and kept learners on task. It is evident from the classroom observations that teachers who are well qualified taught better than those who are less qualified.

It became clear from the classroom observations that teachers were not skilled in assisting learners learn unconnected facts or challenging learners to think critically or analytically, monitor learning, develop understanding of concepts, respond to learners' incorrect, partially correct or poor answers or use a mixture of higher and lower order questions. It was also observed that teachers were limited in adapting instructions to different learning needs of learners; assisting learners to make connections between what they already know and new material, and assisting learners to make connections between different learning areas.

It was also noted that only these same *seven* of the eighteen teachers, taught lessons which showed evidence of a teacher trying to assist learners who had trouble in learning and engaging learners in higher order thinking respectively. Teachers who are well qualified and experienced presented all seven lessons. *Four* of the seven teachers were teaching at resourced schools, while *three* of them were teaching at the under-resourced schools. *One* of the three teachers was teaching at a school in the rural cluster. *Four* of the seven teachers indicated in the interviews that they have been attending workshops for lower primary education reforms and have contributed on the development of lower

primary education syllabuses and teachers' guides significantly. The teachers who conducted these lessons indicated that they did not receive any support from the school management reform and that their teaching practices were not changed as a result of cluster-based school management reform.

It was also observed that only *six* lessons showed evidence of teachers trying to assist learners make connections between different learning areas. *Four* of the six teachers were teaching at resourced schools, while *two* of them were teaching at the under-resourced schools. The six teachers are also well qualified. These teachers claimed that cluster-based school management reform did not change their teaching practices.

8.3 Excessive use of group work

Teachers were limited in the amount of cooperative learning situations they created. Group work became a popular teaching method in the Namibian classrooms because it is associated with the theory of learner-centred teaching which the Ministry of Education advocates. Teachers take it for granted that in each lesson, learners should be involved in group work. However, teachers do not have sufficient skills to organise learning in order to promote cooperative learning, nor do they understand that group work does not necessarily mean cooperative learning.

The lesson described below represents excessive use of group work. The teacher is 42 years old. She has 10 years of teaching experiences and obtained a Lower Primary Teacher Certificate. She has been teaching Lower Primary for 8 years. She was teaching in an under-resourced school in the rural cluster (Otjimue cluster). The teacher claimed that she did not receive support during the implementation of cluster-based school management reform and that cluster-based school management reform did not improve

her teaching practice. The Environmental Studies lesson below was presented to a Grade 4 class:

May 31 Observations (9h20 to 10h00): General Overview: The classroom is small with limited teaching space. It is decorated with posters of letters of the alphabet, and months of the year. There is also children's work on the classroom wall. The medium of instruction is English. The learners come from predominantly one language background which is Otjiherero. There are 25 learners in the classroom. There are no cupboards, except two shelves with a few outdated textbooks. There are subject corners for each of the subjects, with few teaching materials. Learners are sharing textbooks and there are not enough learner workbooks. Learners do not sit in groups permanently.

 In introducing the lesson, the teacher asked learners to mention natural resources and then told learners to take textbooks and read the text about water as a natural resource. One learner was given a chance to read the passage. There was no discussion about the passage. The teacher picked up a poster with pictures and asked the learners to identify pictures that described the use of water. She took pieces of paper with incomplete sentences and gave them to the learners to complete. Only a few learners were able to complete the exercise. She then divided learners into groups to do an exercise which required learners to draw and write about the use of natural resources. For a long time most learners sat quietly in the groups and later began to draw pictures individually. The teacher walked around to check how the learners were drawing. It seemed that the teacher did not realize that learners were working individually. The majority of learners did not have pencils and erasers and therefore used pens to draw, when they made mistakes they stopped drawing and began to talk with the friends. The teacher did not pay attention to them and continued walking around the groups. She then asked learners to report as a group. Though she mentioned a specific group name, learners reported back as individuals. The teacher did not extend on what learners reported. The bell rang and the period ended.

May 31 Observation (9h20 to 10h00): Specific Evaluation
1. The teacher stood most of the time at the chalkboard. The interaction between the teacher and learners in this lesson was poor.
2. Only a few learners could read the passage and completed the exercise. It was evident that most of the learners could not read.
3. The teacher used whole class teaching and question and answer methods, but these were not used effectively, because the teacher was not skilled in questioning techniques and explaining concepts. Though the teacher tried to use group work as

a teaching method, she did not have a clear understanding of the method and how it can be used to enhance cooperative learning.

4. Little was done to assist learners to make connections between what they already know and new material.

5. In this lesson, there was no evidence of engaging learners in higher order thinking.

6. The only materials that the teacher used to support learning were the posters and textbooks. However, these were not used effectively to develop learners' understanding of concepts.

7. In this lesson, there was no evidence of the use of teaching strategies and materials to support learners see the relationship between learning areas.

8. Little was done to adapt instruction to the variations in learners' abilities; the teacher only assisted some learners, others were still struggling with the drawing.

As in the Literacy lesson, the teacher who taught the Environmental Studies lesson did not meet the criteria for effective teaching. This is a typical example of most of the lessons observed in the three primary school clusters. The teacher-learner interaction was poor, and the teacher could not keep learners on task. The main aim of the lesson was unclear and the teacher lacked clarity and skills on how to engage learners in cooperative learning activities. The following teaching qualities associated with good teaching practices were absent from the lesson: use of mixed of higher and lower order questions, monitoring of leaning and support to learners while engaging in learning activities, appropriate use of group work, involvement of learners in a variety of learning activities, developing understanding of the subject matter and promotion of co-operative learning.

It was evident from the way in which the teacher presented the lesson that she lacked an understanding of how to use group work as a teaching method. The teacher asked learners to engage in a group activity, but she did not plan a cooperative learning activity. She did not realise that it is ineffective to use group work method in a situation where learning requires an individual effort. She used whole group/individual teaching even if

they were ineffective. The lesson was not interesting and the majority of learners showed little interest in the activities. It was also evident that the teacher was not able to assist learners make connections between what they already know and new material as well as assisting them to see the relationship between different learning areas. As indicated in the evaluation of the lesson, the teacher did not assist learners to develop higher order thinking skills, since her teaching was very much superficial. It was evident that the teacher did not teach for understanding and her subject matter knowledge as well as pedagogical content knowledge is limited. It is also evident from the teaching methodologies of this teacher that her teaching skills are limited. The lesson described above was of poor quality and therefore the teacher did not teach effectively.

It was observed that in many classrooms observed, learners sit in permanent groups, while in some classrooms learners have to be divided in groups in every lesson. This could be attributed to the fact that teachers lack an understanding that one of the key principles underlying group work is cooperative learning. Therefore, in most of the classrooms observed, teachers divided learners in groups, but learners worked individually.

When teachers use group work, teaching time is wasted because learners take a lot of time to settle in groups. Teachers do not have effective strategies to divide learners in groups without wasting time. Teachers also had trouble in keeping all learners on task; and were not able to offer explanations or reinforce what learners reported in order to develop understanding of the subject content in learners. It was observed that teachers were not skilled in planning teaching time effectively. In most cases, when learners were engaged in group work, they did not finish the group activity nor did they complete the reporting of their work on time. In addition, teachers do not get enough time to extend the

experiences and knowledge of learners. It was evident in most of the lessons observed that instructional time was not used effectively.

## 8.4	Limited individual learner instruction

Teachers were limited in responding to learners with different learning needs. Out of eighteen lessons observed, only *seven* lessons were observed in which teachers tried to respond to learners with different learning needs. Six of the seven teachers were the same teachers as before. *Four* lessons were observed in Makalani cluster, another *three* lessons were observed in Hendrich cluster. In all the seven classrooms, the class size was more than 35 learners.

The lesson described below represents limited individual learner instruction. The teacher is 27 years old. She has 6 years of teaching experiences and obtained a Higher Diploma in Lower Primary Education. She has been teaching Lower Primary for 4 years. She is teaching at the cluster school in the Makalani cluster. The teacher claimed that she did not receive any support during the implementation of cluster-based school management reform and the reform did not improve her teaching practices. The literacy lesson below was presented to a Grade 2 class:

*June 6 Observation (*08h30 – 09h10*): General Overview.*
The classroom is big with enough space for teaching and keeping materials. It is decorated with posters, teaching and learning materials. There were 27 learners in the classroom. The medium of instruction is English. There are cupboards and boxes to keep teaching materials. The class has a collection of a variety of teaching materials such as: posters, books, puppets, containers and realia. The classroom has subject corners and each subject corner has materials related to the subject.

The teacher put a poster on the chalkboard with a reading text.   Each learner was given a text to read. The teacher read a text together with learners, but she was reading from the chalkboard and learners were reading from their text, some children were saying words without looking in the texts.

The teacher identified the difficult words from the reading text and explained the meaning of the words to the learners by means of teaching aids. She then asked learners to read the text. Learners were reading the text as a whole group. Only a few learners were reading from the text, but most learners were not paying attention, but the teacher did not encourage those who were not reading the text. She continued asking learners to read the text over and over. Some learners were starring at the text without saying any words, while others who tried to read the text struggled to read some words. The teacher continued asking the learners to read as a whole group. She did not give learners opportunities to read the text individually. She did not bother assisting those who were struggling to read. One group of learners in the corner was playing with their friends and two began to fight, while other learners were saying words without looking at the text. Towards the end of lesson she asked three learners to read the text.

*June 6 Observation (*08h30 – 09h10*): Specific Evaluation*

1. The teacher stood most of the time at the chalkboard. The interaction between the teacher and learners in this lesson was poor.
2. Only a few learners could read the text. It was evident that most of the learners could not read the text.
3. The only method the teacher used was whole class teaching.
4. Little was done to assist learners to make connections between what they already know and new material.
5. In this lesson, there was no evidence of engaging learners in higher order thinking.
6. Although she gave learners copies of the text, the teacher used only posters to enhance learning; however these were not used effectively because teacher spent most of the time standing at the chalkboard and did not use the posters to meet the learning needs of the individual learners
7. In this lesson, there was no evidence of the use of teaching strategies and materials to support learners see the relationship between learning areas.
8. Very little was done to adapt instruction to the variations in learners' abilities; learners struggled to read the text, but the teacher only assisted three learners who struggled to read.

As in the Literacy and Environmental Studies lessons, the teacher who taught the Literacy lesson to a grade 2 class did not teach effectively. The teacher-learner interaction was poor, and the teacher could not keep learners on task. It was evident from the way in which the teacher presented the lesson that she lacked skills on how to teach reading

effectively. The teacher was not able to use a variety of teaching strategies and resources to enhance learning. The following teaching qualities associated with good teaching practices were absent from the lesson: promoting active participation of learners in learning, adapting instructions to the variations in learner ability, monitoring of learners' progress and support to learners while engaging in individual work. The lesson was boring and learners showed little interest in the activity. The teacher ignored the needs of individual learners and therefore did not adapt instructions to learners who had trouble in reading the text. She did not assess learners' progress in learning in order to identify those who experienced learning difficulties. Although, she might have realised that some learners were experiencing difficulties, she seemed not to have skills to help them. The class size was reasonable; therefore, the teacher should have noticed those who experienced reading difficulties. It was observed that the teacher lacked competencies in teaching reading; therefore she might not have skills of how to assess reading difficulties as well as limited skills to carry out remedial teaching. The lesson described above was of poor quality and therefore the teacher did not teach effectively.

Teaching reading is a big challenge in many of the primary classrooms in Namibia. Teachers lack skills in how to teach learners to read effectively. The World Bank study points out that many teachers in Namibia have limited skills in teaching reading: '*teachers have a limited repertoire of reading instruction methods; they cannot help learners monitor their reading comprehension; they have little facility to diagnose student reading and writing difficulties and limited skills to constitute appropriate remedial action*' (Marope, 2005: 29).

In another reading lesson, presented to grade four learners, it was a shocking to find out that learners in grade four could not read even simple words in English. It was observed

that those learners who experienced difficulties in reading where either requested to remain standing for the rest of the period or ignored totally. It was clear from the lesson observations that the teachers lacked knowledge and skills on how to assist learners who experienced difficulties in reading.

8.5   Limited mastery of the language of instruction

Teachers, especially those who are teaching in schools which have chosen English as a medium of instruction from lower grades (grades 1 to 4) , struggled to teach in the English medium of instruction, because of their own limited level of English language proficiency as well as the very low level of English proficiency of learners. In schools, which chose English as a medium of instruction from lower grades, none of the learners and teachers was English native speakers, learners have come from different language backgrounds, and also none of the teachers were trained to teach in the English medium of instruction. Teachers struggled to explain concepts clearly in English.

In the following observation, the teacher is 52 years old. She has 27 years of teaching experiences and obtained a Lower Primary Teacher Certificate. She has been teaching Lower Primary for 27 years. She is teaching in an under-resourced school in the Hendrich cluster. The teacher claimed that she did not receive support during the implementation of cluster-based school management reform and cluster-based school management reform did not improve her teaching practices. The Mathematics lesson below was presented to a Grade 1 class:

May 30 Observations (13h30 to 14h10: General Overview. The school has double shifts. It is a grade 1 class. There were 39 learners in the classroom. The medium of instruction is English, but learners come from different language backgrounds: Otjiherero, Oshiwambo and Khoekhoegowab. The learners sit permanently in groups and the desks are arranged closely to one another. Each learner has an ice-cream container (with her/his name on) in which s/he keeps bottle tops. The classroom is colourful, decorated with pictures. There are pictures of wild animals, domestic

animals and pictures of different colours. Other teaching materials on the wall include: letters of the alphabet, flash cards on days of the week, flash cards on pictures and the names of those pictures, example pictures of telephone, TV, radio, computer and newspapers. There are three cupboards for teaching materials: counters, boxes of counters and boxes for workbooks.

The teacher told the learners that they would be learning how to count from one to ten. She told them to take bottle tops from the ice-cream containers and put the bottle tops on the desks. First, she told them to put five on one side and then another five on the other side. The teacher struggled to give or offer explanations in English and therefore most of the time the teacher gave instructions or explanations in three languages: English, Otjiherero and Khoekhoegowab and most of the time learners responded in their mother tongue and occasionally in English. Sometimes the teacher asked learners to count individually or in a choir. The teacher walked around the groups, assisting learners counting by showing them how to count using their own bottle tops and giving explanations in African languages and occasionally in English. Some learners sat quietly with bottle tops on the desks, and were not counting at all. The teacher tried to encourage a few of them to count using their bottle tops, but there were still learners who did not show interest at all. She also tried to stop two learners who were not interested in their work.

After finishing teaching learners to count from one to ten using bottle tops, she picked up a picture of a car and asked learners to identify the number of wheels on the car. When asking questions or offering explanations, the teacher switched from English to an African language or from English to Afrikaans. She also picked up a picture of a ship and asked learners whether it (the ship) had wheels and then asked them why there were no wheels on the ship. After she was satisfied with the answers from learners, she distributed exercise books. She asked learners to write numbers from one to ten. The bell rang and the period ended.

May 30 Observation (13h30 to 14h10): Specific Evaluation
1. Teacher-learner interaction was limited in this lesson as the teacher could not keep all the learners on task.
2. Not all learners were responding to the teacher's instructions, some learners sat quietly at their desks without doing the activity, even though the teacher encouraged them to do so.
3. The teacher used teaching strategies such as providing explanations of how to count as well as showing them how to count by means of bottle tops.
4. The teacher tried to connect the new lesson to what the learners already knew by referring to the previous lessons.

5. There was little evidence in this lesson of the teacher trying to engage learners in higher order thinking skills - except when she asked learners why the ship does not have wheels.

6. The teacher used bottle tops and worksheets in the exercise book to support learning and these were used effectively.

7. There was evidence in the lesson in which the teacher used teaching strategies and materials to support learners see the relationship between learning areas.

8. There was evidence of the teacher trying to assist learners with learning difficulties, though she could not assist all learners who experienced difficulties in counting.

In this lesson the teacher-learner interaction was limited as the teacher tried to keep some learners on task. As indicated in the evaluation of the lesson, there was little evidence of the teacher trying to engage learners in higher order thinking. There was no evidence in the lesson of the teacher using teaching strategies and materials to support learners see the relationship between learning areas. It was evident that the teachers tried to assist learners who experienced difficulties, though she could not assist all learners. Though the teachers have good teaching skills, she could not teach effectively because she was limited by her low level of English proficiency. She could not offer clear explanations or use higher and lower order questions, because of her limited mastery of the language of instruction. It was observed that some learners could not follow the instructions or explanations of the teacher, because she could not speak the mother tongue of some of the learners and the teacher and learners' English language proficiency was very limited.

It was observed that teachers teaching in lower grades were really struggling to teach in English. Teachers tried to teach in the mother tongue of some learners to make them understand, but other learners were left behind. Teachers repeatedly talked about the problems of teaching reading in multilingual classrooms during cluster-based subject meetings as well as their own limited mastery of English as a medium of instruction.

However, no teacher in-service training was conducted during the time of this study to support teachers cope with the challenge of teaching in the English medium of instruction as well as teaching in multilingual classrooms.

Poor mastery of the language of instruction was not only observed in classrooms in urban areas, but also in rural classrooms. In Otjimue cluster, teachers also used code switching, because they were limited in their ability to provide instructions or explained the concepts to learners in English. This was because both teachers and learners have very low levels of English language proficiency. It was also observed that reading either in the mother tongue or in English is a real problem to most of the learners in Otjimue cluster and that teachers lack skills in teaching reading especially in the English medium. In a grade four class, only five learners out of twenty-five learners could read in English, but the level of reading skills was at a grade 3 learner or lower.

It was also observed that teachers in the rural cluster still do not have sufficient access to resources. Teachers used outdated textbooks especially in teaching reading. However, no additional resources were provided to schools during the time of this study to support teachers improve their teaching practices.

8.6   Conclusions

The findings from the three case studies and in particular the classroom observations, indicate that teachers in the three primary school clusters lack skills which require teachers to: engage learners in higher order thinking; assist learner to make connections between what they know and new material; provide clear explanations; use a variety of teaching strategies, use material efficiently, develop learners' understanding of subject content, monitor learners' progress frequently; respond to learners with different learning needs or

assist learners to make connections between different learning areas. Chalk and talk teaching and ineffective use of group work dominate the teaching in many classrooms. These teaching methodologies do not develop understanding of subject content. Chalk and talk teaching and the ineffective use of group work make learners disinterested in lessons and they therefore become demotivated. Uninteresting lessons may lead to disciplinary problems and learning difficulties.

It was observed that the English language proficiency of both teachers and learners played an important role. Because of the low level of English proficiency of some teachers, teachers could not explain concepts to learners meaningfully. Marope (2005) concludes that teachers in Namibia lack competencies that are critical to improve student learning:

> *'A large base of teachers is reported to have difficulties in interpreting and implementing the curriculum……Many practicing teachers do not have a sufficient high proficiency in reading skills to enable them to pursue further studies…….Practicing teachers are found to have poor reading skills, grammar skills, elicitation techniques, limited vocabulary, and facility to adequately explain concepts. Teachers' poor English proficiency adversely affects instruction, not only in English as a subject, but in all other subjects that are taught in English, which is a medium of instruction from grade 4 onward' (Marope, 2005: 29).*

It was clear from the classroom observations that teachers lack skills in assessing learning, identifying learning difficulties and constituting remedial actions. These skills are critical in teaching effectively. Teachers also have limited presentation skills. They could not present lessons using a variety of teaching strategies. The teaching methodologies were limited to providing information, with little attempt to teach for understanding.

Teachers were forced to switch from one language to another. Teachers teaching at the lower primary level have difficulties in explaining concepts and giving instructions in English. Teachers talked about the problem of teaching reading in English in cluster-based subject group meetings. However, there has not yet been any evidence of in-service

training courses conducted to address the needs of the teachers during the implementation of cluster-based school management reform.

Only *six* teachers of the eighteen teachers observed could demonstrate teaching qualities, which are associated with good teaching practices. The majority of teachers observed in the three primary school clusters still use traditional teaching methodologies, which are limited in their capacity to enhance conceptual understanding and the development of critical thinking skills. It seems that teachers who are well qualified and experienced teach better. A mastery of the language of instruction by teachers seems to play an important role in teaching. Teachers have poor mastery of both English and African languages. Most of the African Languages are still developing. The World Bank study argues that '*because of teachers' language limitations, reading lessons tend to be mechanised verbalisation of words, without grasping the meaning or context'* (Marope, 2005: 29).

Drawing on the data from the three case studies, the study concludes that there is no evidence to show that the teaching methodologies of teachers who claimed to have received support from cluster-based school management reform are significantly different from those who claimed that they have not received any support from cluster-based school management reform. From the examples of the four lessons described previously, teachers who claimed to have received support during the implementation of cluster-based school management reform presented two of the lessons, and teachers who claimed that they have not received any support during the implementation of cluster-based school management reform presented the other two lessons. It is clear from the evaluation of the four lessons, that none of the four teachers could teach effectively. The teacher, whose teaching methodologies showed evidence of the teaching qualities associated with good

teaching practices, indicated that she did not receive support during the implementation of cluster-based school management reform.

The evidence from the three case studies shows a missing link between cluster-based school management reform and improving teaching. The teaching methodologies of the teachers (except a few teachers) are still characterised by chalk-talk teaching, a teaching methodology that does not enhance active participation of learners in learning and therefore does not develop understanding of subject matter. The other common teaching methodology, which dominates most of the classrooms, is the use of group work. Teachers do not have an adequate understanding of group work as a teaching methodology, as result group work is used ineffectively or inappropriately. Teachers have limited mastery of the language of instruction as well as limited skills in explaining concepts. It seems that teachers did not learn new teaching skills during cluster-subject group meetings, because cluster-subject group meetings are limited to discussions and sharing of information, with no demonstrations of good teaching practices.

Cluster-based school management reform did not provide sufficient resources in schools. Resources such as textbooks, exercise books, stationeries and supplementary books are not sufficient in schools. Most of the schools in Namibia have shortage of books and instructional materials. It is observed that there is a high student-textbook ratio at both primary and junior secondary levels, ranging from 8 at primary to 13 junior secondary. It is further observed that '*other than a textbook shortage, Namibia schools are characterised by a dearth of other instructional materials such as student workbooks, teaching aids, and enrichment materials*' (Marope, 2005:27).

There is insufficient evidence from the three case studies that cluster-based school management reform improve the quality of the teaching methodologies of teachers in the three primary school clusters. The school management reform did not provide adequate resources and support to improve the quality of teaching in schools. The schools, especially in the rural cluster struggle to access basic resources and the classroom conditions remain unchanged. Teachers argue that teaching would not improve if classroom conditions remain unchanged.

Although the teaching practices of the teachers in the three primary school clusters were not assessed systematically it can be inferred from the data on classroom observations that the teaching methodologies of teachers in the three primary school clusters were not effective. It is safe to conclude that cluster-based school management reform has little influence on the teaching methodologies of teachers in the three primary school teachers.

CHAPTER 9: SYNTHESIS OF FINDINGS AND CONCLUSIONS

9.1 Introduction

Decentralisation reforms have been implemented in countries around the world on the assumption that decentralisation would improve the quality of education. Since the implementation of decentralisation reforms in the 1980s, its effects on the quality of education have not invariably been positive. As mentioned previously, this study is in part a response to ongoing debates in the literature, about the effectiveness of decentralisation reforms in improving the quality of education. This chapter synthesises the main findings and the conclusions drawn from the survey and case study research on how the primary school clusters implemented cluster-based school management reform and the extent to which the reform relates to improving teaching in Namibia. In addition, the chapter discusses the contributions of the present study to the ongoing debates about the effectiveness of decentralisation reforms in improving teaching, the limitations of the study, and recommendations for future research, and ways to improve the implementation of decentralisation reform such as school clustering in a developing context.

9.2 Main findings and conclusions of the study

The study commenced by investigating the implementation of cluster-based school management reform through the perceptions of the range of stakeholders and the extent to which the reform improves the quality of teaching practices in classrooms. This section discusses the main findings and the conclusions drawn from this study in relation to the existing knowledge base on the implementation of school clustering in a developing context and on the relationship between school clustering and improving teaching.

9.2.1 The actual practices in schools contradict school principals and teachers' perceptions on the influence of the reform on school practices.

While the school principals and teachers reported that the reform promoted stakeholder collaboration and cooperation, teacher involvement in decision making, democratic practices and sharing of resources, the implementation culture and practices that prevail in the clusters contradict the school principals and teachers' perceptions of the influence of the reform on school practices.

An in-depth study of the three primary school clusters revealed that inspectors, school principals and teachers ignored democratic practices or continued operating as they used to prior to the introduction of the reform. One inspector rejected the view of delegating administrative tasks to clusters, while the other inspector employed bureaucratic control in supervising the work delegated to cluster level. Cluster-centre principals organised cluster activities without involving the satellite school principals and teachers in their clusters. School managers did not involve teachers in the planning of cluster-based subject meetings, but instructed to attend meetings.

While school principals and teachers reported that school managers and teachers were empowered to implement the reform, school principals and teachers expected initiatives and directives on how to facilitate the implementation process to come from the top and decision-making was perceived to emanate from the top and to filter down.

Observation data from the three case studies revealed that the reform did not promote collaboration and co-operation among schools and teachers. Teachers in the rich and semi-urban clusters could not work in a collaborative manner. They were individualistically-oriented and not particularly concerned about their colleagues in the clusters. Localised teacher support structures introduced by the reform to improve teachers' teaching

practices, appeared to be unstructured, un-focused and lacked clarity, guidelines and resources to support teachers improving their teaching. Satellite school principals felt disempowered and resisted the management styles of cluster-centre principals. School principals were accustomed to individualism and independence in the organisation and management of their schools and resisted interference with their authority to run their schools on a daily basis. Resourced schools were reluctant to share resources with under-resourced schools, felt self-sufficient and continued to protect their resources. Schools have been accustomed to work in isolation and to be competitive and individualistic. They have had trouble to give up their ethos of competitiveness and individualism in order to accommodate the values of collaboration and cooperation.

This study shows the strength of the use of mixed methods in evaluation studies. It demonstrates that mixed method approach design can yield richer, valid and reliable findings than evaluation study based on either the qualitative or quantitative method alone. It is evident from this study that survey research provided generalisable information on the school principals and teachers' perceptions and opinions of the reform, while qualitative methods provided deeper understanding of implementation issues and processes of the reform which could not be captured through the survey research.

9.2.2 Resource scarcity and reluctance to share resources impede the implementation of cluster-based school management reform

Although the data from the survey research revealed that schools shared resources, conclusions drawn from the three case studies were that schools did not have sufficient resources and that they have been reluctant to share resources. Resourced schools in both rich and urban clusters did not embrace the implementation of cluster-based school management reform. As mentioned previously, the resourced schools viewed the school

management reform as a potential threat to their resources, and therefore were not prepared to share resources with the under-resourced schools. The goal of resource sharing and the assumption that it promotes equitable distribution of resources has not been realised.

The under-resourced schools embraced the school management reform; because they assumed the reform would improve the standards of their schools by having access to more resources. However, the data from the case study research revealed that the reform did not provide schools with sufficient resources. Schools, especially in the rural cluster, continue to struggle with limited resources.

Schools competed over limited resources and therefore were unable to share resources in order to improve the teaching practices of teachers as per the intentions of cluster-based school management reform. The cluster-centre principals and cluster subject facilitators could not visit satellite schools to support teachers at the classroom level due to limited resources. Teachers, especially in rural schools could not attend cluster subject meetings regularly for lack of adequate resources. Cluster-based school management reform did not provide the means to help teachers in rural schools to gain access to resources, nor provide alternative means to alleviate teacher isolation in these rural schools. It is unrealistic to implement a reform which requires additional resources in schools in communities with little or no resources. The reform goals of resource sharing, improving school supervision and teaching through (localised) cluster supervision and support could not be achieved because of resource scarcity and fear of losing resources.

From the observation of under-resourced schools, the teaching conditions seem to be additional barriers for successful implementation of school management reform. Only

resourced schools have libraries. Most classrooms are physically poor. Some classrooms do not have enough chairs for learners, or some chairs are broken. Most of the lower primary classes are overcrowded; there are insufficient teaching and learning materials such as workbooks for learners, textbooks, crayons and pencils. In some classes visited, not all learners were able to do exercises and finish on time, having to wait for others to finish because they were sharing crayons and pencils. Teachers also could not provide much individual attention because classes were over-crowded and teaching time was limited.

9.2.3 Potential threat to the authority of school inspectors and school principals leads to poor implementation of cluster-based school management reform

Sharing and collaboration are some of the underpinning principles of cluster-based school management reform. Successful implementation of cluster-based school management reform requires schools to work in a shared and collaborative manner. The data from the case study revealed that there has been little shared and collaborative leadership in the clusters. The circuit inspectors were unable to facilitate the implementation of the school management reform using skills and approaches in line with the tenets of the school management reform. The inspector for Makalani cluster resisted the school management reform because he perceived it as a potential threat to his authority over schools. The inspector for Hendrich and Otjimue clusters supervises cluster activities through centralised and authoritarian approaches. The school principals in both rich and poor urban clusters resisted the school management reform because they perceived it as a potential threat to authority over their own schools, while the cluster-centre principals manage the cluster activities through bureaucratic styles of management.

Although the data from the survey research reveal positive outcomes of the implementation of the reform, the data from the case study research show that the reform goals of resource sharing, collaboration and democratic participation have not been implemented successfully because of fear of losing authority and power. Schools continue to work in isolation and there is little consistent support from the regional offices to support the key implementers to make a shift from their existing culture to a culture that fits decentralisation reforms.

9.2.4 Incongruence between democratic ideology and the colonial ideologies impedes the implementation of cluster-based school management reform

Successful implementation of cluster-based school management reform requires institutions and key implementers to make a shift from past ideologies to the ideologies advocated by decentralisation reforms. The ideologies that the street-level bureaucrats inherited from the colonial system remain unchanged and schools continue operating within those ideological frameworks.

Table 19 below shows the incongruence between the characteristics of past ideologies and the tenets of cluster-based school management reform:

Characteristics of past ideologies	Tenets of cluster-based school management reform
Respect and blind submission to authority	Freedom of thought and action
Bureaucratic control and rigid hierarchical governance	Shared, participatory and collaborative leadership
Initiatives and policy directives come only from top	Collective problem solving and shared decision-making, bottom-up initiatives
Competitiveness and individualism	Collectiveness and collaboration

Table 19: The characteristics of past ideologies versus the tenets of cluster-based school management reform

The key role players were unable to make a shift from ideologies that existed prior to the introduction of cluster-based school management reform to the democratic ideology, which promotes shared, participatory and collaborative leadership and management. The key role players either ignored the democratic ideology and continued operating as they used to, or implemented cluster-based school management reform through authoritarian and bureaucratic approaches.

As shown in table 19 and chapter 6, the characteristics of the ideologies that existed prior to the introduction of cluster-based school management reform are quite contrary to the tenets of cluster-based school management reform. For example, the authoritarian ideology emphasises respect and blind submission to authority, while cluster-based school management reform advocates freedom of thought and action. It is clear that the authoritarian ideology is opposite to a democratic ideology. Bureaucratic ideology is also not congruent with the tenets of cluster-based school management reform because the bureaucratic ideology advocates that schools should be governed by a set of rules and procedures, while cluster-based school management reform promotes shared and collaborative leadership. Under bureaucratic control, an official should be provided with instructions and directives from the top, while cluster-based school management reform advocates bottom-up initiatives, collective problem-solving and shared decision-making. Schools are accustomed to values of competitiveness and individualism, while cluster-based school management reform promotes values of collectiveness.

The inspectors, as officials responsible for facilitating the implementation of cluster-based school management reform, could not promote stakeholders' participation in decision-making processes. The inspector responsible for Hendrich and Otjimue clusters imposed change upon schools and expected schools to implement the change through blind

submission to authority, while the Makalani inspector rejected the delegation of authority and responsibilities to cluster-centre principals, because he interpreted that delegation of authority and responsibilities would undermine his authority as a circuit inspector.

Because of bureaucratic control, school principals and teachers lack initiatives to implement the school management reform without directives and guidelines from the regional authorities. In other words, although the school management reform advocates bottom-up initiatives, bureaucracy and its unchangeable procedures stifle initiatives in schools.

While the school management reform advocates shared decision-making, collective problem solving and collaborative management, there has been little or no teamwork or team-planning going on in clusters. The inspectors have been managing the schools without consultations of school principals and the cluster-centre principals have been managing the cluster activities without involving the satellite school principals and teachers in their clusters.

Though the school management reform advocates schools to be viewed as collective entities rather than individual institutions, schools were not be able to make that shift. Schools continue to operate individually and compete with each other. An example of this is that the resourced schools felt adequate and were not prepared to share resources with under-resourced schools.

One can conclude that 'a previously existing culture of cooperation and /or mutual support' is one of the conditions for successful implementation of decentralisation reforms in developing countries (Pellini, 2005). It is clear from the three case studies that an existing

culture of cooperation and mutual support was absent; instead there were strong beliefs of individualism, competitiveness and the influence of the apartheid ideologies.

As shown in table 19 above, the doctrines of the authoritarian and bureaucratic control, competitiveness and individualism are contrary to the tenets of the school management reform. Therefore, these ideologies are barriers to successful implementation of cluster-based school management reform. It is clear that the central authorities have not made significant efforts to build the capacities of the key implementers to make a shift from the past ideologies, to the ideology which fits decentralisation reforms. The key implementers were clouded with the past ideologies and were unable to make a shift in order to implement the school management reform as intended. One can conclude that the strong beliefs and values in authoritarian, bureaucratic and individualistic ideologies (which are contrary to the philosophy of collaborative leadership and management) impede the implementation of the school management reform in the three primary school clusters.

9.2.5 Teacher-support strategies introduced by cluster-based school management reform have little or no significant influence on the teaching practices of teachers

As mentioned previously, advocates of cluster-based school management reform identify the cluster management committee, cluster-based subject grouping and cluster subject facilitators as teacher support strategies to improve the quality of teaching in schools.

Drawing on the findings from the three case studies there is little or no link between teacher-support strategies introduced by cluster-based school management reform and improvement in the quality of the teaching skills of teachers in the three primary school clusters. The evidence from the three case studies indicated that the functions of the cluster management committee remained unknown to most of teachers. The cluster management committee meetings focused on administrative issues rather than teacher

professional development activities. There is no evidence of teachers being supported through cluster-management committees. Teachers reported that they had been supported by their own principals, except in the poor urban cluster (Hendrich cluster), where the cluster-centre principal supported the teachers in the satellite schools with little involvement of satellite school principals. Schools in clusters rarely worked as a team to improve the teaching practices of teachers, except in the poor urban cluster, where the cluster-centre principal tried to motivate satellite school principals to support teachers in their schools. However, the satellite school principals interpreted the intervention as interfering with their school affairs.

Teachers also perceived little or no support from cluster-based subject group meetings. The limitations of cluster-based subject group meetings are identified as follows:

First, cluster-based subject meetings lack structure and a clear focus on how to support teachers, improve their teaching practices. There were no professional development activities (conducted in a systematic manner) during cluster-based subject meetings. Discussions and sharing of information took place in a haphazard way. It is not clear whether cluster-based subject meetings focused on teacher professional development issues or administrative issues. There were no planning and preparations done for cluster-based subject meetings except a list of agenda items.

Second, lack of sufficient pedagogical knowledge limited teacher learning. Though teachers raised their needs for professional development during cluster-based subject meetings, they were provided with little support from colleagues because teachers lack sufficient pedagogical knowledge, and subject advisors generally do not attend cluster-based subject meetings.

Third, discussions and sharing of ideas are limited ways to improve teaching practices of teachers. Although discussions during cluster-based subject meetings related to teaching practices of teachers, discussions and sharing of ideas without demonstration of good teaching practices and concrete lesson plans make it difficult to relate those discussions and sharing of ideas to their teaching practices.

Fourth, though teachers may share good practices during cluster-based subject meetings, schools and classroom conditions remain different. Teachers maintain that it does not help them to discuss good practices or ideas on how to improve teaching if classroom conditions are different or nothing is done to improve classroom conditions in under-resourced schools.

Fifth, teachers have been reluctant to work in a collaborative learning environment. Teachers are used to working in isolation. Cluster-based subject meetings require teachers to uphold values of teamwork, mutual support, respect and understanding. During cluster-based subject meetings observed for this research, it was evident that there was limited mutual support and teamwork.

Sixth, cluster-based subject meetings require additional resources to be available in schools. As mentioned previously, cluster-based subject meetings, especially in the rural cluster were not held regularly because of transport problems and long distances.

Finally, cluster-based subject meetings are perceived as routine activities. Teachers have been attending subject meetings because they felt obliged to do so. Teachers are not motivated to attend the meetings because they do not see the benefits of cluster-based

subject meetings. None of the teachers interviewed could mention one aspect of her teaching practices that improved as a result of attending cluster-based subject meetings.

Based on the limitations discussed above, it is evident that cluster-based subject meetings are limited in the extent to which they can improve the quality of the teaching practices of teachers. The cluster-based subject meetings in urban clusters were cancelled because of lack of interest in teachers to attend, while cluster-based subject meetings in the rural cluster were cancelled repeatedly due to transport problems and long distances.

It is also evident from the three case studies that teachers were not supported at the classroom level, because of limited personnel who were assigned to provide support to teachers at classroom level. Cluster subject facilitators are full-time teachers; one for Otjimue cluster is a principal who also has her own teaching load. Because of their teaching responsibilities, cluster subject facilitators do not have time to support all the teachers in their clusters. Besides their teaching load and limited time, cluster subject facilitators do not have transport or transport allowance to enable them to visit teachers in various primary schools in their clusters.

It can be concluded that teacher-support through cluster subject facilitators, like the cluster management committee and cluster-based subject meetings are limited improving the teaching practices of teachers.

Only teachers from the poor urban cluster pointed out that the cluster-centre principal visited them in their classrooms. None of the teachers interviewed, reported that cluster subject facilitators visited them in their classrooms.

It is safe to conclude that having sufficient personnel in schools is one of the conditions for successful implementation of decentralisation reform in developing countries (Pellini, 2005). It is evident from the three case studies that overwhelming multiple demands on schools and teachers are impeding factors for successful implementation of decentralisation reforms in developing countries (Naidoo, 2005).

It can be concluded from this study that there is insufficient evidence that teacher-support strategies introduced by cluster-based management reform have a considerable effect on the quality of the teaching practices of teachers in the three primary school clusters.

9.2.6 There is no evidence from the three case studies that the teaching methods of teachers who have received support through cluster-based school management reform are significantly different from those who have not

Drawing on the data from the three case studies, only *seven* out of eighteen teachers observed had effective teaching skills. These teachers reported that they did not receive any support during the implementation of cluster-based school management reform and their teaching practices did not improve because of the implementation of cluster-based school management reform. The majority of teachers did not meet the criteria for effective teaching. Some reported that they received support during the implementation of cluster-based school management reform, while others claimed that they did not receive support during the implementation of cluster-based school management reform. In the same category, some teachers also reported that their teaching practices improved because of cluster-based school management reform, while others reported that their teaching practices did not improve.

Drawing on the four lessons described in chapter 8, of which two were presented by teachers who claimed that they received any support, and another two presented by teachers who claimed that they did not receive support, none of the four met the criteria for

effective teaching. Their teaching methodologies focused more on whole class teaching and question and answer methods; only one used teaching strategies, materials and resources effectively. The other *three* teachers could not promote active participation of learners in lessons; keep learners on task; or use a variety of teaching strategies, teaching materials and resources to enhance learning. *All four* teachers were not skilled or were limited in their ability to adapt instructions to the learning needs of different learners; involve learners in challenging activities which require them to think critically or analytically; assist learners to make connections between what they already know and new material; and assist learners to see the relationship between different learning areas.

It can be concluded that there is no evidence from this study that the teaching methodologies of teachers who claimed they have received support during the implementation of cluster-based school management were significantly different from those who claimed they have not received the support.

9.2.7 There is no sufficient evidence from this study that cluster-based school management reform relates to improving teaching

The data from this study revealed that schools were not provided with enough resources during the implementation of cluster-based school management reform to improve the teaching practices of teachers. Schools have been competed for limited resources and therefore they did not share resources to support teachers to improve their teaching practices. Teachers in the rural cluster still have difficulties accessing resources and therefore the situation in rural and isolated schools remains unchanged.

Drawing on the findings from the three case studies, little support was provided to circuit inspectors and school principals to enable them to transform schools from the culture of competitiveness and individualism, to that of collectiveness in order to promote the culture

of collegiality among teachers, or to support those who have insufficient pedagogical knowledge and skills.

The findings from the three case studies also indicate that cluster-based school management reform did not build the capacity and skills of teachers to engage in collaborative learning to support those who have insufficient pedagogical skills. It seems the reform did not yet break the teacher culture of isolation. From the cluster-based subject meetings it seems that teachers were either limited in sharing ideas with another freely or have not yet developed skills to reflect on their teaching practices. Reflecting critically on one's teaching practices is a skill that requires time and confidence to develop.

It is evident from the survey and case studies research that the teacher support strategies introduced by cluster-based school management reform were limited in the extent to which they improved teaching practices. Teachers in the three primary school clusters have little information on how a cluster-management committee relates to their work.

Cluster-subject group meetings lack structure and clarity on how to support teachers to improve their teaching practices. Besides its vague focus, cluster subject meetings are limited to discussions and sharing of ideas, which do not guarantee improvement in teaching practices. Cluster-subject group meetings also lack staff with sufficient pedagogical knowledge to guide teachers in their discussions. It is evident from the three case studies that in order for teachers to attend cluster-subject group meetings regularly, it requires additional time and resources are required. It is also evident from the survey and case studies research that there is insufficient evidence that cluster-subject group meetings have significant effects on the quality of teaching practices of the teachers.

Teachers received little or no support at classroom level during the implementation of cluster-based school management reform. From the survey research, only 38% of the lower primary teachers indicated that they received support during the implementation of cluster-based school management reform and none of the teachers interviewed reported that they received support at classroom level.

The evidence from this study demonstrates a number of missing links between cluster-based school management reform and improving teaching:

First, the roles and responsibilities of school principals on how to support teachers improve teaching were not defined; however, it is not yet clear from the literature whether the leadership and management skills (such as delegation skills, collaborative decision-making and problem-solving skills advocated by cluster-based school management reform) directly relate to teaching. In addition to the management and leadership skills, the reform lacks clarity on how teacher involvement could be utilised to improve teaching in schools.

Second, cluster-based school management reform lacks clarity and guidelines on how to support teachers in improving their teaching practices.

Third, cluster-based school management lacks sufficient resources to support and monitor teaching at the classroom level.

Fourth, cluster-based school management reform lacks clarity and guidelines on how schools and teachers can work in a collaborative manner to improve the quality of teaching in schools.

Fifth, cluster-based school management reform fails to develop management and leadership skills (in school principals) which relate to improving teaching.

Sixth, cluster-based school management reform does not result in schools' adoption of a culture and ideologies that improve (transform) teaching in schools.

Seventh, cluster-based school management reform changes structures of managing schools, but does not provide clarity and guidelines on how these structures could support teaching in schools.

Eighth, cluster-based school management reform introduces teacher support strategies to improve teaching, but these strategies also lack clarity, guidelines and resources to support and monitor teaching at classroom level.

Finally, the evidence from the three case studies shows that the teaching methodologies of teachers in the three primary school clusters lack the competencies and skills associated with effective teaching. The findings from the three primary school clusters indicate that the teaching methodologies of teachers in these school clusters are characterised by chalk-talk teaching, limited elicitation techniques, limited skills to institute remedial actions and language limitations. Although the changes in teachers' teaching practices were not assessed systematically, one can make inferences from the ineffective teacher-support strategies introduced by cluster-based school management reform and the actual teaching methodologies of teachers, that cluster-based school management reform has had little or no influence on the teaching practices of teachers in the three primary school clusters.

9. 3   Contributions of the present study

This study contributes to the international scholarship on the relationship between decentralisation and teaching by providing insight into the content and organisation of cluster-based teacher professional development and its effects on teacher learning in a developing context. This study attempts to contribute to the existing knowledge base on the implementation of decentralisation reforms by providing an understanding that successful implementation of decentralisation reforms requires fundamental changes in the ideologies which existed prior to the introduction of these reforms, and neglecting to anticipate resistance due to a shift in an ideology affects the implementation negatively.

9.3.1 Contributions on the existing knowledge base on the implementation decentralisation reforms in a developing context

The literature on decentralisation has focused on factors affecting the implementation of decentralisation reforms, but has neglected to examine the influence of an ideology on the implementation of decentralisation reforms. This study established that ideologies existing prior to the introduction of cluster-based school management reform were sources of resistance to its implementation. It is argued that although the designers of reform initiative might have been aware of the existence of these ideologies, it seems that the designers have not anticipated that these ideologies could be sources of resistance. School practices had been largely influenced by past ideologies which are contrary to democratic ideology, a belief system which underpins cluster-based school management reform.

Bureaucratic, authoritarian and managerial ideologies had been entrenched in the Namibian society and became a blueprint for social order. While schools were used to a social order informed by bureaucratic, authoritarian and managerial ideologies, the reform introduced a different ideology, one that challenges the past ideologies. The study

established that implementing a 'new' social order that challenges existing social order is problematic. Some key implementers ignored the reform, while others implemented the reform using bureaucratic and authoritarian approaches. The implementation culture and practices that prevail in the clusters resonate more with past practices than with the formal decentralisation aims of extending participatory democracy in education to the grassroots.

This study concludes that old mindsets have not changed substantively; with the results that implementation of democratic ideology has been constrained at the local level. While democratic ideology aims to promote local participation in decision-making and empowerment, faith in the virtues of line-management facilitates the creation of dependency in decision-making. Institutions were unable to make a shift in their traditions, norms and values that carried them through for many years without consistent support. If consistent support is not provided to institutions, they continue to function according to the 'well-established' traditions and norms, and ignore the norms and values advocated by decentralisation reforms.

A lesson learnt from this study is that implementing a new initiative whose ideology challenges the existing ideologies may encounter resistance if the designers of the reform do not anticipate the possible resistance and include mechanisms to overcome such resistance and to monitor the implementation process. Another lesson learnt from this study is that introducing reforms in schools by simply grafting new ideologies onto the existing one may not bring desirable changes in school practices.

9.3.2 Contributions on the existing knowledge base as regards to the link between decentralisation reforms and improving teaching

Advocates of school clustering claim that supervision at cluster level allows for close-to-school support, because supervisors at cluster level may have a better understanding of issues faced by cluster teachers and cluster heads (De Grauwe and Carron, 1997; Dittmar et al., 2002). Cluster-based subject groups are assumed to foster a culture of sharing, openness and mutual support; provide a framework for in-service training and a point of contact for advisory teaching services (Dittmar et al., 2002). It is also assumed that cluster meetings enable teachers to share ideas and solve problems and therefore such meetings act as a form of in-service training for teachers (Bray, 1987; MacNeil, 2004).

The evidence from this study showed that unstructured and un-focused cluster-based subject group meetings did not support teachers in learning new forms of pedagogy. Structures established to affect changes in teaching should have a focus. Because cluster-subject group meetings lack clarity and a clear focus and guidelines on how to support teachers, the cluster-subject group meetings were limited to sharing ideas, information and problems. Sharing of information and ideas without demonstrations of good teaching practices does not guarantee learning of new teaching skills. In order for cluster-based subject group meetings to be regarded as opportunities for teacher professional development in a developing context, they should be well structured and the resources (material, finance and human) for these structures should be provided.

The literature on school clustering and school-based management emphasises the creation of 'professional learning community' for teachers which provides opportunity to engage in professional dialogue and collaborative problem solving in issues related to teaching and learning (USAID, 2004; Dittmar et al., 2002). This study established that

there has been little collaboration among teachers as well as a lack of initiative from teachers to improve their teaching. Teachers from resourced schools maintained that the reform did not have any benefits for them. They argued that the reform had not promoted collaboration and co-operation among teachers. They preferred to remain self-sufficient in terms of resources and to work on their own. Teachers from under-resourced schools criticised the reform because it did not provide clear guidelines on how to support teachers learning from one another.

In this context, for example, where schools do not have sufficient resources and competent teachers, a professional learning community must have a clear focus on how to support teachers to improve their teaching practices. It is evident from the three case studies that creating a professional learning community per se, without competent teacher educators who can facilitate teacher learning, would not have much influence on the quality of teaching in schools. Teachers should be able to access teaching materials that are not available in their schools at cluster centres. Teachers should also be able to access professional support that they cannot obtain in their schools. It is clear from the three case studies that teachers have not been interested in attending cluster-based subject meetings, because they do not see the value of cluster meetings, to their classroom practice.

While a review of studies on school clustering found teacher groups to be ineffective because they were irrelevant to teachers' immediate needs (Giordano, 2008), this study found that the ineffectiveness of teacher groups lies in the fact that they are unstructured and un-focused and that they lack clarity, guidelines and resources to support teachers improving their teaching.

Advocates of cluster-based school management assume that school management and teaching improve through shared and collaborative leadership and management, equitable distribution of resources, and by creating collaborative learning opportunities for teachers (Giordano, 2008; Ditmar et al., 2002). This study argues that it is not yet clear whether the participatory and collaborative styles of leadership and management directly relate to teaching. This study also argues that in order to claim that a link exists between school clustering and improving teaching, there should be research evidence that shows how leadership and management skills advocated by cluster-based school management relate to improving teaching.

The evidence from the three case studies showed that cluster-based school management reform was not able to create a learning culture in schools. As mentioned previously, cluster-based school management reform fails to transform school tradition and culture into a school culture and tradition geared towards improving teaching in schools. Schools competed over resources. School principals were not able to work in a collaborative manner. Teachers lack skills to work in a collaborative learning environment, because they are used to working in isolation. Though this study did not assess the reflective skills of teachers it could be inferred from the observations during the cluster-based subject meetings that teachers had difficulties in reflecting on their teaching practices.

The evidence from this study also showed that teachers lack values that relate to team work, mutual support, respect and understanding. It is not yet clear from the literature how best school clustering can create a collaborative learning culture in schools, especially in the context of schools which have competitive and individualistic backgrounds. It is also not yet clear the extent that the collaborative learning culture influences the quality of teaching in schools. The evidence from the survey research revealed that both school

principals and teachers rated the collaboration among teachers as high, but rated the influence of the reform on improvement of teaching as very low.

Figure 2 below illustrates the disjuncture between cluster-based school management and improved teaching:
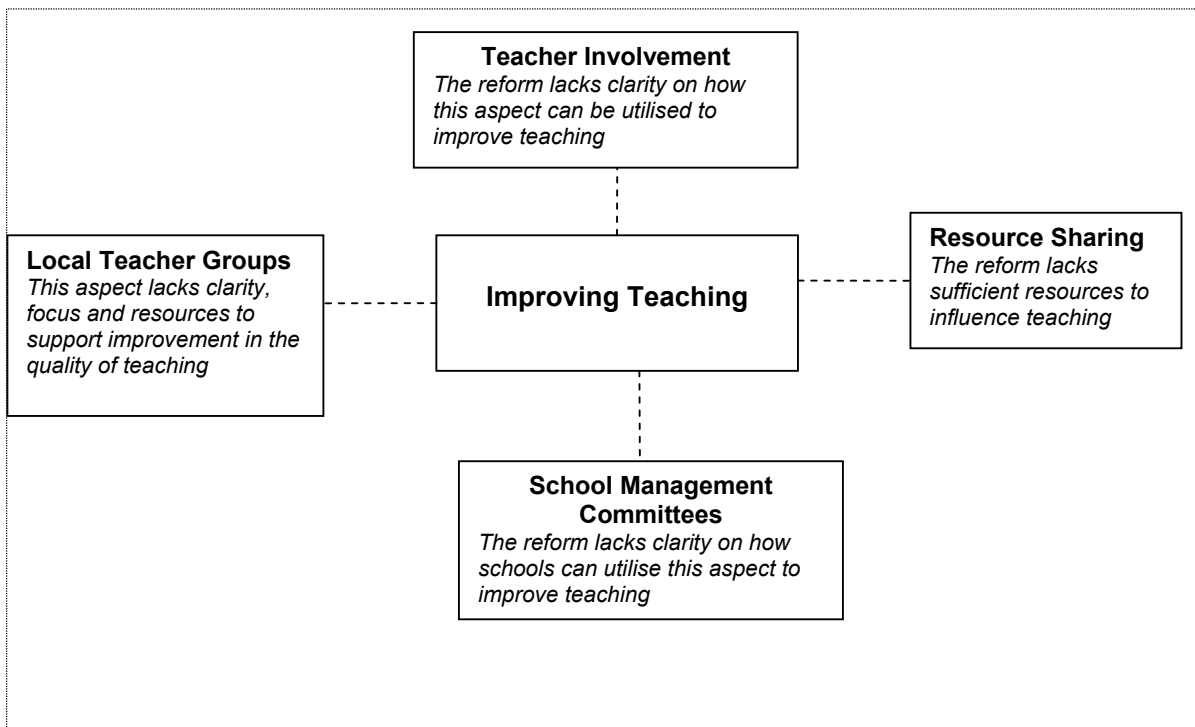
Figure 2: *Disjuncture between aspects of cluster-based school management reform and improving teaching*

Note: Dashed lines indicate no link between the aspect of cluster-based school management reform and improving teaching.

As described in figure 2 above, there is a disjuncture between aspects of cluster-based school management reform and improving teaching. Local teacher groups (cluster-based subject groups meetings) did not influence the quality of teaching; because they lack clarity, focus and resources to support teachers improve their teaching practices.

With regard to the teacher involvement, the reform lacks clarity on how this dimension can be utilised to improve teaching. Besides the lack of clarity, it is evident from the three case

studies that school principals lack skills on how to involve teachers in decisions that relate to school improvement programs. Teachers were expected to attend cluster-based subject group meetings, but they were not involved in the planning of these meetings. Resource sharing is the other aspect of cluster-based management reform which is assumed to improve the teaching practices of teachers. However, this assumption was proven to be unrealistic because schools were competed over limited resources. The aspect of 'school management committees' also did not influence the quality of teaching in schools. There has been little collaboration among schools. Schools interpreted the school management reform as a potential threat to their power; therefore schools competed for power and authority over their schools. Cluster-centre principals and satellite school principals did not work in a collaborative manner to improve teaching in schools. It could also be argued that schools and teachers may collaborate on number of issues, but collaboration may not guarantee improvement in the quality of teaching. Teachers seemed to be supported more by their own principals than by school management committees.

In summary, this study demonstrates a number of obvious missing links between cluster-based school management and improving teaching, because the reform lacks: (1) clarity, guidelines and resources to support and monitor teaching in schools and at classroom level; (2) clarity on the roles and responsibilities of key implementers in improving teaching; (3) capability to transform school traditions and culture into a culture which transforms teaching in schools; and (4) clarity on how teacher involvement can be utilised to improve teaching in schools.

9.4   Limitations of the present study

The qualitative data, which has made significant contribution to this study, was collected only from the three case studies. This limits the generalisation of the study findings from few areas of Namibia, considering the country's diversity.

The study focused only in Namibia excluding other countries in Sub-Saharan Africa, thus limiting the understanding of the implementation of decentralisation reforms such as school clustering to Namibia.

The study assessed the relationship between cluster-based school management and improving teaching. However, it was limited to capturing sufficient data on the types of managerial and leadership skills which could relate directly to teaching.

Due to time and resource constraints, the study did not capture sufficient data on the effectiveness of cluster-based school management reform in isolated schools with weak school leadership and limited resources.

This study does highlight how school traditional norms and values, and existence of the past ideologies affect the implementation of cluster-based school management reform; however, it did not examine how decentralisation reforms can change highly individualistic and competitive oriented schools to more shared and collaborative schools.

9.5   Recommendations for future research

Research on the relationship between education decentralisation and education quality has advanced considerably, especially in developed countries. However, the research evidence on the relationship between education decentralisation and improving teaching

has not been conclusive. As mentioned previously, a variety of decentralisation reforms are introduced to improve teaching in Sub-Saharan Africa. However, there is little research conducted on the relationship between education decentralisation and improving teaching in Sub-Saharan Africa. The following are topics for future research on the relationship between education decentralisation reforms and improving teaching.

Studies designed to investigate the leadership and management skills which directly relate to teaching, would be valuable. Studies should assess the extent to which leadership and management skills such as delegation of problem-solving and collaborative decision-making relate to improving teaching. Likewise, studies on the roles and responsibilities of key implementers such as cluster-centre principals, satellite school principals and cluster-subject facilitators in improving teaching would provide valuable data to shed light on the relationship between school clustering and teaching. Since the move towards education decentralisation has become popular in Sub-Saharan African countries, substantial research evidence on how school clustering reforms improve the quality of teaching in African classrooms is valuable.

Another area of research would be studies of local teacher groups and teacher resource centres as localised teacher development strategies. Studies to investigate how these structures facilitate teacher learning would yield useful data on the relationship between decentralisation reforms and improving teaching. In addition, studies that systematically examine the effects of these structures on the quality of teaching in schools would contribute to our understanding of the link between localised teacher development and teaching in developing contexts.

9.6 Recommendations for improving implementation of cluster-based school management reform in a developing context

Develop strategies for supporting the implementation of cluster-based school management reform

This study establishes that cluster-based school management reform has introduced ideological changes which challenge traditional ways of running schools. The democratic ideology challenges bureaucratic styles of control and faith in the virtues of line-management as well as ethos of competitiveness and individualism. This study revealed that inspectors, school principals and teachers ignored democratic practices, or they continued operating as they used to do prior to the introduction of cluster-based school management reform, or they implemented the reform through bureaucratic approaches. Substantial changes from 'past' practices to democratic practices require opportunity to be created for substantial discussion about why such changes are needed and how these changes will benefit schools and teachers.

In addition, consistent support should be provided to school inspectors (district officers), school principals and teachers to enable them to make a shift to an ideology that supports decentralisation reforms.

Review teacher- support strategies

The evidence from this study shows that teacher-support strategies introduced by the cluster-based school management reform are ineffective in improving teaching practices of teachers in Namibia. In order for decentralisation reforms to have effects on teaching

practices of teachers, a review of the current teacher support strategies is needed. The recommendations from this study are as follow:

(1) Identify teacher support structures and strategies that could support teachers at teacher-resource centre, cluster and classroom level. Combining the effort of supporting teachers at teacher resource centre, cluster and school levels might be the appropriate teacher support strategy for Namibia, since teacher resource centre staff and school managers are full-time officials appointed for teacher support.

(2) Carry out training needs assessment to determine the competencies and skills that should be developed in teachers to improve their teaching practices.

(3) Develop a systematic teacher continuous development program geared towards improving teaching.

(4) Develop incentives for teachers to participate in continuous professional development activities.

(5) Develop systematic follow-up activities for teachers at classroom level.

(6) Determine the resources needed to support teachers at classroom level.

(7) Pilot the program in remote and isolated schools to determine its suitability in difficulty conditions.

(8) Monitor the implementation of the programs.

Evaluate the effectiveness and affordability of cluster-based school management reforms in improving teaching in a developing context

It is evident from this study that successful implementation of cluster-based school management reforms requires a reasonable transportation and communication network, availability of resources and sufficient personnel in schools. It is clear from the study that rural clusters and isolated schools have transport and communication problems. It is expensive for a developing country to have in place a reasonable transportation and

communication network in rural areas. It is also expensive for a developing country to provide sufficient resources and personnel in all schools in a sparsely populated country such as Namibia. The evidence from the rural case study showed that schools had embraced the school management reform, but its implementation was constrained by the fact that schools are isolated and located in impoverished communities.

This study argues that cluster-based school management reform could be an efficient decentralisation reform for distributing administrative responsibilities at local level, but it might not be an appropriate intervention for improving teaching in schools. Therefore this study recommends that since conditions in developing countries are far different from those of developed countries, decentralisation reforms designed for developed countries should be adapted in accordance with the needs of developing countries.

This study therefore recommends a well thought-out cluster-and school-based in-service teacher development strategy which combines in-class support to teachers as a possible intervention for teacher professional development in Namibia. This strategy needs to be tied to a clear focus on improving the teaching competencies of teachers as well as improving the planning and facilitation competencies of officials responsible for teacher professional development at both levels.

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APPENDIX A: QUESTIONNAIRE FOR CLUSTER-CENTRE PRINCIPALS AND SATELLITE SCHOOL PRINCIPALS

The purpose of this questionnaire is to collect information from school managers on the implementation of cluster-based school management in Namibian primary schools. In particular, the questionnaire is intended to collect information on how cluster-centre principals and satellite school principals perceive the implementation of cluster-based school management and whether in their experiences cluster-based management has brought improvements in the quality of teaching. The information provided will be treated with absolute confidentiality and will only be used for the purpose of this research.

PART A: PARTICIPANT INFORMATION

Education Region: ------------------------

Cluster centre: -------------------------

School: -------------------------

PLEASE TICK (√) THE APPROPRIATE OPTION

1.   Age

21 – 30	
31 -40	
41 – 50	
51 – 60	

2.   Gender

Male	
Female	

3.   Educational Qualifications

Less than grade 12 + 2 years of tertiary education	
Grade 12 + 2 years of tertiary education	
Grade 12 + 3 years of tertiary education	
Grade 12 + 4 years of tertiary education	
Grade 12 + 5 years of tertiary education	

4.   Job Status

Cluster centre principal	
Satellite school principal	

5.   Years of school management experience

1 – 5 years	
6 – 10 years	
11 – 15 years	
16 – 20 years	
> 21 years	

6.   School geographical location

Urban	
semi-urban	
Rural	

7.   Years of implementation of cluster-based school management

0 – 2 years	
3 – 4 years	
5 – 6 years	

8.   Cluster condition

Under-resourced	
Resourced	
Well-resourced	

9.   Have teachers in your school received professional support through cluster-based school management?
      Yes /No

      If No, explain why they have not received professional support through cluster-based school
      management:

**PART B: SCHOOL PRINCIPALS' PERCEPTIONS OF THE IMPLEMENTATION CLUSTER-BASED
                 SCHOOL MANAGEMENT**

*This part requires you to rate the extent to which cluster-based school management has been implemented
in your school/cluster. The part contains three items of each of the eight dimensions of cluster-based school
management. Please tick (√) the numeral that best reflects your response on each statement, using the
rating scale under each statement.*

1.   Please rate the extent to which cluster-based school management fosters **shared and collaborative
          leadership**:
a.   In this cluster, school managers, teachers and parents collaborate in managing school activities.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

b.   In this cluster, tasks and responsibilities are delegated among satellite schools.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

c.   Principals and teachers in my cluster work as a team.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

2.   Please rate the extent to which cluster-based school management fosters **competent leadership**:

a.   Cluster-centre principals and satellite principals are prepared for their roles and responsibilities in
          cluster-based school management.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

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b. Cluster-centre principals and satellite school principals receive professional support in facilitating and managing change.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

c. Cluster-centre principals and satellite school principals receive ongoing training in collaborative decision-making, problem solving and delegation.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

3. Please rate the extent to which cluster-based school management promotes **teacher participation** in school decisions:

a. Teachers are involved in decision-making processes.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

b. Teachers' knowledge and experience are included in key school decisions.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

c. School managers and teachers work together to improve school programs.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

4. Please rate the extent to which cluster-based school management promotes **teacher collective planning:**

a. Teachers collaborate in interpreting school syllabi.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

b. Teachers compile common schemes of work.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

c. Teachers collaborate in designing teaching and learning activities.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

5. Please rate the extent to which cluster-based school management fosters **teacher collegiality**:
a. In this cluster, teachers work in a supportive environment.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

b. Teachers share ideas and are open to one another.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

c. In this cluster, teachers' morale and confidence in teaching is boosted as they work together with colleagues.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

6. Please rate the extent to which cluster-based school management fosters **resource sharing** among satellite schools:

a. Teachers from different satellite schools share teaching and learning materials.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

b. Under-resourced schools benefit from other resourced schools within cluster.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

c. Cluster centres are equipped with additional facilities to allow resource sharing in the cluster.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

7. Please rate the extent to which cluster-based school management fosters **supervision and support**:

a. Cluster-centre principals visit and offer support to satellite schools.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

b. Subject facilitators monitor, supervise and support teachers.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

c. Schools identify their own training needs to improve teaching and learning.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

8. Please rate the extent to which cluster-based school management supports **localised teacher development**:

a. Teachers learn new teaching skills during cluster-based subject meetings.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

b. Cluster-based subject meetings increase teachers' understanding of content and how learners learn that content.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

c. There is follow up support for teachers to master new teaching strategies and integrate them in their classroom practices.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

9. Do you think cluster-based subject meetings have changed teachers' classroom practice? Please explain:

--- --

PART C: **PERCEPTIONS OF SCHOOL PRINCIPALS ON HOW CLUSTER-BASED SCHOOL MANAGEMENT COMMITTEES ARE ORGANISED**

This section requires principals to provide information on how cluster-based school management committees are organised in their cluster.

PLEASE TICK (√) THE APPROPRIATE OPTION

1. How often do you attend Circuit Management Committee?

Twice a term	Once a term	Not at all

2. How often does Cluster Management Committee in your cluster meet?

Twice a term	Once a term	Not at all

3. How often does cluster-centre principal provide training to satellite school principals?

Twice a term	Once a term	Not at all

4. How often does cluster-centre principal visit satellite schools?

Twice a term	Once a term	Not at all

APPENDIX B: QUESTIONNAIRE FOR LOWER PRIMARY TEACHERS

The purpose of this questionnaire is to collect information about teachers' perceptions on the implementation of cluster-based school management in Namibian primary schools. In particular, the questionnaire is intended to collect information on how lower primary teachers perceive the implementation of cluster-based school management and whether in their experiences, cluster-based school management has brought improvement in the quality of teaching and learning. The information provided will be treated with absolute confidentiality and will only be used for the purpose of this research.

PART A: PARTICIPANT INFORMATION

Education Region: ------------------------
Cluster centre: ------------------------
School: --------------------------

PLEASE TICK (√) THE APPROPRIATE OPTION

1.   Age

21 - 30	
31 -40	
41 - 50	
51 - 60	

2.   Gender

Male	
Female	

3.   Educational Qualifications

Less than grade 12 + 2 years of tertiary education	
Grade 12 + 2 years of tertiary education	
Grade 12 + 3 years of tertiary education	
Grade 12 + 4 years of tertiary education	
Grade 12 + 5 years of tertiary education	

4.   Years of teaching experience

1 – 5 years	
6 – 10 years	
11 – 15 years	
16 – 20 years	
> 21 years	

5.   School geographical condition

Urban	
semi-urban	
Rural	

6.   Years of implementation of cluster-based school management

0 – 2 years	
3 – 4 years	
5 – 6 years	

7.   Cluster condition

Under-resourced	
Resourced	
Well-resourced	

8.   Have you received professional support through cluster-based subject meetings?
         Yes/ No

If No, explain why you have not received professional support through cluster-based subject meetings:

PART B: TEACHERS' PERCEPTIONS OF CLUSTER-BASED SCHOOL MANAGEMENT

This part requires you to rate the extent to which cluster-based school management has been implemented in your school cluster. The part contains three items on each of the eight dimensions of cluster-based school management. Please tick (√) the numeral that best reflects your response on each statement, using the rating scale under each statement.

1.   Please rate the extent to which cluster-based school management fosters **shared and collaborative leadership**:

a.   In this cluster, school managers, teachers and parents collaborate in managing school activities.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

b.   In this cluster, tasks and responsibilities are delegated among satellite schools.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

c.   Principals and teachers in my cluster work as a team.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

2.   Please rate the extent to which cluster-based school management fosters **competent leadership**:

a.   Cluster-centre principals and satellite principals are prepared for their roles and responsibilities in cluster-based school management.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

b.   Schools managers receive training in facilitating and managing change.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

c.   School managers receive ongoing training in collaborative decision-making, problem solving and delegation.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

3**.**   Please rate the extent to which cluster-based school management promotes **teacher participation** in school decisions:

a.   Teachers are involved in decision-making processes.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

b.   Teachers' knowledge and experience are included in key school decisions.

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To large extent	To some extent	To very limited extent	Never
3	2	1	0

c. School managers and teachers work together to improve school programs.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

4. Please rate the extent to which cluster-based school management promotes **teacher collective planning:**

a. Teachers collaborate in interpreting school syllabi.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

b. Teachers compile common schemes of work.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

c. Teachers collaborate in designing teaching and learning activities.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

5. Please rate the extent to which cluster-based school management fosters **teacher collegiality**:
a. Teachers work in a supportive environment.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

b. In this cluster, teachers share ideas and are open to one another.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

c. Teachers' morale and confidence in teaching is boosted as they work together with colleagues.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

6. Please rate the extent to which cluster-based school management fosters **resource sharing** among satellite schools:
a. Teachers from different satellite schools share teaching and learning materials.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

b. Under-resourced schools benefit from other resourced schools within cluster.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

c. Cluster centres are equipped with additional facilities to allow resource sharing in the cluster.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

7. Please rate the extent to which cluster-based school management fosters **supervision and support:**
a. Cluster-centre principals visit and offer support to satellite schools.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

b. Subject facilitators monitor, supervise and support teachers.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

c.   Schools identify their own training needs to improve teaching and learning.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

8.   Please rate the extent to which cluster-based school management supports **localised teacher development**:

a.   Teachers learn new teaching skills during cluster-based subject meetings

To large extent	To some extent	To very limited extent	Never
3	2	1	0

b.   Cluster-based subject meetings increase teachers' understanding of content and how learners learn that content.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

9.   There is follow up support for teachers to master new teaching strategies and integrate them in their classroom practices.

To large extent	To some extent	To very limited extent	Never
3	2	1	0

10.   Do you think cluster-based subject meetings have changed the way you teach now?
       Please explain:

PART C: TEACHERS' PERCEPTIONS OF HOW CLUSTER-BASED SCHOOL MANAGEMENT COMMITTEES ARE ORGANISED

This part requires you to provide your opinions on how cluster-based committees are organised in your cluster.

PLEASE TICK (√) THE APPROPRIATE OPTION

1.   How often do you hold Cluster-Based Subject meetings?

Twice a term	Once a term	Not at all

2.   How often do you hold Examination Committee meetings?

Twice a term	Once a term	Not at all

APPENDIX C: CLUSTER SUBJECT MEETING OBSERVATION GUIDE

The guiding questions were used to assist the researcher to document activities carried out during cluster subject meetings.

Education Region: --------------------

Cluster Centre: --------------------
Date of visit: --------------------
Visit No: --------------------

1. In what activities are the teachers engaged in?
2. How are the activities organised
3. What resources are used in these activities and how are they allocated?
4. How do the teachers relate to one another?
5. What do the teachers do or say to one another?
6. What verbal and nonverbal language do they used for communication?
7. What is the content of their conversations?
8. Why does the group operate as it does?
9. What meanings do teachers attribute to what they do?

Adopted from: LeCompte M. & Preissle J. 1993: 199-200

APPENDIX D: TEACHERS' PERCEPTIONS OF THE EFFECTS OF CLUSTER-BASED SCHOOLMANAGEMENT ON TEACHING PRACTICES

The purpose of this schedule is to elicit information on teachers' perceptions of the implementation of cluster-based school management and whether from their experiences, the change in school management has brought change in their teaching practices.

Teacher Name: ---------------------------------- Gender: --------------------

Age: --------- School: ---

Teacher Qualifications: --

Years of Teaching Experiences: ------------------------------------

Years of Professional Training: ---

1. How long have you been teaching at this school?

2. How long have you been teaching lower primary phase?

3. What grade (s) do you teach and how have you been teaching in this grade?

4. What change in school management have you experienced in the past four years?

5. What do you know about cluster-based school management?

6. Do you think cluster-centre principal work together with your principal to support improve your classroom practice?

7. Do you think cluster-centre principal and principals are trained to support cluster subject meetings? Please explain.

8. How does your interaction with teachers from other schools change the way you teach? Please explain.

9. During cluster subject meetings, do you share good teaching practice and teaching resources with other teachers? Tell me more how you share good practices and resources? Have these resource improved you teaching practice? Please explain.

10. Do you think you receive regular support from subject/cluster facilitator? Please explain.

11. Is there any follow up support for you at classroom level after cluster subject meetings?

12. What has you learned from cluster subject meetings that have changed the way you teach? Please give an example of an aspect of your teaching practices that has improved as a result of attending of cluster subject meetings?

13. What changes have you noticed in learners' performance since the introduction of cluster-based school management?

14. What encourages you to attend cluster subject meetings?

15. What discourages you to attend cluster subject meetings?

16. Based on your experience, what would you say are the strengths of cluster-based school management? What about the weaknesses?

APPENDIX E: CLASSROOM OBSERVATION GUIDE

The purpose of this guide is to obtain first hand data on what teachers actually practice in classrooms in relation to what they shared and discussed during cluster subject meetings.

Education Region: ....

Cluster: ....

School: ....Rural: ....   Urban: ....

Grade: ....

Teacher: ....

Subject: ....

Date of visit: ....

Visit No: ....

1. How does the teacher interact with learners?

2. How do learners respond to teacher instruction?

3. What teaching strategies does the teacher use to enhance learning in this learning area (subject)?

4. How does the teacher assist learners to make connections between what they already know and new material?

5. How does the teacher engage learners in higher order thinking in this leaning area?

6. What teaching materials and resources does the teacher use to support learning in this learning area?

7. What teaching strategies and materials does the teacher use to support learners understood the relationship between learning areas?

8. How does the teacher adapt instruction to the variations in learners' abilities in this learning area?

APPENDIX F: DOCUMENT ANALYSIS GUIDE

Documentary analysis can identify issues for further investigation and provide evidence of change or no change to support respondents' perceptions on the implementation of cluster-based school management.

The following documents were analysed for this purpose:
1. School clustering policy document
2. Minutes of cluster-based management committee and cluster-based subject meetings
3. Training Manual for Cluster Centre Principals

The documents were analysed based on the following guiding questions:
1. What theory of action underpins cluster-based school management?
2. What does this document say about the actual implementation of cluster-based school management?
3. What does this document say about the key problems recorded during the implementation of cluster-based school management?
4. What does this document say about the key successes recorded during the implementation of cluster-based school management?
5. Is there evidence in this document to show that teachers have been professionally supported under cluster-based school management?

APPENDIX G: FOCUS GROUP DISCUSSION GUIDE

The purpose of this guide is to elicit information and insights on the effects of cluster-based school management of teaching practices of teachers.

Cluster:
Date:

1. What change in school management have you experienced in the past four years?
2. What do you know about cluster-based school management?
3. Are you involved in planning and preparation for cluster-based subject group activities? Please explain.
4. Do you carry out activities in a collaborative way during cluster-based subject meetings? Does this collaborative effort improve your classroom practice?
5. Do you think you receive regular support from the subject facilitator? Please explain.
6. How does your interaction with teachers from other schools change the way you teach? Please explain.
7. During cluster-based subject meetings, do you share good teaching practice and teaching resources with other teachers? Have this resource sharing improved your classroom practice? Please explain.
8. Is there any follow up support for you at classroom level after cluster-based subject meetings?
9. What have you learned from cluster-based subject meetings that has changed the way you teach?
10. Based on your experience, what would you say are the strengths of cluster-based school management? What about the weaknesses?

APPENDIX H: SCHOOL INSPECTOR INTERVIEW GUIDE
This semi-structured interview guide is designed to elicit information on the perceptions of circuit-inspectors on the implementation of cluster-based school management.

Name:

Circuit:

Professional qualifications:

Years of Management Experience:

1. How did the school clustering process take place in your circuit?
2. What was your role during the clustering process?
3. What was the role of the BEP project in the clustering process?
4. What roles and responsibilities were assigned to you, CCP and satellite school principals?
5. How was the CCP appointed?
6. How did the CCP feel about the added responsibilities?
7. How did the resourced schools respond to the clustering process?
8. How did the satellite schools respond to the clustering process?
9. How did you facilitate the collaboration/cooperation among schools?
10. What kind of support do you provide to CCP and satellite school principals?
11. Do you think the clustering process has improved the management of weak schools?
12. Do you think the clustering process has improved the relationship between schools?

APPENDIX I: SATELLITE SCHOOL PRINCIPAL INTERVIEW GUIDE

This semi-structured interview guide is designed to elicit information on the perceptions of satellite school principals on the implementation of cluster-based school management.

Name:

School:

Cluster:

Professional Qualifications:

Years of Management Experience:

1.   How long have you been a principal at your school?

2.   What do you know about cluster system?

3.   What is your experience of being a principal in your cluster?

4.   How are the activities in your cluster planned and organised?

5.   Are you involved in managing cluster activities? What about teachers and parents?

6.   What support do you get from the cluster-centre principal?

7.   What support do you provide to your teachers to improve their teaching practices?

8.   What are your suggestions for improving the management of the cluster?

APPENDIX J: CLUSTER CENTRE PRINCIPAL INTERVIEW GUIDE

This semi-structured interview guide is designed to elicit information on the perceptions of centre-centre principals on the implementation of cluster-based school management.

School:

Cluster:

Professional Qualifications:

Years of Management Experiences:

1.   How long have you been a principal at your school?

2.   How long have you been a cluster-centre principal?

3.   How do you plan and organise cluster activities?

4.   How do you involve the satellite school principals in the management of cluster activities?

5.   Do you involve teachers and parents in managing cluster activities? Please explain

6.   What kind of support did you receive for managing cluster activities?

7.   How often do you visit and offer support to satellite school principals?

8.   What professional development support do you provide to teachers in your cluster?

9.   What do you consider as strengths of the cluster system? What about the shortcomings?

10.   What are your suggestions for improving the management of cluster?

APPENDIX K: A SAMPLING FRAME FOR SELECTING SAMPLE SCHOOLS USING A SIMPLE RANDOM SAMPLING (SRS)

SRS	SCHOOL	SRS	SCHOOL	SRS	SCHOOL	SRS	SCHOOL	SRS	SCHOOL	SRS	SCHOOL	SRS	SCHOOL
001	Tamariskia PS	026	Otjiu PS	051	Ruiters PS	076	Pally C. PS	101	Imannuel R. PS	126	Witkop PS	151	St. Matthias PS
002	Mbilajwe PS	027	Otjerunda PS	052	Otjapitjapi PS	077	Versteende PS	102	Atlantic PS	127	#Aon//Ob PS	152	Adam S. PS
003	Mahundu PS	028	Samudono PS	053	Otjondeka PS	078	W. Borchard PS	103	Ubasen PS	128	Nabasib PS	153	Helene van Rhjin PS
004	Mulumba PS	029	Lyashulu PS	054	Otjikoto PS	079	Brandberg	104	Mariental PS	129	Klein-Aub PS	154	Diaz PS
005	Witkrans PS	030	Ngweze PS	055	Kephas Z. PS	080	PS!O#Gab PS	105	Swakopmund PS	130	St. Patrick's PS	155	Nautilus PS
006	Schlip PS	031	Kameru PS	056	Otjetjekua PS	081	Narraville PS	106	Jakob S. PS	131	Witkrans PS	156	Khoichas E.C.C. PS
007	Ngoma PS	032	Kamanjab PS	057	Hungua PS	082	Kandunda Kaseta PS	107	Namalumbi PS	132	Masikili PS	157	Kaitsi !Gubeb PS
008	Isuswa PS	033	Edward Garoeb PS	058	Mubiza PS	083	Duinesig PS	108	St. Konrad PS	133	J.TL. Beukes PS	158	Marmer PS
009	D.D. Guibeb PS	034	Outjo PS	059	Okorosave PS	084	Flamingo PS	109	Aranos PS	134	Petrus V. PS	159	Blouwees PS
010	Makolonga PS	035	D.F. Uirab PS	060	Ivilivinzi PS	085	Coi PS	110	Cambridge PS	135	Mattheus H. PS	160	Lukas F. PS
011	Namib PS	036	Musaso PS	061	Grootberg PS	086	A.M.E. Community PS	111	Salmon B. PS	136	Mazoba PS	161	St. Joseph PS
012	Ngonga PS	037	Queen S. PS	062	Ongongo PS	087	Oukongo PS	112	Danie J. PS	137	Usib PS	162	De Sales PS
013	Otjitanda PS	038	St. Michaels PS	063	Lubuta PS	088	Otjimbwingwe PS	113	Stampriet PS	138	Origo PS	163	Vaalgrans PS
014	Kaoko-O.PS	039	Jack F. PS	064	Etanga PS	089	Ovihitua PS	114	Sonop PS	139	Tsumis Farm	164	Karasburg PS
015	Impalila PS	040	Bitto PS	065	Sangwali PS	090	Ozondati PS	115	N. Mutschuana PS	140	Ruimte PS	165	Michel D. PS
016	Walvisbay PS	041	Frans F. PS	066	J.P. Brand PS	091	Kronlein PS	116	Mpukano PS	141	Ariamsvlei PS	166	Geduld PS
017	Ondao PS	042	Omatjete PS	067	Muketela PS	092	Warmquelle PS	117	Chinchimane PS	142	Bethanie PS	167	D.C Frederick PS
018	Malundu PS	043	Welwitschia PS	068	Opuwo PS	093	Otjihorongo PS	118	Mukurob PS	143	Rehoboth PS	168	Nowak PS
019	Edward F. PS	044	Otjikondavirongo PS	069	Brendan Simbwaye PS	094	St. Joseph PS	119	C. Spellmeyer PS	144	J.S. Herero PS	169	J.A. Kahuika PS
020	Sibbinda PS	045	Waldfrieden PS	070	Omaruru PS	095	Headstart M. PS	120	Katora PS	145	Keetmanshoop PS	170	Kutenhoas PS
021	P. Diergaadt	046	Abraham G. PS	071	Festus G.	096	Arandis PS	121	Kriess PS	146	Chris L. PS	171	Hoeksteen PS

	PS				PS										
022	Ndoro PS	047	Paheye PS	072	Elifas PS	097	Rossing PS	122	Okongue PS	147	Don Bosco PS	172	E.H.W. Baard PS
023	Mavuluma PS	048	Eddie B. PS	073	Otjikondo PS	098	Bukalo PS	123	Piet D. PS	148	Kalkrand PS	173	Erongosig PS
024	Sikaunga PS	049	Terrace B. PS	074	Etoto PS	099	W.M.Jod PS	124	Groendraai Ps	149	Th. F. Gaeb PS		
025	Kamwandi PS	050	Ehomba PS	075	J.W. Mouton PS	100	Vrede R. PS	125	S.C. Vries PS	150	Minna S. PS		

MATRIX 1: CONTEXTUAL FEATURES AND DYNAMICS OF THE THREE PRIMARY SCHOOL CLUSTERS

Cluster	Socio-economic conditions	School/classroom conditions	Characteristics of institutional cultures
Makalani	The socio-economic background of teachers and learners in some schools ranges from very good to very poor. Some of the learners come from family backgrounds of artisans ranging from bricklaying, carpentry, electricians, while some learners come from family backgrounds who own livestock.	Most schools are resourced with strong leadership, qualified and experienced teachers. Teachers and learners come from predominant one ethnic background. Teacher-learner ratio is high to moderate. Most classrooms have enough space for learners, storage space and have enough teaching materials.	*The circuit inspector:* • has a reserve attitude towards cluster-based school management; • perceived no need for cluster-based school management in situation where schools have strong leadership, qualified and experienced teacher; • did not believe in delegating his responsibilities to cluster-centre principals; • accustomed to bureaucratic style of management; • interpreted the transfer of authority to clusters as undermining his authority over schools. *School principals:* • accustomed to authoritarian, managerial and bureaucratic approaches to management styles • used to report directly to the circuit inspector; • resisted to be under the leadership of another school; principal and continue operate on their own and still report directly to the circuit inspector even though cluster-centre principal is appointed. *Teachers:* • used to work in isolation; • resisted to share knowledge and expertise with other teachers in the cluster; • accustomed to authoritarian and bureaucratic approaches to management; • resisted to attend cluster-based subject meetings regularly.

MATRIX 2:   TEACHERS' PERCEPTIONS OF CLUSTER-BASED SCHOOL MANAGEMENT TEACHER SUPPORT

Cluster	Teacher support through cluster management committee	Teacher support through cluster-subject group meetings	Teacher support through cluster subject facilitators
Makalani	Teachers perceived sufficient support from their principals and no or little support from the cluster management committee	Teachers in both resourced and under-resourced schools perceived insufficient support from cluster-based subject group meetings	Cluster-subject facilitators were appointed in the cluster. The school management reform has created an extra load on the teachers who are appointed as subject facilitators. Subject facilitators could not visit all eight primary schools in the clusters and provided support at classroom level.
Hendrich	Teachers perceived sufficient support from the cluster centre principal and no or little support from their principals	Teachers in resourced schools perceived insufficient support from cluster-based subject group meetings. There are differences in perceptions among teachers in the under-resourced schools on the support provided by cluster-based subject group meetings. While some teachers perceived sufficient support from cluster-based subject group meetings, others perceived in-sufficient support from the subject meetings.	Only one facilitator was appointed in the cluster. The subject facilitator did not visit teachers, due to limited resources and her own workload. The subject facilitator chose to focus more on her workload because of lack of clarity regarding her roles and responsibilities in the implementation of the school management reform.
Otjimue	Teachers perceived support from their principals and no or little support from the cluster management committee. Teachers perceived that they have little information on how the cluster management committee functions	Teachers perceived insufficient support from cluster-based subject group meetings. Cluster subject meetings in this cluster were not held regularly or not at all due to distance and transport problems.	In this cluster, the cluster-subject facilitator is a principal whose school has limited teaching personnel. The cluster subject facilitator did not visit teachers sue to limited resources and her own workload.

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