SCHOOL CLUSTERS AS SITES FOR INSTRUCTIONAL LEADERSHIP: A CASE OF THE BETTER SCHOOLS PROGRAMME OF ZIMBABWE

by

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DECLARATION

I, JERIPHANOS MAKAYE, hereby declare that the thesis entitled: SCHOOL CLUSTERS AS SITES FOR INSTRUCTIONAL LEADERSHIP: A CASE OF THE BETTER SCHOOLS PROGRAMME OF ZIMBABWE is my own independent work and has not previously been submitted by me at another University/Faculty. I further more cede copyright of the thesis in favour of the University of the Free State.

SIGNATURE	DATE
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Mr.J. Makaye

DEDICATION

This thesis is dedicated to my loving and inspiring mother, my late brother and sister, Itai and Tizirai.

ACKNOWLEDGEMENT

First and foremost I would like to thank the Almighty, who is the pen and author of my life. Secondly my profound gratitude goes to my Supervisor Prof Loyiso Jita for his academic and professional guidance, right from shaping my research title up to the completion of the report. He has never tired up, always being there for me when the goings seemed gloomy. You have shown me the academic light I will always live to remember. My gratitude also goes to his team of former doctoral students who became our mentors, viz. Dr. Chabongora, Dr. Akpo, and Prof. Mokhele whose ideas sharpened my academic prowess.

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ABBREVIATIONS AND ACRONOMYS USED IN THE THESIS

BSPZ Better Schools Programme of Zimbabwe

CRT Cluster resource teacher

DEO District education officer

DRT District resource teacher

EFA Education for all

EO Education officer

HoDs Heads of department

JICA Japan International Cooperation Agency

LEAs Local education authorities

MoESC Ministry of Education Sport & culture

NGOs Non-governmental organisations

SDC School development committee

SGB School governing board

UNICEF United Nations international children's education fund

ZIMSEC Zimbabwe school examinations council

School clusters as sites for instructional leadership: a case of the Better Schools Programme of Zimbabwe

Abstract

Inter-school collaborations or clustering has a long history, dating back to the 1940s in Nepal and Great Britain and it has spread across many parts of the world. Zimbabwe is no exception to this trend of adopting inter-school collaborations as a reform strategy for improving teaching and learning in schools. This innovation, which was initially meant to bring together disadvantaged rural schools, has spread to include urban schools. Despite its promise, however, the utility of clusters or inter-school collaborations in terms of improving the quality and efficacy of teaching and learning remains a matter of scholarly debate and inquiry. The present study adds insights to the debates on the utility of clusters for improving teaching and learning in schools. The efforts to improve teaching and learning in schools are what this study defines as instructional leadership.

Whilst many studies have been conducted to understand instructional leadership practices at either the school or district levels, very few of these studies have explored instructional leadership within a school collaborative or cluster specifically. This study took the challenge by exploring whether and how the Better Schools Programme of Zimbabwe (BSPZ), an example of a school cluster or collaborative, serves as a site for instructional leadership for the participating schools and teachers.

The investigation took a pragmatic stance and adopted a mixed methods approach in order to take advantage of the strengths of both the qualitative and quantitative approaches. Using a multiple case study of four BSPZ clusters in the Masvingo district of Zimbabwe, the study employed a sequential explanatory mixed methods design where a sample of 101 participants responded to a questionnaire on the range and depth of instructional leadership practices and artefacts that are used by their clusters, as well as their perspectives on the utility of clusters for improving teaching and learning. In the qualitative phase of the study, purposively selected groups of participants that included two heads of school (or principals), two teacher leaders and two ordinary class teachers from two of the selected clusters were interviewed and observed. The qualitative phase was designed to confirm the participants' perspectives and get an inside picture of how instructional leadership operates in practice within the clusters.

The study has established that school clusters do carry out some activities that qualify to be classified as instructional leadership for the teachers in the participating schools. The drive for the instructional leadership programme of the clusters, however, is very moderate at best, and considerably weak in terms of its conception and influence on teaching and learning in schools. The dominant practices of instructional leadership at the cluster level include the administration of cluster tests, supervision of classes, as well as the conduct of some professional development workshops for the teachers. Significantly, the study also established that instructional leadership within the clusters is sometimes distributed, albeit

by default, to include teacher leaders and other non-formal school leaders. The incentives for participation in general and for leadership of teaching and learning within the clusters are rather poor to non-existent, something that needs the urgent attention of educational leaders and policymakers in Zimbabwe. The study concludes by arguing that school clusters, especially the BSPZ clusters, are in a relatively good position to provide opportunities for instructional leadership to schools and teachers even though it is inevitable that their leadership activities will vary based on the will and capacity of each cluster. The study thus recommends the involvement of local school authorities, such as districts and provincial authorities in providing much needed support to ensure effective instructional leadership within the school clusters.

Further research on the agendas of school clusters and how they are carried out in different contexts (and countries) is needed in order to understand how it may be possible to institutionalise instructional leadership practices within such school collaboratives or clusters.

Key words: school clusters, Better Schools Programme of Zimbabwe (BSPZ), instructional leadership, distributed leadership, artefacts for leadership

Skoolgroepe as terreine vir onderrigleierskap: die geval van die Beter Skole-program van Zimbabwe

Samevatting

Interskoolsamewerking of -groepering het 'n lang geskiedenis en dateer uit die 1940's in Nepal en Groot Brittanje en dit het oor talle dele van die wêreld versprei. Zimbabwe is geen uitsondering tot hierdie tendens van die gebruik van interskoolsamewerking as 'n hervormingstrategie om onderrig en leer in skole te verbeter nie. Hierdie innovasie, wat aanvanklik bedoel is om agtergeblewe landelike skole saam te bring, het versprei om stedelike skole in te sluit. Ten spyte van 'n belowende begin, bly die bruikbaarheid van groepe of interskoolsamewerking in terme van die verbetering van die gehalte en doeltreffendheid van onderrig en leer 'n kwessie van akademiese debat en ondersoek. Hierdie studie voeg insig tot die debat oor die bruikbaarheid van groepe vir die verbetering van onderrig en leer in skole. Hierdie studie definieer pogings om onderrig en leer in skole te verbeter as onderrigleierskap.

Terwyl talle studies al uitgevoer is om onderrigleierskappraktyke op beide die skool- en distrikvlakke te begryp, het baie min van hierdie studies onderrigleierskap spesifiek binne 'n skoolkoöperasie of skoolgroep ondersoek. Hierdie studie het die uitdaging aangepak deur te verken of die Beter Skole-program van Zimbabwe (BSPZ), 'n voorbeeld van 'n skoolgroep- of koöperasie, dien as 'n terrein vir onderrigleierskap vir die deelnemende skole en onderwysers.

Die ondersoek het 'n pragmatiese standpunt ingeneem en 'n benadering van gemengde metodes gebruik om die sterkpunte van die kwalitatiewe en kwantitatiewe benaderings te benut. Met die gebruik van 'n gevallestudie van vier BSPZ-groepe in die Masvingo-distrik van Zimbabwe het die studie 'n opvolgende verduidelikende gemengde metodes-ontwerp gebruik, waarin 'n steekproef van 101 deelnemers 'n vraelys beantwoord het oor die omvang en diepte van onderrigleierskapspraktyke en -artefakte wat deur hul groepe gebruik word, asook hul perspektiewe op die bruikbaarheid van groepe vir die verbetering van onderrig en leer. In die kwalitatiewe fase van die studie is groepe deelnemers doelbewus gekies wat bestaan het uit twee skoolhoofde, twee onderwyserleiers en twee gewone klasonderwysers van twee van die geselekteerde groepe. Hulle is ondervra en waargeneem. Die kwalitatiewe fase is ontwerp om by die deelnemers se perspektiewe te pas en 'n binneprent van hoe instruksionele leierskap in die praktyk binne die groepe werk, te verskaf.

Die studie het vasgestel dat skoolgroepe van die aktiwiteite uitvoer wat kwalifiseer om gesklassifiseer te word as onderrigleierskap vir die onderwysers in die deelnemende skole. Die dryfkrag agter die onderrigleierskapprogram van die groepe is egter ten beste matig, en opmerklik swak in terme van konsepsie en invloed op onderrig en leer in skole. Die dominante praktyke van instruksionele leierskap op die groepvlak sluit in die administrasie van groeptoetse, toesig van klasse, asook die uitvoer van professionele

ontwikkelingswerksessies vir onderwysers. Dit is belangrik dat die studie ook vasgestel het dat onderrigleierskap binne die groepe soms by verstek onderwyserleiers en ander nieamptelike skoolleiers insluit. Die aansporing vir deelname oor die algemeen en vir leierskap van onderrig en leer binne die groepe is ietwat swak tot nie-bestaande, iets wat dringend aandag van onderwysleiers en beleidmakers in Zimbabwe verg. Die studie sluit af met die argument dat skoolgroepe, veral die BSPZ-groepe, in 'n redelik goeie posisie is om geleenthede vir onderrigleierskap aan skole en onderwysers te verskaf, al is dit onafwendbaar dat hul leierskapaktiwiteite sal wissel, afhangende van die wilskrag en kapasiteit van elke groep. Hierdie studie beveel die betrokkenheid van plaaslike skoolowerhede aan, soos distriks- en provinsiale owerhede, om broodnodige ondersteuning te verskaf om effektiewe onderrigleierskap binne die skoolgroepe te verseker.

Verdere navorsing oor die agendas van skoolgroepe en hoe hulle in verskillende kontekste (en lande) uitgevoer word, is nodig om te verstaan hoe dit moontlik mag wees om onderrigleierskappraktyke binne sulke skoolkoöperasies of -groepe te institusionaliseer.

Sleutelwoorde: skoolgroepe, Beter Skole-program van Zimbabwe (BSPZ), onderrigleierskap, verspreide leierskap, artefakte vir leierskap

LIST OF PAPERS PRESENTED AT CONFERENCES

Name of	Title	Place	Date of	Host
organization			conferences	
Sustainable	Revisiting the Autonomy	Qwaqwa	29-31 October	University of
Rural Ecologies	Control Debate In School		2014	the Free State
(SuRLEc)	Clusters: A case of the			
	Masvingo District Better			
	Schools Programme of			
	Zimbabwe (BSPZ).			

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CHAPTER ONE: The Problem and its setting

1.1 INTRODUCTION

This chapter provides the background, the aim and objectives, significance and limitations of the study: *School clusters as sites for instructional leadership by examining a case of the Better Schools Programme of Zimbabwe (BSPZ)*. It also briefly discusses the methodology employed and the theoretical framework underpinning the study. Delimitations, as well as key terms used in the study are explained. The chapter concludes by presenting an outline of the whole thesis.

1.2 BACKGROUND

Whether school clusters can be a solution for school improvement and better student achievement in member schools remains a question for both educationists and politicians alike. The notion of inter-school collaboration or grouping schools into clusters has gained prominence in both national and international educational debates, so much that it has become an internationally acclaimed reform strategy. The reform strategy often forms part of a basket of initiatives to improve the equity, quality and efficacy of teaching and learning in schools (Delport & Makaye, 2009). Clustering has been practised in Europe, Latin America, India, Namibia, Kenya and South Africa (Jita & Mokhele, 2012) and Zimbabwe has been no exception to this trend of educational reform. Despite school clustering being common in these countries, the conceptualization of what 'clustering' is and should be about is not always common. Acknowledging the paucity of information on the utility of school clusters, Jita and Mokhele (2012) posit that little is known about how such networks are formed, what they focus on and how they develop teachers. In the present study, Giordano's (2008:25) definition of school clusters as a grouping of schools located reasonably near to each other for educational and administration purposes, is used. Giordano (2008) further argues that schools in a cluster come together to share human and material resources in order to improve the conditions of education delivery in their schools.

Advocates of inter-school collaboration assume that grouping schools into clusters will help teachers develop as professionals and improve classroom teaching and learning (Jita

& Mokhele, 2012), as well as make education responsive to local needs and improve school leadership and administration (Pomuti & Weber, 2012; UNICEF, 2011). Jita and Ndlalane (2009:59) assert that "...clusters are a form of professional community that provides a context within which members can come together and understand their practices". It is also envisaged that schools could collaborate to share resources, craft expertise, experiences and practices and that this would assist schools to improve on instructional material and skills as well as solve problems of isolation (Goddard et al.,2010). Acknowledging the utility of school clusters, Maphosa et al. (2013:293) state: "...school clusters provide a platform to meet, share and even try out new ideas to improve teaching and learning". Furthermore, Lock (2011:10) expresses the view that school clusters offer opportunities for school heads to share and support each other on leadership issues. Apart from these expectations, the initiative aims to address equity issues in education delivery, access and participation in higher levels of schooling and in overcoming disparities in attainment, amongst schools (Giordano, 2008; Uirab, 2006). Such efforts to improve teaching and learning and student achievement constitute what is often referred to as 'instructional leadership' (Hallinger & Heck, 2010; Rorrer et al., 2008).

In spite of the widespread introduction of clusters in several countries, critics have frequently questioned the validity of the claims on their utility by drawing attention to international circumstances that militate against their effective national and implementation. Pomuti and Weber (2012), for instance, established in a case study of clusters in Namibia that the cluster was far from being successful in meeting its goals, as stakeholders had negative attitudes towards the reform and there were no guidelines with regard to cluster operations. Structures were still tight and leadership was not distributed. Confirming Pomuti and Weber's claim, Aipinge (2007) contends that "...a number of challenges are hampering the implementation of school clusters. These include a lack of system support and inadequate resources". These challenges have also been cited in several instructional leadership studies as militating against effective instructional practices in most schools (Blasé & Blasé, 2004; Mangin, 2007). A similar observation was made of teacher clusters in South Africa by Jita and Mokhele (2012), who argue that the institutionalization of teachers' clusters may have the adverse effect of curtailing collaboration, learning and leadership by the participating teachers.

Inadequate resources, structures and long distances travelled by teachers to cluster meetings (Hammond & Richardson, 2009; Hughes *et al.*, 2010) constitute some of the impediments to effective clustering. Contrary to Pomuti and Weber's (2012) claim, UNICEF (2009), Aipinge (2007) and Uirab (2006) argue in favour of school clusters, although they suggest that the above factors need to be addressed. These controversies surrounding school clusters clearly indicate the need for research on their viability as institutions for improving student outcomes. Researchers view the efforts to improve student learning outcomes by improving teaching and learning as instructional leadership. Against the backdrop of the various challenges and promises of school clusters, it was appropriate to ponder their viability as vehicles for achieving the improvements of student outcomes by changing teaching and learning in schools, that is, the extent to which school clusters could serve as vehicles for instructional leadership.

While inter-school collaboration for the purpose of improving learning and teaching takes different names and has diverse forms and nuances depending upon the context, the Better Schools Programme of Zimbabwe (BSPZ) cluster was a particular government response to the challenge of improving the quality of teaching and instructional delivery in schools. Mandated by the Chief Education Officer Minute No.9 of 1994, BSPZ clusters were aimed at building school capacity through mobilization of human, material and financial resources (MoESC, 2000:17). The clusters were also expected to build and develop the capacity of teachers and school heads as professionals as well as the school development committees (SDCs). Thus, cluster activities include, inter alia, empowering the individual in professional and self-development, peer teaching/tutoring or coaching, joint subject panel meetings, sharing of local resources, ideas, information and problems and by means of study groups at local level (MoESC, 2000). These expectations were also observed by Jita and Mokhele (2014) of teacher clusters in South Africa, with these two scholars arguing that the activities focus on improving instruction and student learning. The MoESC (2000) expected that cluster members would be responsible not only for their own performance but also for that of the whole cluster. Cluster activities differ as each

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¹The MoESC(2000:19) provides examples of activities in which clusters might engage, such as: setting up cluster structures; conducting training needs analysis, conducting information and awareness campaigns; monitoring and evaluating the effectiveness of cluster activities; organizing cluster workshops; organizing sporting activities and other competitions; establishing cluster sub-committees; discussing professional and education related topical issues; conducting action research; induction of new teachers and heads of schools; production of magazines, newsletters and fliers; carrying out fund raising activities; conducting model/demonstration lessons; working together on common schemes, plans and syllabi and discussing teaching methodologies.

determines its needs, funds its own activities, as well as elects its own management committee and a cluster resource teacher or lead teacher, to coordinate its activities.

BSPZ cluster activities may therefore be conceived of as opportunities for instructional leadership, as their mandate is to improve school achievement and student learning. Barnes *et al.* (2010) argues that a community of practice's central role is the improvement of instructional leadership. This type of leadership envisages capacity building, instructional supervision, collaboration, coaching, shared leadership and a shared vision on teaching and learning. These have been among the major foci for the BSPZ cluster. Rorrer *et al.* (2008) list the following as being some of the major activities of instructional leadership: capacity building, collaboration, monitoring goals and instruction, increasing data accessibility, availability, transparency and accountability. Other instructional leadership processes include developing the professional capacity of staff, creating a conducive learning climate at the school, family and community involvement, and identifying effective instruction (Sebastian & Allensworth, 2012). The major thrust of this study was to identify the instructional leadership practices at a cluster and establish how they impact on student performance.

More than a decade after the launch of clusters in Zimbabwe, the evidence suggests that a considerable amount of work remains in order for clusters to realize their mandate of delivering instructional leadership in schools. A baseline study by Madungwe (2000), to ascertain the nature of cluster activities, established that most of their activities revolved around the school heads and that teachers were mostly side-lined. Delport and Makaye (2009) further reported on the findings of an evaluation of the activities of two clusters, with moderate implementation of most cluster activities² that would be key to instructional leadership, such as staff development workshops and coaching clinics for teachers, supervision of instruction, developing teaching /learning materials, working together on common schemes and plans, modelling of instruction and team teaching. Whilst the study had recommended government commitment to funding of clusters and appointment of key personnel to drive the programme from the national level to school level, few of the recommendations have been instituted to improve the instructional leadership practices of

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²Other cluster practices observed included: monitoring and evaluating activities; discussing teaching methodologies; teachers meeting and discussing their own professional needs and problems; group study for personal development; networking with other organizations with an interest in education and cluster schools sharing resources.

school clusters. The Delport and Makaye (2009) study thus revealed that clusters were poorly funded and stakeholders had to sustain cluster activities from their own personal resources. This state of affairs often resulted in burn-out and despondence among stakeholders.

In another case study on BSPZ clusters, Chikoko (2007) suggested that macro and micro problems militate against effective cluster activities, particularly in their role of capacity building. The major threats were the tight structures and negative attitudes of school heads. The cluster structures were still centralized as school heads could not relinquish their formal roles to teachers which then negatively affected the effectiveness of the cluster groups. Spillane and Diamond (2007) elucidate the opportunities for the distribution of leadership roles in such institutions as schools and clusters, considering their multi-faceted roles. These scholars argue that leadership should take into account all individuals who have a stake in leadership, Timperly (2005) advocates loose leadership structures and permeable boundaries between leaders and followers as essential elements for promoting instructional leadership.

Given this scenario about the reform initiative in Zimbabwe, it is pertinent to try and understand how clusters could and do perform their instructional leadership roles in the BSPZ clusters. Jita and Mokhele (2014) acknowledge that there is little research on how instructional leadership is distributed in clusters, thus strengthening the case for the current study which sought to establish the ways in which instructional leadership, specifically, is undertaken in the case of the BSPZ clusters.

1.3 PROBLEM STATEMENT

Inter-school collaborations or school clusters were first formally established during the 1940s in Bolivia and have since spread around the world (Giordano, 2008). The major purpose for their establishment was to improve the quality and efficacy of instructional delivery in schools. Other studies submit that school clusters counter the isolation associated with those teachers who are mainly situated in small schools and that these structures also address issues of equity in terms of provision of educational services since member schools share resources and craft knowledge. Muijs (2008) reveals that teachers from schools in mutual clusters experience less stress and difficulty when implementing a new curriculum, while disadvantaged communities benefit more when teachers share

expertise, exchange resources and share leadership. Pomuti and Weber (2010) aver that the objectives of school clusters are to improve school management, school supervision, teaching and learning. Most activities of school clusters may be conceived of as instructional leadership since they are directed towards improvement of teaching and learning (Hallinger, 2009).

Despite the global use of school clusters, there are still many controversial issues regarding their utility and efficacy, with regard to their claims as vehicles for instructional delivery in schools. Jones (2009) claims that the viability of clustering has been the subject of debate for decades. Research and commentary from Australia, Canada, the United States of America (USA), Europe and the United Kingdom (UK) reveal an enduring stream of concern regarding their economic and educational viability. Several international studies have explored the nature of collaboration in school clusters but there has been minimal investigation of the nature of the instructional leadership practices of the main actors in the cluster. Further studies have observed that leadership in school clusters is not evenly distributed as claimed by the proponents of clusters. As indicated above, school clusters tend to be dominated by school heads and few teachers seem to benefit from the cluster activities. Zimbabwean studies have also alluded to the marginalization of teachers in cluster activities (Chikoko, 2007). Madungwe et al. (2000) assert that teachers felt marginalized, yet they considered that, given the latitude, they could effectively run their own cluster business. In another study, Makaye (2011) noted moderate implementation of cluster instructional activities in a few such groupings in Zimbabwe.

Most studies in the field of instructional leadership have explored how and by whom this approach is enacted in the individual school environment or the district site (Firestone & Martinez, 2007; Rorrer *et al.*, 2008), but little research has focused on instructional leadership within the school clusters per sé. Given this context, the current study sought to explore whether and how school clusters could be sites for instructional leadership. The wide experience of the researcher in education gave some impetus to carry out this research, including eight years as a primary school teacher in which I had the opportunity to successfully pioneer and practice team teaching at primary level, two years as a deputy school principal,³ and almost a decade as a District resource teacher⁴ coordinating the

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³In Zimbabwe the term 'School Head' refers most commonly to the school principal.

⁴The district resource teacher(DRT) was, inter alia, responsible for organizing in-service training for teachers in the district; designing and implementing plans for in-service training of teachers; evaluating and monitoring the effectiveness of in-service training of teachers; identifying training needs for teachers;

BSPZ cluster activities. The latter post enabled the researcher to ponder the issue of clusters as potential sites for sharing craft expertise and other resources for improving the quality and efficacy of education delivery services. Advocating and encouraging schools of cosmopolitan status to collaborate in pursuit of a common goal was a challenging task, notwithstanding their interaction as colleagues. It was this challenge around collaboration for the improvement of teaching and learning in the clusters that motivated me to explore how instructional leadership practices are enacted in the BSPZ clusters and the potential impact of those practices on student performance.

1.4 THE CENTRAL QUESTION

The central question addressed by the study is: how is instructional leadership enacted in the BSPZ school clusters?

1.4.1 Research questions

The following sub-questions were generated to assist in answering the main one:

- What are the practices and artefacts for instructional leadership within the cluster?
- How can these instructional leadership practices be understood and/or explained?
- How is instructional leadership distributed, if at all, within the cluster?
- How are the instructional leadership activities perceived by both teachers and principals?
- What suggestions and improvements can be made to the instructional leadership practices of the clusters?

1.5 Aim of the research

The study sought to explore whether and how BSPZ clusters could be sites for instructional leadership.

establishing district resource centres and communication systems with serving teachers, schools, district offices and the region; co-ordinating the work of subject panels in the district; caring for and maintaining district resource centre equipment and materials; carrying-out research that assisted in decision making and supervising cluster activities.

1.6 OBJECTIVES OF THE RESEARCH

The specific objectives addressed by the study were to:

- a. identify the instructional leadership practices and artefacts within the cluster
- b. explore how instructional leadership is distributed in clusters
- c. assess perceptions of teachers and principals of cluster instructional leadership
- d. suggest how clusters may improve their instructional leadership practices.
- e. Provide explanations for the observed perceptions and practices on instructional leadership.

1.7 SUMMARY OF RESEARCH METHODOLOGY

Hallinger (2010), in his review of research on instructional leadership, established that most research tends to employ case studies or longitudinal descriptive surveys. Against the grain, the present research inquiry adopted a mixed methods approach as it was deemed necessary for the study of 'school clusters as sites for instructional leadership', and of the both the capitalizes on strengths quantitative and qualitative approaches(Creswell,2007). The study focuses on primary schools in four rural clusters in the Masvingo District of Zimbabwe, with a view to analysing the influence of cluster instructional leadership practices on primary schools' performance, in terms of teaching and learner achievement. The study sought to explore whether and how school clusters could be possible sites for instructional leadership.

1.7.1 Research Approach

The study adopted the sequential explanatory mixed methods design. Creswell (2003) considers that in the sequential explanatory design the quantitative approach precedes the qualitative. The survey was employed primarily to provide a basis for instructional leadership practices and artefacts in the cluster. The questionnaires developed were distributed to all primary school teachers and to a sample of ten primary school heads in the four clusters in Masvingo district. Both the respondents and the clusters were purposively sampled. According to Patton (2002) purposive sampling has the advantage of reaching respondents who have in-depth knowledge about the phenomenon under

investigation. Thus, only teachers who had some experience with the cluster were eligible to participate in the interviews. The clusters were again chosen on the basis of their being identified as the most effective in the district. Accordingly, the purpose of the survey was to identify the instructional leadership practices and artefacts in the clusters with a view to exploring whether they could be sites for instructional leadership. The interviews and observations of cluster instructional practices, such as in-service training meetings, were later employed to validate as well as provide salient explanation and further explore instructional leadership issues raised during the surveys. The qualitative aspect provided answers to how instructional leadership practices are enacted, how instructional leadership is distributed, the effects thereof on student achievement and suggestions with regard to cluster instructional leadership. Ultimately, the sample for the interviews included two cluster principals, two cluster teacher leaders and two classroom teachers.

The data gathered through surveys were presented using descriptive statistics such as percentages, means and standard deviations. Data from interviews and observations were transcribed, coded and analysed for recurring themes. Thick descriptions of interviews are provided to authenticate participants' views on how instructional leadership is enacted in the BSPZ cluster. The details of the research approach, the methodology employed, sampling techniques, instrumentation and ethical issues are discussed in Chapter three.

1.8 SIGNIFICANCE OF THE STUDY

By investigating instructional leadership practices in school clusters, my major intention was to shed light on how the initiative might be a context for improving teaching and learning in schools. Results of the study could assist researchers and policymakers to make informed decisions about how best to leverage clusters for improving teaching and learning. It is hoped that other countries too will take a lead from the research findings on how best school clusters maybe exploited as sites for instructional leadership within their own contexts.

The findings of the study on clusters are expected to add value to the existing discourses on instructional leadership, since most extant studies tend to focus on a single school and/or district. The findings also contribute to the limited knowledge base on instructional leadership in developing countries, Zimbabwe in particular. The potential contribution of the study on school clusters as sites for instructional leadership is therefore significant.

The study's findings may help to create awareness among teachers and principals about the new approach to school leadership that focuses closely on teaching and learning. The phenomena of teacher leadership and distributed instructional leadership are novel in most developing countries, Zimbabwe specifically. A study such as this one has the potential to provide data on the adoption and practice of both instructional and distributed leadership forms in schools and clusters in particular.

I investigated instructional leadership in school clusters because I wished to establish how it is enacted in these multi-site collaborative contexts, who the major actors involved are and how this form of leadership is perceived by teachers and principals, in order to provide insights and recommendations regarding related strategies for improving teaching and learning in the cluster schools.

1.9 LIMITATION OF THE STUDY

The findings of the study might have been negatively affected by certain factors. The limited time in which the study was carried out may have been too short to adequately investigate the varied instructional practices and their impact on pupils' performance. To mitigate this limitation, the researcher endeavoured to adhere stringently to set schedules and time lines of the study.

The size of the sample that responded to the survey might have been another limitation. The sample is relatively small to represent the views of the general population of cluster members (Leedy& Ormrod, 2005:135). My sampling was largely influenced by limitations in the funds available for the research. As a way of mitigating this limitation, the researcher tried to use purposive sampling (Yin, 2003), focusing on those respondents who were likely to provide relevant and reliable information. In some schools, teachers who had reasonable working experience with the cluster system were in short supply, due to high staff turnover.

In addition, the researcher could not override issues of timing, as the action plans of the clusters had not been fully determined at the commencement of the study and were liable to change at any time, due to circumstances beyond my control. The pre-planned schedules sometimes also clashed with other activities, necessitating adjustment or cancellation of some of the pre-planned schedules. For instance, all observations of the cluster workshops were postponed to the third term, due to sporting activities in the earlier terms. To mitigate

the impact, I liaised in advance with the expected participants and made a timeline and schedule accordingly. In the event of potential clashes, public relations took precedence and played an important role, particularly when instructional leadership practices raised in the surveys (quantitative) needed to be followed up either by interviews or observations (qualitative).

Lastly, the period during which the research was undertaken could be regarded as a possible limitation. Most instructional leadership and management studies concur with the notion that incentives play a major role in motivating teachers and workers in general. The study was carried out at a time when the country was haemorrhaging economically and workers (teachers, in this instance) were somewhat demoralized, due to their declining salaries. In these conditions, participating in extra cluster activities was more of a burden for them, especially as stakeholders were expected to fund the cluster activities themselves.

1.10 DELIMITATION OF STUDY

The study was confined, as explained earlier, to four clusters solely situated in the Masvingo district of Zimbabwe. The respondents were all primary schoolteachers in the clusters and included cluster coordinators, who were mainly school principals, primary school teachers and teacher leaders, such as the cluster resource teachers. The necessity of having all teachers respond to the surveys was to gather as many views as possible with regard to instructional leadership practices and the effects thereof on student performance. A longitudinal study would have provided a more adequate representation of the impact of cluster instructional leadership practices on student performance. However, with the limitations of time, a cross-sectional study was preferred.

The study was carried out in 2014 and it was within this period that the study results were presented and analysed. Where school performance was alluded to, reference is made to the grade seven examination results of the cluster schools. Thus, the positive impact of cluster instructional leadership practices were judged in terms of better results at that level and not by other indicators.

1.11 OUTLINE OF THE THEORETICAL FRAMEWORK

This study is informed by Mead's (1863-1931) social interaction theory, which postulates that human beings act towards certain things on the basis of the meaning they hold for them. Human beings construct meaning from the interaction patterns they have within the two different worlds they inhabit, viz., the natural and the social. The natural world, wherein they are organisms of drives and instincts and where the external world exists independently of them, and the social world where the existence of symbols such as language, enables them to give meaning to objects (Cohen *et al.*, 2011). The attribution of meanings to interaction takes place through a continuous and social process which emerges in a state of flux and subject to change. Cohen *et al.* (2011) assert that individuals align their actions towards those of others, by taking the roles of others and by making indications to themselves about the likely responses of others. They construct meaning on how others wish or might act in certain circumstances and how they might act. This process of interaction ultimately brings change in individuals and societies.

The social interaction theory provided direction for this study in exploring how instructional leadership is enacted within the school clusters. Teachers construct meanings of who they are as professionals and what instructional practices to provide for their learners through interactions with others. The meanings they construct from their interaction with their class, schools and clusters, how they react to their conceptualizations and the nature of their interactions as instructional leaders in school clusters constitute the foci of the study. Klar (2010:370) holds that social interaction is critical to the acquisition of knowledge and learning. The interactions teachers carry out in clusters equip them with best instructional knowledge for use in class. In support of this view, Jita and Ndlalane (2009) contend that clusters provide teachers with the opportunity for negotiation or social interaction, as they involve learning and unlearning of information. Clusters promote teacher development, construction and sharing of both content and pedagogical content knowledge. Barnes et al. (2010) assert that social interaction around content, with knowledgeable others and peers, develops scaffolding for student learning. It is also through the social interaction between and among leaders, followers and the situation, that there is impact on student learning. Cohen et al. (2007) warn that symbolic interactionists direct their attention to the nature of interaction and the dynamic activities taking place between people, instead of looking at an individual person.

In this study, I conceived of clusters as examples of inter-school collaborations. This view focuses on the social interactions between or amongst teacher professional communities within these structures, with a view to enhancing student outcomes. Such social interactions uphold collaborative cultures which embed teacher professional ethos and etiquettes to transform student learning. Goddard *et al.* (2010) posit that higher levels of teacher collaboration may lead to improved student achievement. When collaboration is absent and teachers work in isolation little professional development occurs. Viewing clusters as sites for social interaction begged the question of how, if at all, the social interactions in the inter-school collaborative clusters could help to improve teaching and student learning. That is, while the policy in Zimbabwe, for example, is clear about the need for these structures to collaborate for the improvement of teaching and learning in the schools, the premise of the study was to understand both the direct and indirect instructional leadership influences of clusters and their potential influence on student learning.

The present study was consequently interested in exploring the nature of cluster interactions, their activities, how they organized themselves in those interactions and the types of support they needed and received within the inter-school collaborations.

1.12 CLARIFICATION OF TERMS

The following terms are used in this study according to the following meanings.

Cluster: A group of schools within the same geographical area that have agreed to come together to share resources and pursue a common goal.

Instructional coach: A teacher leader, an expert or anyone who works with teachers or leads teachers to adopt new teaching strategies. Sailor and Shanklin (2010:1) describe coaching as sustained, class-based support from qualified and knowledgeable individuals who model research-based strategies and who explore with teachers how to increase these practices using the teachers' own students. There may be categories such as subject area coaches, e.g., Maths, Physical Education, or a coach maybe a teacher leader who is able to work across grades or schools.

Instructional leadership: All efforts to improve student learning. Rorrer *et al.* (2008:314) refer to instructional leadership as applicable to actions undertaken with the intention of

developing a productive and satisfying working environment for teachers as well as desirable learning conditions and outcomes for children.

School head: In Zimbabwe the term 'school head' is commonly used to describe a school principal.

Cluster Resource Teacher⁵(CRT): A teacher who is in charge of coordinating cluster activities.

District Resource Teacher (DRT): A teacher who is in charge of coordinating BSPZ activities at district level.

Teacher leaders: Acknowledging the varied conceptions of teacher leaders, the following views were adopted for this study. Mangin and Stoelinga (2008:1) view a teacher leader as anyone who takes on non-supervisory, school-based, instructional leadership roles. Neumerski (2012) argues that teacher leaders promote instruction, take on administrative duties or hold a combination of positions. They may be consultants, curriculum managers, department chairs, mentor teachers, professional development coordinators, resource teachers, specialists, coaches and demonstration teachers. They could be full-time classroom teachers or combine part-time teaching and part-time leadership (Neumerski, 2012).

Practices: For the purposes of this study, this term refers to instructional practices. According to Jones (2010:39), practices are the total of programmes, activities, and strategies that leaders use to influence instruction. Jones (ibid.) argues that practices are only effective if leaders address the context and have a clear target.

1.13. ORGANIZATION OF THE THESIS

The thesis is organized into five chapters:

Chapter one has introduced the reader to the background of the study. Its aim and objectives were listed, with the significance; delimitation and limitation of the study. The theoretical framework underpinning the study as well as the methodology of the study were all articulated in this chapter.

⁵The CRT identifies training needs and organizes in-service training for teachers; produces and develops teaching learning material for teachers, evaluates and monitors activities in the cluster, carries out research and manages the cluster resource centre. He/she links with the district resource centre through the DRT.

Chapter two reviews the literature related to clusters and instructional leadership, thus giving the research a theoretical base. The chapter also provides the conceptual framework upon which the study is anchored. It also discusses in detail the theoretical framework of the study.

Chapter three discusses the study methodology used in detail, including the approach and the design employed, sampling designs and procedures as well as the ways in which validity, credibility and reliability of the instruments were enhanced. The manner in which data was collected and analysed is presented, with details of the ethical guidelines were adhered to in conducting the study.

Chapter four presents, analyses and discusses data collected in the study in light of the research problem and sub-questions.

Chapter five summarises the findings and draws conclusions to answer the research questions from the analysis of the data collected. It makes recommendations on how school clusters could be sites for instructional leadership. The chapter also recommends other areas for further research identified during the course of the research.

CHAPTER TWO: LITERATURE REVIEW

2.1 INTRODUCTION

Whilst clusters have been widely accepted as a possible reform strategy to improve instructional leadership in schools, several studies acknowledge that the reform approach is fraught with challenges (Jones, 2009; Verger *et al.*, 2013). There is growing controversy and contestation with regard to how school clusters should be constituted, their activities, how they should be managed, their structures and the types of support they need to discharge their instructional leadership duties. Clusters in Zimbabwe and other developing countries are often conceived widely in terms of building capacities for teacher professionals and other school stakeholders (Delport & Makaye, 2009; Jita & Mokhele, 2012). Another view, however, sees these structures as vehicles for resource mobilization, boundary spanning and administrative support for schools and teachers. In this study, clusters are conceived of as examples of inter-school collaborations. This chapter assesses previous studies on school clusters and thus literature on school collaboration and instructional leadership is widely consulted. It concludes with the conceptual and theoretical frameworks for the study.

2.2 GENESIS AND FORMS OF SCHOOL COLLABORATION

Giordano (2008) posits that the notion of school collaborations began in the early 1940s in Great Britain and India, with nearby rural schools coming together and pooling their resources for educational purposes. It is envisaged that rural schools are usually isolated, and inadequately resourced with more teachers who are less experienced and qualified, with few opportunities for professional development or supervision from the district. As Giordano (2008:19) argues, "...these conditions make it difficult to deliver quality education".

Clusters were thus established to counter these effects of isolation by allowing teachers to share their craft practices (Dittmar, 2006). The schools would form a cluster or network and elect a central school with adequate resources to act as a lead or core school. This lead or core school would house a resource centre with a library, and teaching and learning resources for member schools. The core school would also act as a meeting place in which

teachers from surrounding schools could meet for in-service training, work on curricula and develop teaching learning materials. Thus, clusters would be associated with lead schools or cluster resource centres (UNICEF, 2009; Madungwe *et al.*, 2000). This study acknowledges the presence of the cluster resource centres but does not focus on them as such.

A new wave of educational reforms between 1960 and 1970 gave impetus to clustering in Asia and Latin America as an innovation to improve teaching and learning conditions in neglected and post-conflict schools. However, after this reform period clusters continued to operate in some countries, while others died out due to lack of funding or political changes. A new commitment to clustering was ushered in by the World Declaration on Education for All (EFA) formulated at the Jomtien Conference, Thailand, in 1990, which recommended decentralization systems of governance, participation of local people in education and empowerment of teachers in education and decision making. Ministries of education, international agencies and non-governmental organizations (NGOs) made a commitment to improve on the capacity and performance of schools, and since then the strategy of school clusters has become a common feature of education reforms and school improvement programmes throughout the developing world, particularly in Asia and Africa. School clusters have also become a common phenomenon, in not only rural but also urban areas. Most nations, who were/are signatories to the Jomtien Conference Declaration have adopted clusters as a strategy to improve the quality of education delivery services. Zimbabwe, being a signatory, also launched the Better Schools Programme of Zimbabwe (BSPZ). However, the verdict on how clusters have to be implemented, their activities and their impact on school performance has not yet been returned as the structures and functions vary from nation to nation.

Instructional leadership encompasses all efforts to improve student learning in schools (Hallinger, 2011), hence the bone of contention is whether and how clusters can be possible sites for instructional leadership.

2.3 DEFINITIONS OF SCHOOL CLUSTER

Dittmar (2005:4) views a school cluster as a group of schools that are geographically located as close and accessible to each other. Spring (2011), on the other hand, sees it as a group of schools that are bound together by similar values. Whilst these definitions do not

specify the reasons for or nature of collaboration, Giordano (2008:25) suggests that a cluster is a grouping of schools for educational and/or administration purposes. The BSPZ cluster is a group of schools within the same geographical location that could comprise both primary and secondary, which have agreed to come together to share human, material and financial resources in order to overcome their challenges, achieve common goals and improve the quality and relevance of education in their respective institutions. The Ministry of Education, Sports & Culture (2000) defines the BSPZ as:

... a structure in which groups of people or institutions are arranged like grapes growing on a vine. These work together on a semi-permanent basis; the cluster is accountable for its business results and has a customer or client orientation and it develops its own expertise, shares information broadly and translates decisions into action. Members of a cluster are responsible not just for their performance but for the performance of the cluster as a whole.

Thus, clusters can vary in size and usually consist of schools that are geographically located near each other. They can comprise primary and secondary schools, a composition that may have strengths and challenges in the cluster's discharge of instructional leadership responsibilities.

Collaboration for the purposes of improving learning and teaching takes different forms and names, depending on the context. In other countries and contexts, clusters are also referred to as 'teacher networks' or 'teacher communities of learning', taken from Wenger's (2002) concept of 'communities of practice' but with a relatively longer history (Jita & Ndlalane, 2009; Jita & Mokhele, 2014; Lieberman, 2008; Mokhele, 2011). In the UK and other European countries, 'networks', 'federations' and 'clusters' are regarded as related concepts, albeit with diverse nuances and implications (Spring, 2011). According to Delport and Makaye (2009), networks operate on a more informal and voluntary basis, being loose, fairly widespread links between schools or teachers. Atkinson *et al.* (2007) acknowledge that networks are the most commonly adopted form of collaboration.

In Sweden and some rural areas of the UK, the concept of a 'federation' is applied to stimulate co-operation between schools. In Scotland, groupings of schools for collaboration purposes are referred to as 'community schools' (Delport & Makaye, 2009). Although the teacher network approach has gained popularity in the USA and UK,

research on its usefulness in changing teachers' knowledge, practices as well as its impact on student learning is not conclusive (Jita & Ndlalane, 2009).

2.4 TYPOLOGIES OF CLUSTERS

Notwithstanding the different forms and nuances of school clusters, collaborations can vary from being statutory to non-statutory, formal and non-formal (Atkinson *et al.*, 2007). Similarly, Giordano (2008) advances that clusters can be initiated by the education ministry or donor organization, requiring the participation of schools as part of education reform, or they may be initiated at the local level by voluntary schools with few resources. However, this typology may have adverse effects on the operation and nature of cluster activities. Fullan (2007) discusses forced and voluntary compliance with regard to implementation of innovations. When clusters are initiated by government, participation may be enforced, whereas in the latter case it may be voluntary. Atkinson *et al.* (2007) warn that the nature of support a cluster receives from government can determine or limit the extent and nature of collaborative activities and relations. The following cluster typologies have been proposed by Giordano (2008):

i. Bottom-up "grass roots" vs. top-down

Bottom-up clusters are initiated at the local level by communities to address their local educational needs whereas the top-down are government- or ministry-initiated. The latter case typifies most clusters in developing countries. Giordano (2008) cites Sri Lanka, Cambodia and Mali as examples. Zimbabwe also followed this trend in the initial phase of the BSPZ cluster in 1993.

ii. Voluntary vs. Mandatory

A mandatory cluster involves educational officials requiring schools to belong to a cluster, whereas in voluntary clusters schools can decide for themselves. Most developing countries⁶ that have adopted clusters as part of a school improvement reform mandate schools to belong to a cluster, however, their support and contribution in monitoring and evaluating the adherence of schools to this strategy vary from country to country.

iii. Selective coverage vs. widespread, national coverage

⁶ Most of these countries were signatories to the Jomtien conference (1990).

The ministry of education may choose clusters as a national strategy or may use one as a pilot project in selected areas. This is the scenario for most countries in Asia and Africa. The BSPZ cluster was adopted as a national strategy and hence all schools were obliged to belong to one. The most critical challenge to these countries is whether the government has the legislation and structures in place to support effective implementation of clusters. Studies by Pomuti (2012) and Chikoko (2007) on Namibian and Zimbabwean clusters respectively have revealed lack of proper guidelines and statutory instruments on clusters as militating effective implementation.

iv. Financially autonomous vs. financially supported by an outside source

Whilst the viability of clusters can be influenced greatly by the availability of funding most clusters in developing countries, they have received funding from external donors and when this expires the impact is catastrophic. Zimbabwe experienced this trend, coupled with the economic crisis in 2008, forcing cluster activities to come almost to a stand-still (Chikoko, 2007). Lack of funding impacts negatively on cluster activities, with lack of will on the part of government to support cluster instructional leadership roles. Without funding clusters cannot secure instructional materials or meet the costs for capacity-building of their members. Hammond *et al.* (2009) report that in the USA and other developed nations, teachers are given a stipend for embarking on professional development outside the school as well as reimbursement of travelling fares. This is part of an incentive to encourage full participation of teachers in staff development programmes.

v. High intensity vs. low intensity

This cluster engages schools in several operations simultaneously and requires them to share resources systematically. Schools in a high intensity structure might be on the same administrative structures. A low intensity cluster is one in which a member voluntarily comes to address a particular problem, as is the case with special educational needs clusters in Great Britain. Zimbabwe adopts a high intensity cluster system as all schools enjoy autonomy and cluster activities are needs-driven (Makaye, 2011). In Namibia, school clusters are used for other

educational administrative duties, such as staffing and distribution of material resources to schools (Pomuti, 2009).

vi. Pedagogical vs. administrative

Clusters are not entirely administrative as their goal for most cluster strategies is improving educational quality. However, they can spend more time pursuing pedagogical or administrative goals. Teacher clusters under the Mpumalanga JICA programme were pedagogical as their goal was to promote the teaching of Mathematics and Science (Dhlalane, 2006). In Namibia, school clusters played both the pedagogical and administrative roles as they could be used as distribution centres for teaching and learning material by the district. Some countries may have problems when they have required cluster heads or resource centre staff to take on administrative duties (Pomuti, 2009). In a case study of the BSPZ cluster, Chikoko (2007) observed that school heads dominated the cluster activities. Whether clusters could be better sites for improving teaching and learning was the major thrust of this study. Jita and Mokhele (2012) observed that there was continuing tension between administrative and pedagogical imperatives in teacher clusters in South Africa, as teachers would meet to share both content knowledge and pedagogical content knowledge. In essence, teacher clusters act as instructional and/or curriculum guidance systems based on modelling instructional practices for teachers.

vii. Inclusive vs. exclusive participation

Inclusive clusters do not limit participation to school directors and education officials but also solicit participation of community members, teachers and parents. Exclusive clusters limit participation to head teachers and education officials. During the early 1990s, in Zimbabwe, existing clusters were limited to head teachers but have now been extended to teachers and the community. However, it is not clear how the local participation of the community impacts on student learning. Harris and Goddall (2007) recognize that it is parental engagement and not involvement in school clusters that improves student learning. They argue that parental engagement activities promote parents' engagement and participation in their children's learning. In a baseline study of BSPZ clusters, Madungwe *et al.* (2000) established that parental involvement was minimal and limited to funding

cluster activities. The challenge for the present study is to establish whether and how instructional leadership roles are distributed among the various participants or stakeholders and how inclusive the instructional leadership practices are.

viii. Clusters with resource centres vs. those without resource centres

Giordano (2008) posits that for most formalized clusters, resource centres are part of the cluster strategy. How the resource centre is utilized and its viability is another grey area of study. Makaye (2011) established in his study of the BSPZ clusters that most had rooms identified as resource centres, however, the existing ones were poorly resourced. The only visible one was at district level (Madungwe *et al.*, 2000). If clusters have resource centres, the overarching questions are how they are utilized to realize student learning, how accessible they are to their expected beneficiaries considering that most schools are isolated, and whether they have adequate and relevant materials to impact student learning. The effectiveness of cluster resource centres in terms of instructional leadership roles warrants further investigation.

ix. Integrated into the education administration vs. separate programme

Some programmes incorporate resource centres and school clusters into the education administration in order to bring supervision and support closer to the school level. In this case clusters become a sub-district level of the education administration, as is practised in Nepal and Namibia. Giordano (2008) asserts that most clusters are separate from the education administration.

The cluster typology discussed above provides different conceptualizations of school clusters, and the varied typologies signify the nature of power differentials, distribution of instructional leadership and nature of activities or instructional leadership practices. Giordano (2008), Pomuti (2009) and UNICEF (2009) concur that most clusters in developing countries are mandated by government and participation is inclusive, however, the level of participation and the role of government in supporting cluster activities are peripheral in most developing countries.

Jita (2013) observes that district influence on instruction depends on four elements, namely, *consistency*, which is about communicating the same messages to teachers by various leaders; *prescriptiveness*, about providing specific and detailed guidance on what teachers do in class; *authority*, that is, the extent to which teachers are persuaded by the

leaders' messages on instruction; and *power*, which deals with consequences of non-compliance in terms of rewards and punishment. Thus, how the four elements are exercised by the government impacts greatly on the effectiveness of cluster instructional practices. Jita (ibid.) describes lack of such elements as 'flawed by design', because the situation can negatively impact on cluster effectiveness.

2.5 THE BETTER SCHOOLS PROGRAMME OF ZIMBABWECLUSTER

The Better Schools Programme of Zimbabwe (BSPZ) cluster was borne out of two main considerations, namely, the massive and social demand for education after the Zimbabwean independence, and the paradigm shift from quantitative to qualitative expansion and relevance in the provision of education services. International trends, such as the agreement of the World Conference on Education for All at the Jomtien Conference,7 in 1990, led member countries to develop action plans to improve the capacity and performance of schools. Assisted by donors, the Zimbabwean government launched the BSPZ as a capacity-building initiative, and the establishment of clusters was a direct response to regional and district directives following the publication of the *Chief* Education Officer Circular 1 of 1994. The cluster approach was adopted in part because it was realized that education in general would benefit if stakeholders participated in solving problems collectively, resources were shared, common needs attended to and collaboration and collegiality promoted (Makaye, 2011). The BSPZ phase one, launched in 1993, targeted school heads as it was assumed that a school is as good as its head, and that as heads are trained the benefits would trickle down to teachers. This phase witnessed the establishment of clusters and production of head teacher support modules and setting up of resource centres.

Phase two was introduced in November 1996, when the Zimbabwean government signed an agreement with the Royal Netherlands government. During this phase the emphasis was on greater involvement of the teachers in the management of clusters and in staff development activities as the trickle-down effect of phase one had not taken off as expected. Miller *et al.* (2010) claim that principals are most effective when they focus on instructional improvement, collaborate with teachers and encourage them to work towards

⁷ The philosophy and vision of the Jomtien Conference involves: providing basic education to all by removing educational disparities; focusing on learning and learning outcomes; strengthening partnerships between national, regional and local authorities and increasing participation of all stakeholders in educational decision making (Ministry of Education, Zimbabwe, 1995).

instructional improvement. Lieberman and Mace (2009) also argue that teachers are the strongest influence on learning, whilst the only way to improve student outcomes is to improve instruction, hence the professional development of teachers should be the primary vehicle to improve their practice. Hayes *et al.* (2006), Zammit *et al.* (2007) and Zbar *et al.* (2009) concur that high quality teaching is the most effective method of improving student learning outcomes. In line with this conception, cluster operations were rejuvenated and most stakeholders were included.

Zammit *et al.* (2007) aver that strong synergies of teachers, parents and community members promote the school as a learning organization and improve student outcomes. This phase witnessed the appointment of District Resource Teachers(DRTs) and Cluster Resource Teachers(CRTs) to coordinate district and cluster activities respectively (Makaye, 2011). The second phase thus marked a new milestone in the educational leadership in Zimbabwe and clusters in particular. The emergence of teachers as leaders implied that leadership could be shared or distributed among followers or several role players (Spillane *et al.*, 2004), however, the questions which needed answering were on how these teacher leaders were perceived by other teachers and school heads, and what the impact of their leadership was on student learning.

The cluster is thus the vehicle through which the BSPZ realizes its goals of improving the quality, equity and efficacy of education. It aims to develop schools through mobilization of human, financial and material resources as well as setting structures to facilitate the translation of a concept into action (Madungwe *et al.*, 2000). Each cluster is supposed to fund its own activities through contributions made by cluster members or donors. Madungwe *et al.* (2000) argue that a cluster is designed to promote staff development for teachers, heads and school development associations or committees through empowering individuals in professional and self-development; peer teaching; subject panel meetings; studying modules at local level and sharing of local resources.

According to the Ministry of Education, Sport & Culture (2000:17), cluster members are responsible not only for their own performance but also for the performance of the whole cluster. The Ministry provides cluster committees with guidelines regarding their responsibilities to encourage them to focus on continuous staff development activities. Madungwe *et al.*(2000:19-20) provide examples of cluster activities to include the following: conducting training needs analysis; formulating annual training plans; carrying out staff development programmes; monitoring and evaluating effectiveness of clusters;

organizing cluster visits; organizing cluster workshops; organizing sporting activities; setting common tests; developing teaching materials; discussing professional and education-related topical issues; conducting action research; organizing group studies for personal development; inducting new teachers and heads of schools; producing magazines, newsletters and fliers; identifying potential trainers; team teaching; conducting model/demonstration lessons; working together on common schemes, plans and syllabi; and discussing teaching methodologies.

In another study on issues tackled by clusters, Maphosa *et al.* (2013:296) also identified the following: selection of topics (where there are syllabus options); suggestions of content to be taught; suggesting ways of assisting learners with special issues; ways of maintaining discipline; collaborative lesson preparation; and classroom management skills. These activities constitute some of what scholars have referred to as the instructional leadership practices of the clusters (Hallinger, 2010; Rorrer *et al.*, 2008). It is far-fetched to imagine that if these activities were earnestly translated into action the quality of education delivery service in schools would be positively transformed. The missing link in the knowledge base is whether, how and by whom these instructional leadership practices are being enacted in practice. In a case study of two BSPZ clusters by Delport and Makaye (2009), moderate implementation of the above cluster activities was reported.

Maphosa *et al.*(2013), in their descriptive survey, have also established that cluster activities such as suggestion of content to be taught, suggesting ways of assisting learners with special issues, demonstrating effective teaching methods were not as effectively carried out. Reasons proffered included lack of funding of cluster activities by government or donors as well as lack of a clear-cut policy on funding and operation of the BSPZ cluster. The above cited studies recommended that the central authorities fund clusters and even go to the extent of crafting incentive systems for hard-working clusters, to promote competition among them. Whilst government mandates clustering of schools, it lacks supporting legislation and political will to support and sustain the innovation. In a study on district instructional leadership practices, Rorrer *et al.* (2008) established that generating will and capacity-building are key roles in mediating instructional leadership in schools. The challenge is how school clusters generate the will and capacity to improve teaching and learning in schools and to identify the key players in that process. Little is known about instructional leadership processes in clusters or the impact of school collaboration activities on student improvement.

2.6 INSTRUCTIONAL LEADERSHIP AS A MAJOR DRIVER OF CLUSTERS

This section discusses the concept of instructional leadership as one of the major drivers of school clustering. Several authors concur that instructional leadership is about improving the quality of teaching and learning at school and classroom levels (Atkinson et al., 2007; Giordano, 2008; UNICEF, 2007). Whilst for Darling-Hammond et al. (2009) instructional leadership involves any effort to improve teaching and learning, for Jones (2010) it involves developing a common vision of good instruction, building relationships, and empowering staff to innovate. Duze (2012:113) posits that instructional leadership refers to "those actions that a principal takes to promote growth in student learning, as he or she makes instructional quality a priority and endeavours to bring that vision into reality". Duze (2012) and Blasé and Blasé (2005) demonstrate that instructional leadership practices include setting clear goals, allocating resources for instruction, managing the curriculum, monitoring lesson plans and evaluating teachers. For Hallinger (2012), instructional leadership behaviours include the making of suggestions, giving feedback, modelling effective instruction, soliciting opinions, supporting collaboration, providing opportunities and giving praise for effective teaching. Whilst most of the above practices place more responsibility on the principal, current studies have considered other sources of instructional leadership in the school. Instructional leadership practices may be conceived of as all efforts, direct or indirect, to influence student outcomes. For instance, Jones (2010) includes such actions as placing the right teachers in the right places; fostering development of teacher leadership; ensuring that leaders across all levels are focusing on instructional leadership; developing and using effective classroom walkthrough procedures; selecting questions that stimulate teacher reflection on instructional practices; making difficult or challenging decisions about staff; developing teachers into effective instructors through continuing professional learning; reflecting about current conditions and practices of professional learning; creating and implementing coaching and mentoring practices; and evaluating the effectiveness of professional learning.

Acknowledging the multiplicity of tasks of improving learning and instruction, Hallinger (2012) proposes a three-dimensional model for a better understanding of instructional leadership roles, namely:

1. Defining the school's mission: this involves framing the goals and communicating them;

- 2. Managing the instructional programme: which entails supervising and evaluating instruction, coordinating the curriculum and monitoring student progress;
- 3. Promoting a positive school learning climate: this implies protecting instructional time, maintaining high visibility, promoting professional development, providing incentives for teachers, and providing incentives for learning. The three leadership dimensions were further delineated into ten instructional leadership functions.

Drawing on Hallinger's categories of instructional leadership roles, May *et al.* (2012) provide a further list of instructional leadership activities for the principal:

- 1. framing and sustaining their school's vision or mission and planning specific goals and strategies for school improvement;
- 2. instructional functions, such as monitoring instruction and providing feedback, analysing student data and supporting teachers' professional development and modelling instruction;
- 3. working to enhance the organizational and social structures in the schools(through actions and developing teacher leadership, collaboration in decision-making);
- 4. efforts to improve the culture or climate in their schools;
- 5. investing in their personnel by hiring and retaining qualified teachers

May *et al.*'s (2012) conception of what constitutes instructional leadership places more emphasis on the fact that it calls for collegiality, shared vision, and enabling environment or climate, as well as total commitment.

In another elaboration of instructional leadership that also draws on Hallinger (2012) and May *et al.* (2012)'s conceptualizations, Jones (2010) identifies three aspects upon which instructional leadership is anchored. These are (i) the *context*, which describes the work to build elements of a strong community that is eager to innovate and share. This is similar to Hallinger's role of promoting a positive climate. Jones (op cit.) claims that context or cultural practices incorporate academic intervention, instructional coaching and peer review. The basic tenet of context is the promotion of collaborative school cultures to promote equity of student learning opportunities both in and outside the school. (ii) The *target* involves the setting of strong vision of instructional leadership and building agreement among school community members about the specific aim and purpose of instruction(Jones, 2010). This is similar to Hallinger's (2012) instructional role of defining

the mission, however, Jones (2010) throws more light on the distinctions between student achievement and instructional leadership by arguing that a focus on increasing student achievement is a measurement of results but not an appropriate target for instructional leadership since it does not inform teachers on how to adjust their instructional practices. For Jones, the focus should rather be on aligning all instructional practices with the agreed upon targets. Hallinger (2012) underscores the need for clear unambiguous goals. Setting targets before instructional practices compels all staff to become involved. Thirdly, effective *practices* should be developed to address the context and target. Jones (2010) proposes 25 major ones,⁸ most of which are a replica of Hallinger's and May's descriptions of instructional leadership. However, Jones warns that no single practice improves instruction, using an elaborate conceptualization of what constitutes instructional leadership in this study of BSPZ clusters, to explore whether and how clusters could be possible sites for instructional leadership.

Lineburg (2010) argues that student performance is a result of a web of instructional leadership practices of the teachers and principal. It is based on Mullins' (1971) model of providing resources that is not acknowledged by either Hallinger (2012) or May (2012). The model in Figure 1 (below) has two major influences, namely leadership strategies of principals and other influences on teachers' classroom practices. Under leadership strategies and change in teachers' instructional practices, Lineburg (op cit.) asserts that principals use the following strategies to change teachers' instructional practices: (a) communicating goals; (b) supervising instruction; (c) promoting professional development; (d) providing resources; and (e) providing incentives. In support of Lineburg's (2010) and Hallinger's (2012) assertions, Day *et al.*(2011) claim that setting direction, developing people, engaging in collaboration and using data and research are the primary components of instructional leadership, and are indicators of the effectiveness of teaching and learning.

⁸ These include: 1. Balanced assessments; 2. Celebrations; 3. Classroom walk-throughs; 4. Co-teaching/team teaching; 5. Grading; 6. Individualized professional learning; 7. Instructional coaching; 8. Instructional technology; 9. Leadership teams; 10. Mentoring; 11. Needs assessment/strategic planning; 12. Peer review of student work 13. Personnel and budgets; 14. Policies and procedures; 15. Professional development workshops; 16. Professional learning community; 17. Rigor/Relevance Framework; 18. Master schedule/teacher assignments; 19. Staff meetings; 20. Staff reviews and evaluations; 21. Student achievement data analysis; 22. Teacher incentives and rewards; 23. Teacher incentives/rewards; 24. Teacher observations/study tours; 25. Vision/mission/goals (Jones, 2010:40).

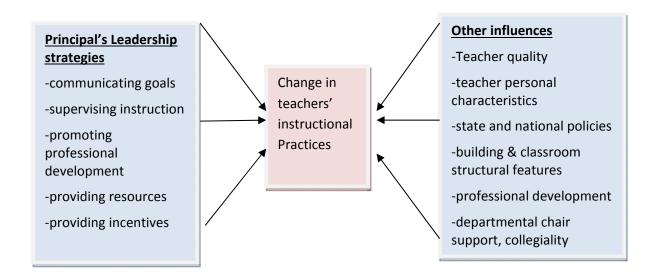


Figure 1: Theory of change in teachers' instructional practices (Adopted from Lineburg, 2010:6)

Other influences include teacher quality and personal characteristics, state and national policies, building and classroom features, professional development, and departmental chair support and collegiality among teachers. On the other hand, 'other influences' refer to the situation or context inside or outside the school which the principal encounters to bring about positive teacher instructional practices, thence affecting student outcomes.

Lineburg (2010) conceptualizes instructional leadership as interplay of both the principal's practices and the contexts he or she needs to create an enabling environment for teachers to collaboratively work towards improving instructional practices. Thus, instructional leadership at the school or cluster can be viewed in terms of the interaction of the principal's instructional leadership practices and the situation or context. Conceptualizing instructional leadership in this way leads one to question whether clusters can create an enabling context for effective instructional practices in schools. The model however disregards the learner and community as other variables that need consideration in influencing instructional leadership. According to Leithwood *et al.* (2010), external environment and family-related factors account for 50% of the effects on student achievement, thus the importance of a strong network between home and school, and school and other institutions for instructional leadership. Prytula *et al.* (2013) have also established that principals perceived support from both home and the Ministry of Education as critical to instructional leadership.

Acknowledging the general lack of consensus on what constitutes instructional leadership, Rorrer *et al.* (2008) propose two critical elements which constitute instructional leadership at the district level, namely, *generating will to reform* and *building capacity to do so*. Rorrer *et al.* (ibid.) suggest that the *will and support* can be manifested as the attitudes, motivation and beliefs that underlie an implementer's response to a policy's goals or strategies. Instructional leadership is reliant upon existence of commitment to improving teaching and learning, sensitivity to others' views, self-awareness and consistent personal behaviour. Hallinger (2012) calls for collegial relationships and unity of purpose as essential ingredients for generating will.

An important element of district instructional leadership is capacity-building, that is the extent to which a school has the knowledge, skills, personnel and other resources to carryout decisions (Rorrer *et al.*, 2008). It entails mobilizing personnel, developing functions related to change, providing and selling vision, obtaining resources, adapting standard operating procedures, monitoring the reform effort and networking with other organizations with vested interest. In a similar study at a district site, Firestone and Martinez (2007) established that districts engage in clearly well-defined instructional leadership tasks, such as monitoring instruction, procuring and distributing resources and supporting the growth and development of teachers, whilst Rorrer *et al.* (2008) have advanced the above two elements as pivotal to district institutional leadership.

Marzano and Waters (2006) established six specific district instructional leadership responsibilities and practices to improve their student academic achievement. The first is collaborative goal setting, which, as Hallinger (2012) agrees, is paramount to instructional leadership. However, Marzano and Waters (op cit.) argue that effective superintendents tend to include all relevant stakeholders, such as office staff, building-level administrators and board members in establishing non-negotiable goals⁹ for their district. Once stakeholders reach an acceptable level of agreement on the goals, they can agree to support their attainment and commit themselves to embracing strategies to achieve them. In such a case they become 'consonant users' (Marsh, 2009), implying that they are willing to conform to the goals. Specific practices assist in developing coherent goals and communicating these to central office and principals. In a cluster, coherent goals or a mission agreed to by all stakeholders can be communicated to the district office and all schools within the clusters for implementation.

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⁹Hallinger (2012) uses the terms mission or vision.

The second responsibility consists of non-negotiable goals for student achievement and instruction. In this respect the district sets specific achievement targets for the district as a whole, for individual schools and for sub-populations of students within the district (Marzano & Waters, 2006). These goals have to be based on relevant research and once agreed upon are enacted with action plans drawn up for every school site. Jones (2010) posits that the target requires the setting up of a strong vision for instructional leadership, with overarching and challenging district and school standards of which all stakeholders are aware. Marzano and Waters (op cit.) caution that setting uniform standards does not imply adopting a single instructional model but that districts adopt a broad but common framework for classroom instructional design and planning, common instructional language or vocabulary, and constant use of research-based instructional strategies in each school. Some of the specific instructional practices identified for this responsibility were modelling and adopting instructional designs and methodologies. The question to be asked is whether school clusters could set achievement targets for the cluster as a whole, for individual schools, teachers and/or students.

The third responsibility is board alignment with and support of district goals, by which the local policies are aligned with and supportive of the non-negotiable goals for achievement and instruction (Marzano, 2006). This calls for systemic goals, which within the cluster should not be conflicting but should send the same message and thrust. No other initiative should detract attention or resources from accomplishing them, only specific instructional practices that include creating a conducive climate, establishing staff development needs and providing staff development for the district. Staff development is regarded by many studies as critical to building the capacities of teachers and/or personnel in general. However, Williams (2010) and Jones (2010) concur that staff development that impacts on instructional leadership is collaborative, engenders craft needs of teachers and provides hands-on work that builds their academic content and how to teach it to their students. The study was premised on exploring how cluster staff development programmes were held and their impact on student achievement.

The other strategy that could be employed by the district superintendent is monitoring and evaluating implementation of the instructional programme and its impact on student achievement and implementers (Marzano, op cit.). Mafuwane (2011) posits that monitoring achievement and evaluating the learning and teaching programme is a primary function of the instructional leader. Mafuwane (ibid.) further suggests that the instructional

leader must be able to use data collected from performance levels of learners to evaluate the school programme. This could be done by using a systematic evaluation programme, annual evaluation of principals and/or observing classroom visits. Instructional leadership proponents have identified peer supervision as another practice for instructional monitoring, Gamage *et al.* (2009) acknowledging that principals should encourage networks among teachers and ensure they share their expertise. Mafuwane (2011) argues that instructional leaders should support teacher networks by making suggestions, modelling effective instruction, soliciting opinions, providing professional development, praising effective teaching, and giving feedback on successes and challenges they encounter in their practices. The current study purports to explore the above claim by Mafuwane through the descriptive survey.

The use of resources to support the goals for instruction and achievement has also been identified as strategy districts can use to influence instructional leadership in schools (Lineburg, 2010; Rorrer *et al.*, 2008). It is also acknowledged by Marzano and Waters (2006) that high performing districts ensure the necessary resources, including time, money, personnel and materials, are allocated to accomplish district goals. Pomuti and Weber (2012),Uirab (2006) and UNICEF (2009) concur that funding and professional time have been a challenge to most school clusters in developing countries, as unlike in developed countries time is not always allocated for teacher professional development, and it has to be fitted into their spare time. The same applies to funding for both instruction and professional development as well as rewarding incentives for their work.

Marzano and Waters (2006) observe that superintendents should provide autonomy to school principals to lead their schools. However, they refer to 'defined autonomy', implying that the freedom bestowed on schools should be within the confinements of district instructional goals and resources. Autonomy promotes creativity and initiative amongst schools to foster positive instructional leadership, and they may be at liberty to create a positive climate with leadership for curriculum development rewarding students beyond standard honour and development of a shared vision. Likewise, school clusters should give individual schools defined autonomy to navigate through and propel cluster standards.

2.6.1 Instructional leadership artefacts

In highlighting the use of artefacts in influencing instructional leadership, Firestone and Martinez (2007) allude to the use of classroom observation checklists, regulations and policies with regard to learning time and adoption of certain textbooks as critical to influencing learning and teaching. Artefacts are viewed as designed programmes, procedures and policies intended to shape or reform existing organizational practices. On the other hand, Spillane et al. (2003) argue that material artefacts and tools constitute leadership practice components and influence how leaders approach tasks. For Honig (2012:740), tools focus learning by specifying what individuals should and should not do. They "trigger" negotiations among individuals about which actions might contribute to particular goals rather than prescribe action. For these reasons, forms, curricular documents, classroom observation protocols, tools for representing test score data and other material artefacts have received attention in instructional leadership studies at both the school and district sites. Cobb et al. (2003) identified district tools as including documents listing state-mandated curriculum objectives, pacing guides, textbooks, classroom observation forms, reports of text scores, and copies of students' written work. These tools often aid cluster principals and teachers in effecting instructional leadership in their schools. Cobb et al. (ibid.) aver that teaching can be viewed as distributed activity that can be accomplished collectively by a number of people using a variety of artefacts.

Other instructional leadership tools include state-mandated tests to make students' learning visible and prescribed instructional programmes produced by state departments of education (Cobb *et al.*, 2003). These artefacts can be used by the principals or other peers to check or monitor consistency between objectives specified by student behaviour on engagements. Thus, clusters can develop their own tools or adopt state or ministry of education instructional tools to monitor school standards and enhance learning and teaching in their schools. Hammond *et al.* (2009) observed that teachers in Japan use their own developed checklist forms to observe and record lessons taught by their peers. They could also record peer-delivered lessons by video and/or audio tape for further discussion and analysis. Because teachers control teaching and curriculum content, methods of learning and procedures for teaching (Maphosa *et al.*, 2013), clusters could select and adhere to similar set books or schemes. Berardo (2006) asserts that in selecting textbooks consideration should be on suitability of content, exploitability for teaching purposes, readability and presentation. Thus, based on these considerations, clusters could adopt

textbooks that positively influence student outcomes. Makaye (2011) and Maphosa *et al.* (2013) have established that most BSP (Z) clusters set and administer their own tests. The impact of these tests on the performance of students in the public examinations is another problem area which needs attention, in how the tests are developed, administered, processed, analysed and evaluated. For the purposes of the present study, it is sufficient to note that such tests fall within the ambit of artefacts for instructional leadership.

Zbar et al. (2009) also underscore the systematic way in which data is widely shared and discussed by staff for the purposes of improving teaching and learning. Wohlsletter (2007) established that collaborative examination of data by teachers was a characteristic of high performing school systems. Supovitz and Tognatta (2013) also argue that collaborative review of data increases engagement of team members as well as a more thoughtful analysis of data themselves. In concurrence with the above authors on the importance of collaborative data interpretation, Hammond et al. (2007) established that group analysis of student performance data and samples of course work(e.g., Science projects, essays, Maths tests) help teachers to identify learners' most common errors and misunderstandings, reach common understanding of what it means for students to master a given concept or skill, and to find out which instructional strategies are or are not working, and for whom. Such practices help staff development coordinators dovetail their programmes and/or discussions to the needs of students and the likelihood of positive student performance is high. How cluster test results and other student performance data is interpreted and used to inform or improve on subsequent student learning is thus an important area of focus for the present study, which highlights the nature of instructional artefacts and how they are used in school clusters to affect positive student outcomes.

Other instructional leadership roles include ones that districts can play in their quest to provide instructional leadership to schools, such as reorienting the organization, establishing coherence, maintaining equity focus, brokering, maintaining and creating social engagement. Rorrer *et al.* (2008) bring to the fore attempts by the district to change structures and processes to support improved teaching and learning, with strategies that involve backward mapping, whereby decisions from the grassroots are accommodated. Rorrer *et al.* (ibid.) cite examples of teachers, parents and principals developing homegrown ideas. Participating in setting standards by those involved and aligning them to the district is a cornerstone to instructional leadership. If clusters are to be sites of instructional leadership they should identify their own needs, find ways to fulfil them and align their

activities to their set standards. By so doing, they would own the whole process of teaching and learning and are more likely to be committed and prepared to account for any eventuality. Honig (2012), however, warns that 'joint work' stands in sharp contrast to some district traditional instructional leadership practices. Reorienting the organization calls for shared forms of leadership which may be viewed as a change of culture. Culture therefore involves organizational routines which can be studied as part of instructional leadership practice.

Coherent policies do not contradict each other but rather send the same message. If clusters are to impact positively on the learner they should be seen to complement district and national standards, hence they should align their vision to that of the district or national curriculum frameworks. Whilst Rorrer *et al.* (op cit.) alluded to aligning resources to the needs of the schools, clusters should be seen to be supporting member schools to procure the requisite resources for teaching and learning. Dittmar (2006) has cited the Namibian clusters as an example of providing and ensuring that schools access the needed learning and teaching resources, including recommending these materials for teachers, is practiced rather well. Hammond *et al.* (2009) concur that teachers easily implement strategies which they feel are connected to local curriculum guidelines, texts and assessment practices.

Similar to the previous attributes, equity ensures fairness within the district and clusters helps eliminate gaps between poor and rich schools through sharing resources (Delport, 2009; Muijs, 2008). According to Honig (2012), districts can help to strengthen principals' instructional practices through some of the district practices including modelling, brokering and creating and sustaining social engagement. Through social engagement, individuals grapple with new information on what practices are being modelled and captured. Districts can also protect principals against unnecessary pressure and threats and link them to other interested parties that can help enhance learning. The district instructional practices provide lessons on which clusters can draw to enhance their own instructional leadership and help schools boost student achievement.

Thus, from the previous discussion on both the conceptualisation of instructional leadership and the district instructional leadership roles, the following table can be developed to provide a synchronized view of instructional leadership roles and practices that may bear relevance for the clusters in other institutional settings.

Table 1: Instructional leadership roles and practices at district sites

Instructional leadership role	Source	Specific practices
Defining	Hallinger (2012)	-collaborating to frame coherent goals
institutional mission	May(2010)	-establishing standards for content and instruction through participatory modes
	Jones(2010)	-collaborative action plans
Target setting		-communicating expectations to schools
Managing the instructional programme and use of instructional artefacts	Honig(2012)	-co-ordinating curriculum
		-monitoring student progress
		-instructional coaching
		-instructional technology
		-co/team teaching
		-modelling good practices
		-mentoring classroom methodology
		- supervising and evaluating instruction
Promoting positive learning climate / context and providing autonomy to school principals and teachers	May(2012)	-efforts to improve culture or climate
	Jones(2010)	-working towards collegiality and shared vision
	Rorrer et al.	-building strong school community engagement
	(2008) Hallinger(2012) Honig(2012)	-maintaining equity
		-protecting instructional time
		-maintaining high visibility
		-providing incentives for learners
		-providing incentives for teachers.
		-brokering
		-creating and sustaining social engagement
Monitoring goals for achievement & instruction	Marzano and Waters (2006)	-lesson observation
		-staff reviews and evaluations
	Jones(2010)	-peer review of student work
		-collective needs assessment
		-collaborative student achievement data analysis
		-principal peer evaluation
		-ensure that schools have clear mission focused on student achievement and instruction
Use of resources to support goals or	Jones(2010)	-providing extensive teacher and principals staff development
student achievement		-adopting flexible models for training instructional staff

Many studies offer different views on who should be an instructional leader. For instance, Spillane *et al.* (2004) argue in favour of shared or distributed leadership as opposed to solo and heroic leadership. In support of this view, Mafuwane (2011) posits that leadership should not reside in one person but rather should be distributed among staff members in the organization. This view considers instructional leadership as a function and process rather than a position or role, hence, it can be enacted by anyone from the top to the bottom of the organization. The principal should know how and be willing to share and distribute instructional leadership, and empower his/her staff by providing them with opportunities to innovate, develop and learn together. These scholars advocated leadership which spans formal boundaries as being critical to instructional leadership.

Conceptualization of shared leadership has also given birth to teacher leadership, thus, the foregoing discussion of instructional leadership practices provides a good platform for exploring whether school clusters can be possible sites for instructional leadership. Whilst this is more often associated with school leadership, all those found promoting student learning are included as instructional leaders. In the context of the clusters, the issue of how and by whom instructional leadership is enacted is yet to be clarified. The ensuing discussion attempts to clarify the concept of distributed leadership as one of the building blocks in our conceptualization of cluster instructional leadership.

2.6.2 Conceptualizing distributed instructional leadership in school clusters

Spillane *et al.* (2003) and Dimmock and Walker (2005) concur that instructional leadership in schools is mostly distributed, but that the issue to be considered is how instructional leadership activities are distributed, and the ways in which this leadership is differentially effective. Undergirding the social interaction of teachers and school heads in clusters, leadership in clusters is inevitably a shared responsibility. Thus, in exploring clusters as possible sites for instructional leadership, a distributed leadership perspective becomes useful. Affirming that instructional leadership in clusters is distributed, Jita and Mokhele (2014) posit that little is known about how this leadership (in clusters) is distributed. Harris (2007) acknowledges that the concept of distributed leadership has been viewed differently and that terms such as 'shared', 'collaborative', 'facilitative' and 'participative leadership' have been used as synonyms for distributed leadership.

The distributed theory of leadership is informed by the distributed cognition theory of Hutchins (1995) and Pea (1993), which holds that in an effort to complete complex tasks, cognition is distributed by situation and socially through other people and elements of the situation, such as the tools they use (Harris, 2007). Distributed cognition reinforces the importance of 'social-cultural' context in thinking and acting. Spillane et al.(op cit.) took distributed cognition and superimposed it upon leadership practices in schools(Harris, 2007), conceptualising distributed leadership as constituted, defined or constructed in the interaction of leaders, followers and their situations in the execution of leadership tasks. Hence, leadership is socially distributed and the leadership function is 'stretched' over the work of a number of individuals and the task is accomplished through the interaction of multiple leaders. Decisions about who leads and who follows are dictated by the task or problem situation, and not necessarily by where one sits in the hierarchy. In support of this view, Jita and Mokhele (2013) posit that investigating instructional leadership as a socially distributed task calls for one to pay particular attention to the variations of context as an important factor in how leadership practice is constructed and implemented. The two scholars have cited subject matter as one such context which can influence distribution of instructional leadership. Accordingly, Spillane et al. (2004) brings to the fore two aspects of the distributed leadership perspective, namely leader-plus and leadership practice (Neumerski, 2012).

The leadership-plus aspect states that we should consider the work of all individuals who have a hand in leadership, and that multiple individuals in both formal and informal positions play a role in schools, akin to delegation. The leadership practice aspect, meanwhile, foregrounds interaction among leaders, followers and their contexts around particular tasks (Spillane et al., 2003). According to Neumerski (2012), while leadership has been conceptualized in terms of the behaviour or actions of individual leaders, the distributed perspective challenges us to rethink leadership as constituted in interactions between leaders and followers. Secondly, the interactions cannot be extracted from context, as the actual doing of constitutes practice (Spillane & Diamond, 2007). Thirdly, practice occurs in interactions between leaders and followers in particular contexts around particular tasks. In this study, instructional leadership tasks relate specifically to teaching and learning.

Sherer (2008) writes that leaders and followers are not mutually exclusive categories but rather are dynamic roles that change over time and across contexts. For instance, a teacher

may be a leader in one setting (in a Mathematics meeting) and a follower in a different setting (Language meeting). This perspective assumes that leadership processes are not tied to the variable aspects of the leaders' persona and behaviour. The leadership practice aspect leads us to consider the interaction pattern between leaders, followers and situations. Sherer (2008) brings up another critical issue of routines in an organization, that is, that routines have elements of both agency and structure. According to Feldman and Pentland (2003), in Sherer (2008:4) agency is "the actual performance of a routine by specific people in specific times and specific places". The proposed study thus sought to establish the varied cluster agencies in support of student learning.

Harris (2004) argues that collegiality and collaboration are at the core of distributed leadership but warns that distributed leadership is distinct from and more than mutual collaboration. Emerging through interacting with other people and the environment, it is a product of such a conjoint activity. Hopkins and Jackson (in Harris, 2004) suggest that it is orchestrated and nurtured by formal leaders of the school, with the principal creating an enabling collaborative school environment.

Leithwood et al. (2009) list four patterns of distributed leadership which can be observed:

- a. Planful alignment: In this pattern, leaders' tasks and functions result from prior, planful thought by organizational members, and functions are rationally distributed.
- b. Spontaneous alignment: leadership tasks and functions are distributed with little or no planning and tacit or intuitive decisions determine who should perform which leadership functions. Fortuitous, positive, short-term working alliances evolve.
- c. Spontaneous misalignment: there are disjunctions among leadership functions, causing unpredictable outcomes and negative effects on short-and long-term organizational effectiveness and productivity.
- d. Anarchic misalignment: this pattern is similar to what Hargreaves and Fink (2006) describe as 'anarchy'. Members of the organization reject or compete with one another in making claims of leadership regarding decisions, priorities and activities.

The patterns highlighted above could be observable in school clusters and schools resulting in positive or no impact on student learning. Leithwood *et al.*(2009) aver that when distributed leadership is neither planned nor aligned then the self-sustaining culture drifts and gradually loses its collective sense of vision and purpose, and becomes balkanized with each teacher or school focusing on his/her own classroom and working in isolation from colleagues, typical of child's play. Chikoko (2007), in his case study of a BSPZ cluster, established that most of the principals still had competitive tendencies and hence their collaboration with others was not always done in good faith. Considering the geographical location of most clusters the current study sought to establish the nature of collaboration in a different setting.

A variety of studies have, however, established clear evidence of the positive effects of distributed leadership on teacher efficacy and levels of morale. Evidence suggests that when teachers share good practice and learn together, there is better quality teaching (Lieberman, 2010). However, not all collaborative activities will generate effective distributed leadership. Much depends on the internal conditions set by the formal leadership. Harris and Spillane (2008) argue that whilst instructional leadership may be distributed in some way, how it is distributed and with what effects is uncharted territory. The current study sought to establish how instructional leadership is distributed in the school clusters. Lima (2008) provides three ways leadership can be distributed among teachers.

Firstly, principals can appoint experienced teachers (e.g., lead teachers, master teacher, teaching and learning consultants) to posts designed for the purpose of improving their colleagues' performance. These teachers can intervene as outside agents contracted by districts to improve performance of some teachers or they can act as inside agents who are designed to roles such as mentors, action research facilitators, in-service training coordinators or coordinators of special education. Cluster coordinators, resource teachers, Music and Physical Education cluster teachers can be good examples of outside agents, but how they perform their roles and the impact thereof on student performance needs exploration.

Secondly, teachers who are already in formal positions could exercise instructional leadership, a view that considers those in formal positions as distributing instructional leadership. This perspective, akin to Spillane's (2006) leadership-plus perspective, considers delegation of instructional leadership to followers.

Thirdly, Lima (op cit.) holds that leadership can be exercised by teachers regardless of their formal position or official designation. This view concurs with Spillane's (op cit.) analytic perspective of distributed leadership which views distributed leadership as a tool to look at how leadership is spread out between leaders, followers and the situation. The overarching question is who the leaders are and how we know.

In a study to establish how instructional leadership is distributed in International Baccalaureate (IB) schools, Hallinger *et al.* (2012) established that there were a number of strategies employed to distribute instructional leadership. Practices such as cross-programme teaching in which teachers could model more than one programme or grade might involve team teaching. Teachers from the secondary school sector can span boundaries to teach a subject or topic on which they are experts. This promotes the development of vertical or horizontal subject articulation. Teachers can help to teach at the same or another level or, similarly, use cross-programme cooperation whereby teachers act as mentors or project supervisors in programme (p.17).

Cross-programme cooperation also encourages programme collaboration in which teachers and programme coordinators or principals can have meetings or cross-programme workshops together. These strategies permitted teachers to exercise instructional leadership through interactions with colleagues in different units, grades, and departments, enhancing their understanding of school-wide mission and sharing best instructional practices. Lima (2008) further cites joint lesson planning and materials, and exchanging teaching materials, development as other examples of distributed instructional practices. Cross-programme interaction among staff permits staff to lunch together, chat informally as well as engage in formal meetings such as workshops and regular staff meetings. Hallinger *et al.* (2012) cite a secondary school science teacher helping primary school teachers in their exhibitions as another example of distributed leadership practice.

Another distributed leadership strategy is articulation which seeks to enhance curriculum coherence among programmes within a school. This involves backward mapping, a tool that engages and facilitates the work of multiple leaders, for example, principals, vice principals and, heads of departments (HoDs), in identifying and creating coherence in the skills and knowledge that students are expected to attain when they reach the final instructional period. It also involves collaborative setting of standards by all stakeholders, and Hallinger *et al.* (2012) concur with Prytula (2012) that documentation such as curriculum frameworks and student achievement results can be used as articulation tools

across schools. Teachers and principals can collaboratively devise more concrete instructional guidelines to enhance curriculum consistency as well as setting curriculum standards. Articulation strategies bridged the gap between teachers and administrators who were structurally compartmentalized in different programmes and/or departments. Thus, it breaks down the isolation faced by teachers in their four-walled classrooms.

Hallinger *et al.* (ibid.) argue that cross-programme collaboration enables staff to gain an added advantage of specialization within a role set. Whilst the aforementioned distributed strategies could not be generalized to other settings they provide a springboard upon which distributed instructional leadership in clusters could be studied. Hallinger *et al.* (2012) posit that when these practices are formally routinized (institutionalized) they foster collective responsibility for instructional leadership (p.19) and instructional leadership is broadly distributed and integrated into the daily interactions and practices of staff.

Thus, Harris (2007) and Hallinger *et al.* (2012) concur that effective distributed instructional leadership practices hinge on formal leadership through the processes of building supportive structures and organization climate. Young (2012) avers that expertise, trust and a culture of openness between staff and reliance on dialogue in which issues are articulated are inseparable forms of distributed leadership. The distributed leadership perspective is thus not a prescription but an analytic tool to conceptualize how instructional leadership is enacted in clusters. The study assumed that instructional leadership in clusters is distributed or stretched over different individuals, namely, cluster resource teachers, subject committee members and other stakeholders who hold different informal and formal positions.

Neumerski (2012) argues that context can enable or constrain leadership, a conceptualization of school clusters that underscores the importance of enabling culture, shared leadership in building teacher capacities as well as improving student outcomes (Hallinger & Heck, 2010). Jita and Mokhele (2013) warn that examining the social distribution of instructional leadership implies paying attention to how different leaders may or may not collaborate and cooperate on specific leadership tasks to achieve their goal.

In summary, some of the key questions that the present study sought to answer are how leadership is enacted, the different leadership players, teacher leaders and their roles, how

they are perceived by other teachers, and the impact of this interaction on student achievement.

2.7 MANAGEMENT AND KEY ACTORS IN A CLUSTER

Several authors concur that clusters are often managed by committees, however, the number and composition vary from context to context. Pomuti and Weber (2012) note that a management committee typically consists of school principals in the cluster, selected teachers, and school governing body (SGB) members, headed by the cluster centre principal. In the BSPZ cluster the cluster resource teacher, who is a selected teacher, coordinates the cluster activities in liaison with the cluster chairperson, who happens to be a principal. The cluster resource teacher acts as an intermediary between the school resource teacher and the district resource teacher in terms of BSPZ activities. The positions of the resource teachers are not vested with authority, which resides with the cluster chairperson, school principals and district education director.

Giordano (2008), in a study of clusters and cluster resource centres, established that most clusters in Asia and Africa established clusters as part of a national education strategy. Clusters were set up with the participation of Ministries of Education with a number of bilateral and international donor agencies. The Royal Netherlands, for example, assisted in the setting up of clusters in Namibia, Kenya and Zimbabwe (UNICEF,2009). In addition to their role of improving quality of learning and teaching in schools, notably instructional leadership, clusters have been used as channels to disseminate information up and down the hierarchy from national to school levels. In some instances they have become more effective distribution points for materials and information.

There have also been efforts to include community members on cluster management and steering committees. The interaction and partnership created between actors at cluster level need to be coordinated by a coordinator and steering committee (Giordano, 2008). The question arises, however, as to how effective the composition and management of school clusters are in promoting instructional leadership. If community members are part of the cluster, what role do they play in influencing teaching and learning in schools?

In a case study of a BSPZ cluster, Chikoko (2007) established that community roles were limited to funding, and their needs in developing the schools were not taken into account. Chikoko (2008) established in another study of the BSPZ cluster that centralization

tendencies negated the notion of clustering. The management of clusters tended to militate against shared decision-making as school heads found it difficult to function under the cluster leadership of a mere teacher. To them cluster leaders went against the grain.

2.8 CLUSTER ACTORS AND INSTRUCTIONAL LEADERS

Giordano (2008) has identified the following as key actors in the coordination of cluster activities. The cluster director or coordinator could be one of the schools heads, elected by members or a teacher, representing the cluster to their hierarchical superiors, overseeing the management committee and helping in the coordination of the whole cluster. Resource centre co-ordinator is another key actor, perhaps a teacher or school head. The cluster coordinator coordinates centre activities, organizing workshops, training for teachers, and teaching and learning materials. Tutors and advisory teachers provide advice and professional support and help as facilitators of teacher groups. In Zimbabwe the cluster resource teacher is bestowed with the duty to coordinate the cluster activities in liaison with the chairperson of the management committee as well as district inspectors (Ministry of Education, 2002).In most cases the cluster chairperson is the school principal. Advisory teachers can be peripatetic teachers or instructional coaches for Music and Physical Education. Their roles are critical in enhancing the teaching of marginalized subjects. Other players include teacher groups or subject panels, promoting the teaching of the various subjects of the school curriculum.

The district coordinator is another actor as s/he provides support to the cluster. In Zimbabwe, the title 'district resource teacher' is used (Makaye, 2011). Most clusters provide for management committees that oversee the management of the cluster, and allocate or raise funds for activities (Giordano, 2008; Dittmar, 2005). The management committees comprise representatives of all key stakeholders. Referring to the BSPZ cluster management committee, Chikoko (2007:44) writes, "...the composition of this committee suggests a structure adequately representative of all the stakeholders concerned with the smooth running of schools, thus, quite ideal for capacity building". The cluster can have other committees which it deems necessary, for instance pedagogical (Giordano, 2008), examination-committee, and HIV/AIDS-committee (Dittmar, 2005). The structure and composition of clusters influence greatly the distribution of instructional leadership as well as dominant instructional practices. For instance, Madungwe *et al.* (2000) established in a

base line study of the BSPZ cluster that activities were dominated by school heads and teachers were side-lined. Harris (2007) recommends that those in formal leadership need to actively influence the development and implementation of distributed leadership through supportive structures and organizational climate.

Not undermining the possible instructional leadership gains schools can accrue from clusters, Williams (2010) argues that the principal's role is critical in the development of a collaborative culture. He/she should be seen as an instructional leader at the site for change to be effected. Several studies on clusters have observed that most cluster instructional leadership activities are negatively or positively affected by the principal's leadership style. Cluster leadership should be loose and distributed among teachers and other followers. Nieto (2009) underscores the need for a climate of openness, shared decision-making and collaboration. Affirming this, Chappuis *et al.* (2009) emphasize how critical the principal's role is in collaborative instructional leadership by noting that school leaders must not only set the tone and climate but also model continuous learning through a shared vision. Principals should help teachers to understand the structure of formally scheduled meeting times, thus, teacher support is critical in effecting instructional leadership.

Several studies have alluded to pitfalls of collaborative time turning into a non-instructional meeting time. For instance, Williams (2010) suggests that school leaders should allow followers to construct learning goals and action research to meet their needs. Such instructional practices call for collegiality, teamwork and *esprit de corps*, with which co-practice of routines and co-sharing of leadership are embedded in institutional leadership. Thus, distributed instructional leadership is inevitable if clusters are to operate effectively (Spillane *et al.*, 2003).

Chappuis *et al.* (2009) argue that those facilitating collaboration should be carefully chosen and skilled, taking on the role of 'advanced learner', selecting activities matched to the team's needs and carrying out the reading and activities in advance of cluster meetings so that they can stir members through unfamiliar or complex concepts. The concept of teacher leaders in the clusters is crucial for ensuring effective instructional leadership in schools. How they enact their roles and how they are perceived by other teachers was the subject of the present study.

2.8.1Teacher leaders and instructional leadership

Acknowledging the varied conceptions of the term 'teacher leaders' and appreciating their instructional roles, Harris and Muijs (2005) view teacher leaders as peers with no authority over other teachers, whose role is to improve practice. The rationale for teacher leadership is that teachers are sometimes placed in leadership positions because of a belief that "most of the knowledge required for improvement must inevitably reside in the people who deliver instruction, not in the people who manage them" (Supovitz, 2008; York-Barr & Duke, 2004). Teachers may occupy formal or informal positions or roles, whilst formalized teacher leader roles, such as department chairs, cluster resource teachers are meant to decentralize structures as well as empower individuals and professionalize teachers (Firestone & Martinez, 2007). Teacher leaders can be full-time classroom teachers and operate at their own schools or across stations. According to Firestone and Martinez (2007), teacher leadership tasks are diverse, ranging from administration duties, for example, setting standards for student behaviour, budgeting, and addressing personnel issues. Some teacher leaders act as liaisons between administrators and teachers on matters of curriculum and instruction and help their peers improve their own teaching. Similarly, Harris and Muijs (2005) propose that teacher leaders can take formal roles as HoDs, subject coordinators, union representatives, associate leaders, master teacher and members of the school council.

Harrison and Killion (2007) write that teacher leaders can play a wide range of roles to support school and student success. Whether these roles are assigned formally or are shared informally they build the capacity of the school to improve. The cited roles include instructional specialist, who helps other teachers implement effective teaching strategies; curriculum specialist, who leads teachers to agree on standards, follows the adopted curriculum, uses common pacing charts, and develops shared assessments; classroom supporter, who works with colleagues inside the classroom to help implement new ideas, often by demonstrating a lesson, co-teaching, or observing and giving feedback (consultation with peers has been found to enhance teacher efficacy and capacity to solve teaching and learning problems as they collaboratively reflect on practice, Blasé & Blasé,2006:22); learning facilitator, who facilitates the development of a professional development programme which embeds the school and student needs; data coach, who can lead other teachers to engage in data analysis and use the information to improve

instruction; and *catalysts for change*, visionaries who are not content with the status quo but look for a better way(Harrison & Killion, op cit.).

Harris and Muijs (2005) further postulate that formal teacher leadership can be manifested in modelling methods of teaching, serving in advisory capacity to others, coaching, mentoring beginning teachers, studying aspects of classroom life, jointly developing the curriculum, structuring problem identification and resolution, developing instructional materials, and strengthening school-home relationships. These teacher leadership roles can be manifested in school clusters, however, little is known about the specific roles played by cluster teacher leaders or the extent to which these roles influence student performance in cluster schools. Mulford and Silins (2004) claim that the way those roles are structured and the extent of active support teacher leaders receive from their colleagues, principals and district administrators make a difference to their performance and outcomes.

Because of the conditions under which they operate, for instance provision of time, resources and opportunities to interact with others, instructional practices of teacher leaders vary from context to context. Firestone and Martinez (2007) established that teacher leaders in the district were found to perform tasks such as monitoring instruction, procuring and distributing resources and professional development. They could engage in specific activities such as sharing best practices at meetings, supervising, analysing test scores, modelling, coaching instruction, and recommending text books. A number of schools in the district reported marked differences in their instructional practices. In his study of teacher leadership, Mangin (2006) established that teachers had different perceptions about the usefulness of Mathematics teacher leadership activities of providing materials, helping in their classrooms, modelling lessons and facilitating group sessions. On the other hand, Vanderburg and Stephens (2010) assert that teachers perceive coaches as useful when they demonstrated lessons, interpreted data or directed their attention to teachers' instructional needs.

Teacher leaders are perceived negatively by teachers if they spend more time on management and administrative duties (Bean et al., 2010), a view affirmed by Silins and Mulford (2003), who posit that some teacher leaders who find their roles conflicting with classroom teaching or creating tension with colleagues experience stress and role ambiguity. Similarly, Kiranli (2013) established that although both teachers and heads had high expectations and perceptions of teacher leadership roles, teachers had higher perceptions of the teacher leadership role of professional development and collaboration

than school heads. This could be because teacher leaders are viewed as colleagues rather than administrators, a perception that concurs with Supovitz (2008), who established that high school teachers were more likely to turn to informal rather than formal teacher leaders for instructional leadership.

Grant (2010) warns that teacher leadership roles cannot be imposed by management and where there are attempts to formalize teacher leadership through policy directives the opposite tends to happen. Hence, leadership should be bestowed by those who are to be led (pg. 47). How formal leadership is associated with power dynamics, snooper vision and fault-finding is another significant area in the context of clusters, particularly how instructional leadership in general was perceived by teachers and how these perceptions influenced instructional delivery in schools, if at all.

Firestone (2005) noted several researchers' demonstration of how teacher leaders' ability to function as leaders can be hampered by the principal's reluctance to share authority. In a case study of BSPZ clusters, Chikoko (2007) established that school principals were insubordinate to the cluster resource teacher's leadership. Principals found it difficult to operate under the leadership of a 'mere teacher'.

Whilst the aforementioned discussion has alluded to some of the major challenges likely to be faced by cluster teacher leaders in their effort to discharge instructional leadership, the present study sought to investigate the current status of clusters in Zimbabwe with regard to this phenomenon of instructional leadership in general. Grant (2010) acknowledges the importance of teacher leadership in the life of the learning institution, hitherto student learning provides the following conditions for the emergence of teacher leadership. For the institutionalization of the necessary structural and cultural conditions institutional structures should facilitate coordination of work and workers in order to provide control over the people and activities and activities with the organization. This would involve leadership being distributed between people, tasks and conditions or situations, with emphasis on collaborative cultures permeating organizational values, beliefs and norms as prerequisites. In support of this view, Kiranli (2013) posits that teachers undertaking instructional leadership roles can be hindered by the school culture and climate. Several studies on educational leadership however concur that the authority to create and nurture effective collaborative instructional leadership cultures resides with school principals. The same authority is extended to teacher participation in cluster activities but the questions arise as to whether the principals permit teachers to actively participate in cluster activities,

and whether they give them the liberty and necessary support to implement what they will have learnt.

2.9 DRIVERS OF CLUSTERS'MAJOR INSTRUCTIONAL TASKS

UNICEF (2009) posits that the active involvement and participation of teachers in clusters provides them with and upgrades their pedagogical and professional skills. The same views were shared by Jita and Ndlalane (2009), who point out that teacher clusters provide a context within which members can come together and understand their practices. In support of teacher professional collaboration and the inherent benefits from it, Lieberman and Mace (2010:77) argue that:

...Just as local-foods gardener is invested in the daily care to grow food that will grace the tables of his or her community, teachers can access a greater investment in their own knowledge and expertise by sharing the fruits of their labors with each other. This task is not intended to result in one standard for teaching and learning (like the search for a perfectly round tomato) but to recognize the different heirloom varietals of accomplished teaching practices already in place, refining themselves over years and decades in schools.

Thus, instructional activities in clusters should be locally based, intentional, sustainable and benefit both teachers and learners in the cluster. The following were identified as the pedagogical drivers of clusters.

2.9.1 Encouraging cooperation and diffusion of good teaching

School clusters are believed to encourage cooperation and to diffuse good and special practices among teachers. As teachers interact in clusters they cross-pollinate craft expertise, viewed by Hunt (2011:189) as their being"...allowed to share their strength and weaknesses, offering the opportunity to maximize the former and overcome the latter". In addition, clusters facilitate improved teaching and all teachers can benefit from making their practices public and sharing them with others (Lieberman &Mace, 2010).

2.9.2 Promoting more autonomy and professionalism

Dittmar (2005) argues that inter-school collaboration counters the effects of isolation associated with teachers, particularly from small schools, whilst Lieberman and Mace

(2010) cite pedagogical loneliness as one driver of professional collaboration. By collaborating in clusters the teachers enhance their autonomy and their professional etiquette. UNICEF (2009) holds that school collaboration breaks not only the isolation of teachers but also of the pupils, as schools within clusters might bring their students for learning specialized subjects, for example, extra-curricular programmes and sporting activities, which may lead to the creation of peer groups. Hallinger and Lee (2012), in their study of international schools, also established benefits brought about by distributed instructional leadership. Teachers engaged in cross-programme teaching and collaboration which impacted positively on student achievement as eased the transition from one programme to another. The composition of clusters can also permit such practices and benefits if a conducive atmosphere is provided. Primary and secondary teachers in a cluster can share their expertise, cross-teach grades, and direct their skills and expertise where they are needed. Such forms of distributed instructional leadership enhance student learning and strengthen teacher collaboration and team spirit.

2.9.3 Provision for better access to teaching and learning resources

Giordano (2008) argues that school clusters permit individual schools to drop in and borrow teaching and learning material from the cluster. Delport and Makaye (2009) also support this assertion by noting that clustering had even reduced the gap between poor and rich schools through sharing resources, but how they use the material and the quality of materials require further investigation.

2.9.4 Teacher professional development and training

Most authors acknowledge that one of the major objectives of school collaboration is developing teacher capacities through in-service training, seen by Firestone and Martinez (2007) as an essential instructional leadership practice. Dinham (2008) affirms that building the capacity of teachers and leaders through engagement in quality professional learning is the key to improve students' learning outcomes, though Hayes *et al.* (2006) argue that it is not sufficient to focus on learning if teachers do not have the necessary knowledge and skills in terms of both subject content and pedagogical repertoire. This threshold knowledge, with skills and dispositions, forms the fundamentals for teacher professional development and thus student achievement. Similarly, Lineburg (2010) and

Leigh (2010) concur that effective professional development that focuses on teaching, assessment and curriculum development is linked to improved pedagogy for teachers at all stages of their teaching career, regardless of qualifications and experience. Weber (1987:23, in Mafuwane, 2011) argues that even the excellent teachers cannot renew themselves and need the intervention of an instructional leader to provide in-service training opportunities. Confirming the positive impact of professional development, Mafuwane (2011) has also established in her study that teachers who engaged in postgraduate studies produced poorer student results than their counterparts with fewer qualifications. Thus, effective cluster staff development activities should engage teachers in active learning, content knowledge and skills if they are to influence change in their instructional practices (Mouza, 2006).

Acknowledging the importance of cluster-based teacher professional development, UNICEF (2009) posits that one of the main advantages of school clusters is the provision of opportunities for continuous in-service training for teachers using needs-based, demand-driven models of "teacher teach teacher". In support of this view, Lang and Fox (2010) write:

...collaborative professional development relies heavily on peer to peer support and promotes reflection, dialogue, and collaboration about teaching. Collaboration strategies provide the context for teachers to explore, question, and dialogue about practices in order to be able to integrate them into school life. These strategies also provide the social, emotional, and intellectual engagement with colleagues needed to exchange practice.

The above statement illustrates that staff development programmes should also be internally motivated, and involve and engage the teachers if they are to improve their competencies. Mokhele (2011) established that teacher networks offer opportunities for staff development which improve teachers' professional knowledge and improve their classroom practices.

Mafuwane (2011) posits that professional development encompasses a variety of activities in which educators are involved to improve their practice, and hence student learning outcomes. Joyce and Shower (2002) established that 95% of teachers who had engaged in collaborative professional development instead of the traditional type, implemented new practices. Similarly, Hammond *et al.* (2009) established that teachers were more likely to

try classroom practices that had been modelled for them in professional development. Thus, cluster professional development programmes could impact positively on teacher capacities for improved student performance. The overarching questions are how regular these professional developments should be, how conducted, by whom and what they should address. Trudie (2010:548) argues that "successful staff development is embedded in daily practice, is needs based and is linked to learner needs and tailored to meet specific circumstances or contexts of teachers", whilst for Mclesley and Waldron (2010) collaborative professional development is coherent and focused; addresses instructional practices and content knowledge that improve student outcomes; collaboratively builds upon the practice and beliefs of teachers ensuring high levels of teacher support; is school-based, job-embedded and long term; provides extensive follow up (e.g., coaching) in the classroom; and is actively supported by school administrators.

In support of the view that the principal sets the tone for staff development programmes, Wahlstrom and Louis (2008) cite specific leadership practices that help in the development of staff members. These include stimulating teachers intellectually, visiting highperforming schools, providing them with individualized support through modelling lessons by experts in the subject, classroom observation and providing constructive feedback. Peer observations and debriefing sessions with colleagues are some of the instructional leadership practices from which teachers can benefit (Wahlstron, 2004:24). According to Mafuwane (2011) and Lineburg (2010), principals should also attend staff development programmes together with teachers if they are to be effective lesson observers. They recommend that school principals actively participate and avail themselves for the organized staff development programmes, whilst Hammond et al. (2009) avow that in an effective professional learning system, school leaders learn from experts and mentors, and with their peers, about how to become effective instructional leaders. They work with staff members to create the culture, structures, and dispositions for continuous professional learning and create pressure and support to help teachers continuously improve better understanding of students' learning needs, making data-driven decisions regarding content and pedagogy, and assessing students' learning within a framework of high expectations. Thus, effective professional development programmes entail shared vision, collegiality and home-grown problem-solving solutions. Effective professional development should address the concrete, everyday challenges involved in teaching and learning specific

academic subject matter rather than focusing on abstract educational principles or teaching methods taken out of context (Hammond *et al.*, 2009:10).

Whilst cluster activities are supposed to be needs-driven, meaning that stakeholders identify their own professional and administration problems and decide on how best to solve them, the process is not a smooth flowing one (Delport, 2009). While acknowledging the benefits of collaborative professional development, Fullan (2007) warns that the practice is fraught with challenges, and concurring with Fullan, Hammond et al. (2009)¹⁰ observe that while American teachers participate in short-term professional development the nation lagged behind in providing teachers with chances to participate in extended learning opportunities and productive collaborative communities in which they could conduct research on education-related topics, learn from one another through mentoring or peer coaching, and collectively guide curriculum, assessment and professional learning decisions. If developed nations, which provide ample time¹¹ and resources for teacher professional development, lag behind then how can states, districts, clusters and schools in developing nations provide high quality professional development that is effective in building teacher knowledge, improving their instruction, and supporting student learning? Hammond et al. (2009) have argued that historical and cultural norms dictate that teachers work in isolation, rarely giving them time to plan lessons, share instructional practices, design curriculum or help administration or managerial decisions. This has negatively influenced effective professional development, which requires significant levels of support from government, perhaps in the form of incentives and funding, which most developing countries do not have. Thus, how staff development sessions unfold and the impact of these on student performance, particularly in different contexts, requires further study.

2.10 EMPIRICAL CHALLENGES TO CLUSTER INSTRUCTIONAL LEADERSHIP

In spite of several successes of clusters in terms of school improvement, a large number of studies have tried to explain the challenges to inter-school collaborations. For instance,

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¹⁰ The study was on the status of teacher development in the USA and other high achieving nations around the world.

¹¹ In most European and Asian countries, instruction takes up less than half of a teacher's working time. In South Korea, Japan, Singapore and other Asian nations only about 35% of teachers' working time is spent on classroom instruction. In other nearby countries teachers devote non classroom time to collaborative planning, lesson study, peer observation and action research (Hammond et al., 2009:15).

Giordano (2008) cites the large size of some clusters as a great challenge to successful implementation, observing that those involving more than six schools tend to have coordination problems. Giordano (ibid) further points out that, in England, where up to 25 schools constituted a cluster, such problems were common, often compounded by difficulties in sharing instructional resources. When this happens the gap between the poor and rich widens, and hence inequity prevails. Rorrer et al. (2008) argue that one of the district instructional roles is to address the issue of equity.

Geeves (2003) reported inadequate cluster funding as another challenge, reference being made by Giordano (2008) to Cambodia and Kenya, where cluster tutors spent from their own pockets to sustain activities. Where clusters are funded by the government or donors, activities tend to be relatively high and schools can engage in staff development and other instructional activities, but as Delport and Makaye (2009) observed in Zimbabwe, since most clusters in developing countries depend on stakeholder contribution, collaboration to share craft knowledge and other activities deemed necessary for student achievement becomes costly (Brunswick & valerian, 2003; Giordano, 2008). According to Rorrer *et al.* (2008), generating will and building capacity are critical elements of instructional leadership. Thus, clusters should appeal to the attitude and beliefs of teachers, as well as motivating them if they are to generate a strong commitment to instructional practices.

Incentives have been cited as another way of generating the will of teachers (Hallinger & Heck, 2010), however, Jones (2009) warns that the impact of incentives is tantalizing and short-lived as long as they are in short supply. The current study sought to capture the teachers' voices with regard to whether clusters could be possible sites for instructional leadership, particularly in trying times when minimal support is received from government.

Inadequate preparation of cluster coordinators has also been cited by Giordano (2008) as a challenge to effective collaboration. Hallinger (2012) believes that climate building is another cornerstone of instructional leadership, with the school principal at the forefront. Likewise, the leadership etiquette of the cluster head is crucial in organizing and coordinating activities. Lack of or inadequate training in coordination may also have a negative impact on effectiveness, as reported in a number of clusters in Sri Lanka, Cambodia, Thailand and Costa Rica (Giordano, 2008). That cluster coordinators need the craft competency and literacy to effectively discharge their mandates underscores the importance of principals engaging in staff development programmes organized by them.

Having found that instructional leadership is seldom practiced in schools due to lack of indepth training of principals for the role, Phillips (2009:1) posits that instructional leadership as a relatively new concept calls for a shift in emphasis from principals as managers or administrators to instructional academic leaders. This scenario could be evident in most developing countries, Zimbabwe in particular, where instructional leadership is a new phenomenon even in educational institutions. Concurring with this view, Bush (2007) in Mafuwane (2011) finds little evidence of principals or other school leaders being developed for the central role of promoting learning in schools, or conceptualizing their roles as instructional leaders. The claim by Phillips and Bush could be true but needed to be validated by cluster instructional leaders in the current study, through interviewing the principals and observing the meetings.

Similarly, most cluster heads or coordinators are full-time school administrators and hence administration of clusters adds to their already heavy workload. The problem of inadequate time for school collaboration affects not only cluster coordinators but also cluster teacher leaders, facilitators as well as ordinary teachers (Giordano, 2008; UNICEF, 2009; Phillips, 2009). However, Williams (2010) posits out that to avoid collaboration time turning into a non-instructional meeting time, leaders at both school and cluster level should construct learning goals and action plans to meet their needs jointly.

Nieto (2009) underscores a climate of openness, shared decision-making and collaboration as strong ingredients for instructional leadership. The issue of time for professional development is an integral component, particularly when district or central authorities lack clarity or legislation on professional development time. Such a context coupled with inadequate support from the said authorities in terms of teacher professional incentives is liable to negate effective instructional leadership practices in institutions. Mafuwane (2011) argues that instructional leaders should be found protecting instructional time and programmes, and be prepared to monitor unplanned distracters to instruction and put up contingency measures to compensate lost instruction time. Marzano and Waters (2006) found that effective districts provide time and funding for professional development. The question remains as how district and/or clusters traverse instructional leadership in these troubling terrains.

That school heads, who in most cases are cluster coordinators, are overburdened with a variety of roles, for example, political, managerial and instructional(Hallinger,2012),so leadership in clusters should be shared or distributed if it is to have a positive impact on

the school. The present study endeavoured to establish how instructional leadership is distributed in clusters, if at all, and its effects. In a case study of school clusters in Zimbabwe, Chikoko (2007) established that leadership was still largely exercised by principals and activities were centred on the heads. Pomuti and Weber (2012) also established that centralization and bureaucratic tendencies negate effective cluster instructional leadership practices, and Chikoko (2008) found decision making power could only succeed in a reciprocal relationship between higher and lower tiers, in which the former was willing to relinquish some of its power for the latter to utilize. Lieberman and Mace (2010) recommend that teachers be given a platform from which to control their professional development as it is based on their own teaching practice.

Other studies have also established that school clusters are hampered by tight structures that are the antithesis of effective collaboration and implementation. In a study in South Africa, Jita and Mokhele (2012) established that clusters were largely undermined by bureaucratic and controlling discourses, arguing that it was not merely the existence of the structure which provided opportunities for effective professional learning and development, but more the interaction among teachers with a relationship of trust and identity that made the man attractive vehicle for changing teachers' craft knowledge and practice. Sherer (2008) argues that there should be symbiotic interactions that culminate in effective instructional routines, whilst, similarly, Pomuti (2009) found that the bureaucratic and hierarchical structures prevalent in Namibian clusters were a factor in limiting their success. Advocating an ideal instructional leadership structure, Rorrer et al. (2008) proposed a hybrid model that would capture the advantages produced by both centralization and decentralization of organizational structures. Such a model determines how tightly coupled the structures should be to deliver instructional leadership. Variability in terms of coupling influences the linearity and boundary spanning of instructional leadership in clusters (Harris & Goddard, 2007; Rorrer et al., 2008).

Research in Africa and other developing countries suggests that the most common instructional leadership practices of clusters are that teachers can share content knowledge, reflect together on their teaching experience, give feedback and promote collaboration and negotiation among themselves (Jita & Ndlalane, 2009; Jita & Mokhele, 2012). Collaboration and sharing of knowledge amongst peers will thus become pillars of a successful cluster. Whilst developing teacher capacities and promoting collaborative efforts among peers are some of the critical instructional leadership practices, Zammit *et*

al. (2007) claim that serious collaboration, in which teachers engage in rigorous mutual examination of teaching and learning, is rare, and where it exists it is fragile. The present study sought to explore this claim within the context of the BSPZ cluster.

2.11 PRINCIPALS' AND TEACHERS' PERCEPTIONS OF INSTRUCTIONAL LEADERSHIP PRACTICES

Whilst the previous discussion has highlighted what constitutes instructional leadership and the varied instructional practices at different institutional settings, Borden (2011) argues that one useful approach for addressing the difficulty of conceptualizing and measuring instructional leadership is to solicit the teachers' perceptions of their principal's activities which directly influence teaching and learning. Teachers experience first-hand the impact of their principal and they work more closely with him or her than any other professional. This section brings to the fore the varied perceptions of principals and teachers of instructional leadership practices.

Whilst there is a general consensus that student outcomes is likely to be greater when there is direct leader involvement and participation in curriculum planning and coordination and in teacher learning and coordination, Robinson (2007) argues that the closer leaders are to the core business of teaching and learning the more likely they are to make a difference to the learner. Teachers feel that principals should be visible in the school and also in the classroom, so that they do not feel isolated. When teachers feel that they are working together with the principal their morale and performance are boosted (Wahlstron, 2004). According to Jorgenson and Peal (2008), teachers appreciate administrators who occasionally offer to relieve a class, take the opportunity to be guest teachers and demonstrate their skills and engagement in classroom life. They do not appreciate a principal who tells them what to do, preferring one who models what should be happening in the classroom. Hence, principals need to have skills to model effective instructional practices and should model exemplary instructional practices to their teachers by being involved in the actual act of teaching. They have to be visible and available to give support when they need it (Mafuwane, 2011). Some behaviours that teachers feel have negative effects on their instructional practices, Lineburg (2010) identified as discounting teachers' needs, isolating teachers, withholding resources from them, spying on and overloading them, criticizing and threatening them, giving them unfair evaluations and preventing them

from personal academic advancement. Teachers felt that these behaviours thwarted and limited their creativity and hence they could not be risk-takers or rely on traditional teaching methods as they lacked support from their principals.

In summary, teachers expect principal instructional leadership practices to foster collaborative cultures, collegiality, shared vision, and high visibility, whilst providing instructional resources, modelling good practices, monitoring and supervising instruction and creating a conducive working climate. Kirsunoglu and Tanriogen (2009) found that teachers perceived their principals as effective instructional leaders if they attended to the various needs of the policy and their constituents. On the other hand, Kiranli (2013) established that teachers underscored the importance of professional development as it not only capacitated them with instructional content and pedagogy but also enhanced their roles as teacher instructional leaders. How professional development nurtures and develops teacher leadership needs to be explored. Effective instructional leadership should be manifested in distributed leadership, participatory professional development and shared vision so teachers need principals to play the roles of communicator, counsellor and facilitator.

In another study to capture teachers' perceptions of instructional leadership and school outcomes, Borden (2011) established that teachers view more favourably teaching principals who appear to be peers and not 'the boss'. They are 'in the trenches', experiencing the same challenges, limitations and successes as peers who have no administrative responsibilities. Teaching principals may be viewed as colleagues, hence their leadership can be associated with 'peer' or teacher leadership. Kiranli (2013) has established that teachers have higher expectations and perceptions of teacher instructional leadership roles on professional development and collaboration, however, teaching principals have limited time to undertake activities outside the classroom. The overarching question is of what status and calibre principals need to be to elicit positive instructional leadership. Zepeda(2007) and Marshal(2008) have established cases of non-teaching principals in the USA, finding it challenging to set aside the time required to be authentic instructional leaders and take action to impact positively on the learning and teaching process in their schools. A similar scenario has been reported in Paraguay, by Borden (2011), therefore it can be concluded that teachers have different perceptions of instructional leaders in terms of authority differentials. How an instructional leader uses his/her authority impacts positively or negatively on teacher instructional practices and consequently on student achievement, similarly with teacher leaders, however, studies have also excluded gender as a factor perceived by teachers.

Borden (2011) has also established that teachers perceive principals who are better educated and have more teaching and administration experience to be more committed to creating and sustaining a school climate supportive of learning and teaching. Whether their perceptions translate into positive student outcomes is another area of debate. While Stronge *et al.* (2004) and Barends (2004) in Mafuwane (2011) concur that experience is related to instructional leadership, Leigh (2010) sees no relationship between the quality of teaching and years of teaching experience. Rather, what counts most is professional learning that focuses on teaching, assessment and curriculum development the teacher encounters. Mafuwane (op cit.) brings to the fore another contested issue in instructional leadership, that student achievement is not dependent on the principal's qualification. She found that principals had little time in classroom practice and did not take over teaching to demonstrate their skills, perhaps because they concentrated on their sponsored university work. Whilst the results might not be generalized they provide us with an operational lens to look at other variables that might affect cluster instructional leaders.

Prytula *et al.* (2013) found that whilst most principals were struggling to find adequate time for instructional leadership they identified four aspects as critical to enhance performance at the school, namely, discussions, collaboration, professional learning communities, and capacity building. The majority of the heads felt that increased collaboration among teachers would permit teachers to share expertise, develop goals for student learning and collaboratively plan how they would be achieved. The perceptions included increased discussion about teaching, learning and assessment, and increased collaboration around school mission and improvements plans as effective instructional practices.

School principals also perceived improvements in teachers and teaching as another way of improving learning and student achievement at schools (Prytula, 2013). This perception concurs with Marzano (2006) in arguing that better teachers and improvements to classroom teaching practices would help improve test scores. Thus, Prytula posits that principals felt additional professional development in specific areas of teaching and assessment strategies would improve teachers' instructional practices, as the latter lacked an understanding of curricula and assessment, pedagogy and related strategies calling for

consultants to lead professional development sessions. They also concurred that external professional development had a role to play in this regard.

Prytula *et al.* (2013) provides more interesting perceptions of the principals, which include increased collaboration with parents and school about the learning programme and how they can be supported, involving students and parents in decision-making. Harris and Goddall (2007) argued that parental engagement in learning is more important to student improvement than mere involvement. Support from the district was also perceived as contributing, to some extent, to student achievement. Makaye (2011) emphasizes the importance of networking as critical to effective cluster implementation. When districts and schools collaborate and network student results are likely to improve. Principals also felt that allowing teachers to take the lead and support teachers through open and safe dialogue as members of a team is critical to instructional leadership (Prytula, 2013). Thus, teacher and distributed leadership is perceived by principals as cornerstones to instructional leadership.

Whilst the previous section has illuminated both teachers and principals' perceptions of instructional leadership, the discussion warrants a critical analysis in order to understand instructional leadership in various settings. The discussion thus poses the questions: how do school principals and teachers perceive instructional practices in their clusters? Do they have the political will to implement effective instructional practices? What challenges militate against effective implementation of these instructional practices? Whilst the perceptions could not be generalized or transferred, since they were limited to a different setting, they did provide a mirror to reflect perceptions of principals on instructional leadership at the cluster site.

2.12 MAJOR INFLUENCES ON THE CONCEPTUALIZATION OF SCHOOL CLUSTERS

The major research agenda to influence conceptions of clusters and instructional leadership is professional learning communities(PLCs) literature, which provides a clear focus of improving student learning as well as redesigning schools as learning centres for all(Huffman,2011). The notion of PLCs is generally associated with the work of Wenger and his colleagues, and names such as 'professional communities' and 'communities of practice' have often been used to characterize these initiatives. In education, they are more

commonly referred to as the latter (Crow et al., 2005; Printy, 2008) or 'professional learning communities' (Hord & Hirsh, 2008), but according to Wenger et al. (2002), communities of practice are groups of people who share a common concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on a continuous basis. Their purpose is to create, expand, exchange and develop individual capabilities (Wenger *et al.*, 2002).

Hipp and Huffman (2010) argue that PLCs involve professional educators working collectively to create and sustain a culture of learning for all students and adults. They list five dimensions: shared and supportive leadership; shared values and vision; collective learning and application; shared personal practice; and supportive conditions (Huffman, 2011, Jones & Harris, 2010). Meanwhile, DuFour, in Feger and Arruda (2008) posit three principles of PLCs, as a focus on learning; a culture of collaboration; and a focus on results. DuFour argues that PLCs should be guided by three questions in their operations, viz. what it is that we want our students to learn, how we will know when each student has learnt, and how we can improve on current levels of student achievement. These questions constitute the foci of instructional leadership. Day *et al.* (2011) claim that PLCs are characterized by distributed leadership and trust in teachers' pedagogical judgments, however, Feger and Arruda (2008) and Fullan (2006) assert that PLCs should not focus on a sense of camaraderie but rather on their effectiveness in terms of impacting student achievement rather than a list of their characteristics.

There is compelling research evidence on the positive results of PLCs in improving school outcomes. The Institute for School Reform (2004) in Feger and Arruda (2008), for instance, provides evidence for efficacy of PLCs in improving professional culture, attending to issues of equity and trust and focusing on instruction. The OECD (2009) study on teaching and learning cited the high positive correlation between professional collaboration and school performance in Iceland. Lieberman and Mace (2010:78) observe that: "... the idea of professional learning communities encompassed collegiality but gave us a more nuanced picture, not only of how teachers learn to work together but also of how teaching and learning are connected differentially in various types of communities."

Feger and Arruda (2008), however, warn that PLCs are challenged by negative attitudes of schools, limited funding and size of the group, and Klar (2012) sees difficulties in nurturing and sustaining them, particularly in large schools. Similarly, Ali (2011), Lieberman and Miller (2008) note that the involuntary and informal nature of professional

learning communities affects their sustenance and continuity as they can be disbanded any time. Fullan (2006) recommends an in-depth study of PLCs to show their impact on student outcomes, whilst Wahlstrom and Louis (2008) also support the need for research on PLCs to explore the practices of school principals in sharing leadership and creating trust. In response, the present research sought to undertake an in-depth study of how instructional leadership is enacted and distributed in school clusters.

2.13 CONCEPTUAL FRAMEWORK

Understanding whether school clusters could be better sites for instructional leadership calls for one to understand their nature, the different forms and their major activities. An understanding of what constitutes instructional leadership, how is it distributed and by whom, forms one lens for the study, along with cluster conceptualization, instructional leadership and distributed leadership. For the conceptual framework and literature review, the details below help to conceptualize clearly how the study was framed.

The history of school clusters or inter-school collaboration dates back to the 1940s in Great Britain and India, later spreading to different parts of the world. Whilst clustering or inter-school collaborations have different names, forms and nuances, the literature provides these. However, for the purpose of this study, Giordano's (2008) conceptualization of cluster as a group of schools for educational and administrative purposes was adopted. Lieberman (2008) and Jita and Ndlalane (2009) provided the different names for school clusters, whilst a short background of how clusters have developed and spread to other parts of the world provided fertile ground to understand the BSPZ cluster. Makaye (2011) and Madungwe et al. (2002) provide a conceptualization of the BSPZ clusters, its rationale and its roles. Cluster activities, such as collaborative monitoring and evaluation, professional development, and peer supervision, were viewed as critical in enhancing teaching and learning. 12 The concepts of collaboration, teacher leadership as encapsulated in resource teachers, and the social interaction¹³ of stakeholders to enhance student achievement, aptly provided a lens for studying instructional leadership in clusters. The quantitative survey was used to capture the instructional leadership practices in clusters and the challenges and successes registered by clusters.

¹² All efforts to improve teaching and learning are regarded as instructional leadership.

¹³ The social interaction of cluster stakeholders including inter alia teacher and principals to enhance learning is viewed as distributed leadership.

Instructional leadership provides another theoretical lens, and acknowledging that instructional leadership is conceptualized differently I provide varied views and frameworks. For instance, those of Hallinger (2012), May (2010) and Jones (2009) were studied. However, Hallinger's (2012) model with ten leadership functions that constitute instructional leadership was the bedrock for the conceptualization of instructional leadership for the present study.

Literature also discussed artefacts as instructional leadership tools, whilst empirical studies, mostly in school and district, and a few on cluster settings, assisted in conceptualizing how it can be navigated, particularly in school clusters. The different practices and artefacts discussed in the literature review provided a basis for construction of the descriptive survey to capture instructional leadership practices in school clusters. Interview protocols attempted to capture how instructional leadership was perceived by principals and teachers and principals' and teachers' perceptions on how best instructional leadership could be enacted in school clusters. The role of teacher leaders was also discussed in the literature review and was captured through interviews.

Acknowledging that instructional leadership in clusters is inevitably distributed (Jita & Mokhele, 2014), I brought to the fore how distributed leadership was conceptualized. Spillane *et al.*'s (2004:6) analytic perspective of distributed leadership was discussed, that views leadership as socially distributed among leaders, followers and the situation. The context dictates how leadership is spread, hence it does not reside in one formal position but is shared. The normative perspective, on the other hand, views leadership as distributed by the formal leaders, a view akin to delegation. Harris (2007) and others also provided different strategies on how instructional leadership can be distributed, several of which however concur that it is the formal leadership of the principal that develops enabling structures and climate for both instructional and distributed leadership. The current study interviewed cluster members and observed one cluster meeting to observe *in situ* how instructional leadership was distributed. The interaction patterns observed and their effects defined whether a leader-plus or analytic perspective was adopted.

Framed in this manner school clusters became a useful concept for investigating the *how* and *why* of instructional leadership, thus, they could be perceived as social interaction institutions wherein stakeholders¹⁴ construct instructional practices (knowledge, values and

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¹⁴ Cluster stakeholders include all those with a stake or interest in education. These include pupils, teachers, parents and community, principals and district officers.

skills), through distribution of leadership using varied instructional artefacts. Currently, there is a paucity of empirical work that explore how clusters impact positively on student outcomes, especially in different contexts, thus, the importance of this study for both research and policy. The diagram below depicts a conceptualized relationship of the clusters.

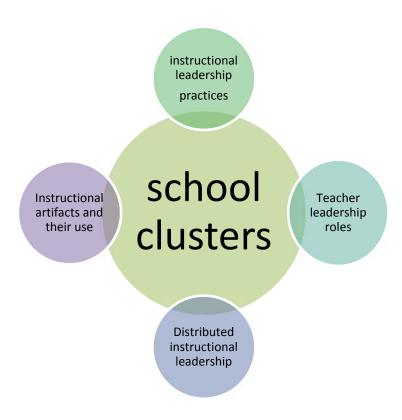


Figure 2: Conceptual framework to study cluster instructional leadership

2.14 THEORETICAL FRAMEWORK

The conceptualization of school clusters as institutions existing in a flux of interaction of different stakeholders to bring about effective teaching and learning is rooted in the social interaction or symbolic interaction theory propounded by Herbert Mead (1863-1931) and coined by Herbert Blumer, based on three premises. Firstly, human beings act towards certain things on the basis of the meaning they give to objects and events rather than simply reacting either to external stimuli, such as social forces, or to internal stimuli, such as organic drives (Haralambos *et al.*, 2013).

Secondly, human beings learn about themselves and construct meaning from the interactive patterns they have within two different worlds they inhabit, viz., the *natural*, wherein they are organisms of drives and instincts and the external world exists independently of them, and the *social*, wherein the existence of symbols such as language enables them to give meanings to objects (Cohen et al., 2011). Human beings learn about themselves and how other people react to their behaviour. The attribution of meanings to interaction takes place through a continuous social process which emerges in a state of flux and is subject to change. Cohen et al. (2011) assert that individuals align their actions towards those of others, perhaps by taking their roles and making indications to themselves about the likely responses. They construct meaning of how others wish or might act in certain circumstances and how they might act. Blumer (1962) in Haralambos et al. (2013) asserts that meanings arise from the process of interaction rather than simply being at the outset and shaping future action. To some degree, meanings are created, modified, developed and changed within interaction rather than being fixed and preformed. Blumer warns that actors in the process of interaction do not just slavishly follow present norms or mechanically act out established rules. This process of interaction brings change in individuals and ultimately societies.

Thirdly, the human mind is capable of obtaining and processing information as well as having the ability to reflect on these processes which increase the development of oneself. Mead (1863-1931) believed that society influences individuals through self-conception, which arises and is continuously modified through interaction between people. By means of the mechanism of self-interaction, individuals modify or change their definition of the situation, rehearse alternative course of action and consider their possible consequences.

The social interaction theory thus resonates around the three concepts of self, society and roles (www.scribd.com). A majority of what people know and learn about themselves is a result of their interactions with others, developing a sense of self-worth based on others. They tend to ignore the negative comments or reactions to their behaviour and accept the positive comments or reactions to develop positive self-worth, with socialisation being a method by which they obtain symbols and apply meanings to them. They learn not only various meanings for the symbols of society but also about their own roles within it and through interactions with others.

Roles are a part of culture, thus social interaction theory provides opportunities for this study to explore how instructional leadership is enacted in school clusters, which permit

teachers to come together and share ideas about their craft in a symbiotic relationship. They engage in a kind of 'give and take' interaction as they try to construct meaning of what effective teaching and learning entails. Teachers construct meanings of who they are as professionals and decide what instructional practices to provide for their learners through interacting with others. The meanings they construct from their interaction with their class, schools and clusters, how they react to their conceptualizations and the nature of their interactions as instructional leaders in school clusters constitute the study foci. They can also adopt instructional routines which can improve teaching and learning. Hogg and Vaughan (2011) assert that effective interaction also rests on being able to take the role of the other person, which entails looking in from outside and seeing oneself as others do. Thus, effective interaction entails cross-pollination, dissemination and diffusion of instructional leadership ideas and practices. Klar (2010:370) holds that social interaction is critical to the acquisition of knowledge and learning. The interactions teachers make in clusters equip them with best instructional knowledge for use in class.

Social interaction theory permitted me to study the kind of interactions clusters engage in for effective teaching and learning, how they should interact and with whom. It also informed me on the kind of leadership teachers want that would build a positive self-concept to promote student learning. Jita and Ndlalane (2009) argue that clusters provide teachers with the opportunity for negotiation or social interaction as they involve learning and unlearning information. They promote teacher development, construction and sharing of both content and pedagogical content knowledge, and it is through inter professional collaboration in them that effective teaching methods are developed and modelled in collegial relationships. Barnes *et al.* (2010) assert that social interaction around content with knowledgeable others and peers develops scaffolding for student learning, thus, the social interaction between and among leaders, followers and the situation has an impact on student learning.

Social interaction theory has been criticized by some scholars for focusing on small scale face-to-face interaction with little concern for its historical or social setting (www.scribd.com). The theory works well for describing individual behaviour in small groups (micro-analysis) but not for macro analysis. Cohen *et al.* (2007) warn that symbolic interactionists direct their attention at the nature of interaction and the dynamic activities taking place between people instead of looking at an individual. It is also criticized for not being useful for cross-cultures, lambasting the existence of classes or structures. Social

interactionists downplay the existence of norms, albeit admitting their presence, however, they claim that action is determined by structural norms (Haralambos *et al.*, 2013:980). Despite these criticisms, social interaction theory proved important in informing me in my study of cluster instructional leadership since clusters are sizeable groups of schools within the same geographical area that have agreed to come together for a common purpose. Thus, investigating how they do it, the nature of their activities and their focus becomes inevitable. The idea of distributed leadership and teacher leadership again necessitated employment of the social interaction theory when examining how creativity and innovation are thwarted among group members, in this case teachers.

Social interaction theory advocates studying individual interactions in their natural settings, thus Mead (1863-1931) calls for qualitative studies which include unstructured interviews and participant observations. This particular study employed a mixed-methods approach which included semi-structured interviews with school principals, teachers and teacher leaders to establish how instructional leadership was being enacted in clusters. Participant observation of cluster meetings was also carried out to determine on the ground how instructional leadership was distributed. The current study therefore sought to ascertain the nature of cluster interactions, the meanings they construct of effective teaching and learning, how they organize themselves in those interactions, the support they needed and received, and their impact on teaching and learning. Viewed in this way, social interaction theory proved vital for this study in exploring whether clusters could be sites for better instructional leadership.

2.15 SUMMARY OF THE CHAPTER

The chapter reviewed literature related to the study. It explored literature on school clusters, their genesis, benefits and activities. It also reviewed literature on instructional leadership. It did so by giving an exposition of the concept, the varied instructional leadership roles and practices. The chapter attempted to review instructional leadership literature as it applies at the school, cluster and district sites. The concepts of distributed leadership and teacher leadership were also discussed much as they apply to the cluster. The chapter concluded by discussing both the conceptual and theoretical frameworks of the study. Informed by the social interaction theory, the four major pillars which framed the study were discussed namely, the cluster concept, instructional leadership, distributed

leadership and teacher leadership. In the next chapter the researcher discusses the methodology of the study.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter discusses, in detail, the methodology for the study into whether and how Better Schools Programme of Zimbabwe (BSPZ) clusters could be sites for instructional leadership. It does so by highlighting the general approach adopted, specific designs employed and data collection procedures. It also discusses issues of validity, reliability as well as ethics. The data collection was guided by the following research question: how is instructional leadership enacted in BSPZ school clusters? The main problem was subdivided into the following specific research questions which also guided my literature review:

- What are the practices and artefacts for instructional leadership within the cluster?
- How can these leadership practices be understood and/or explained?
- How is instructional leadership distributed within the cluster?
- How are the instructional leadership activities perceived by both teachers and principals?
- What suggestions and improvements can be made to the instructional leadership practices of the clusters?

The table below provides the outline of the chapter before it is discussed in detail.

Table 2: An outline of the research methodology

Title	School clusters as sites for instructional leadership: a case of the Better Schools Programme of Zimbabwe
Research Approach	Mixed Methods
Research Design	Sequential explanatory mixed methods
General Data collection:	Having been cleared by the University's Ethics committee permission was sought from the Ministry of Education. I visited schools where by participants indicated their consent to participate in the study by signing the consent forms. Thereafter I distributed the 101 questionnaires, made follow up interviews with six participants. I also observed one cluster meeting/workshop. Data was analysed separately and later merged to

	ascertain whether clusters could be sites for instructional leadership.		
Population	School teachers, deputy principals& principals		
Sampling techniques	Convenience and Stratified Purposive: Units of study were selected conveniently and purposefully. From a list of active clusters I went on to select those which were accessible in terms of time and reach. Participants for the survey were all teachers, including the school principals and teacher leaders.		
Data collection methods	Quantitative	Qualitative	
	Survey: Questionnaires were distributed to 101 respondents –all teachers in the four clusters.	1. Semi-structured interviews with two principals, two teacher leaders and two ordinary teachers. One participant from each of the two clusters purposively selected. 2. observation: one cluster meeting/workshop was observed,	
Validity and reliability	Instruments were validated by peers and supervisor .Pilot test of the instruments was done with five teachers from the district .Participants were also given the opportunity to check on what they would have said. Prolonged stay with and at the stations of participants also assisted me to check on the trustworthiness of the data.		
Data analysis	Descriptive statistics: data expressed as mean and standard deviation.	Thematic content analysis and narrative analysis: Themes were established and narratives and/or interview excerpts corroborated to support the themes.	
Ethical consideration	Informed consent, voluntary participation and the right to withdraw any time by participants. Researcher would ensure confidentiality of names of participants and information given.		

3.2. RESEARCH PARADIGM

Any research inquiry or approach, whether conducted explicitly or implicitly, is inclined to a world view or paradigm which has its own philosophical, methodological assumptions and beliefs about the nature of reality. The quantitative researchers work mostly from the positivist or the post-positivist paradigm and research carried out from this is expected to be objective, measurable, free of value and driven from hypothesis. There is use of deductive reasoning as studies seek to establish causes and effects relationships. According to Teddlie and Tashakkori (2009:69), "the post-positivist paradigm has replaced positivism as the predominant philosophy for quantitative research in human science". Accordingly, researchers are influenced by the researcher's values and chosen theory or conceptual framework. Post-positivists assume that facts cannot necessarily prove a theory or determine a cause. Reality is socially constructed and internal and external validity are both important. Data in quantitative research is represented mainly as numerals (Angel *et al.*, 2011).

Qualitative researchers, on the other hand, work mostly from the constructivist or interpretivist paradigm, which supports the notion that there are many realities that are constructed as researchers engage with participants. In this paradigm researchers and participants construct realities from the participant's view. Observations of realities are influenced by the researcher's values and multiple realities exist as they are constructed individually and socially. In this world view it is impossible to determine a connection between cause and effect, hence description of reality is important. Qualitative researchers engage in inductive reasoning as they work from units of data toward a theory or as they work from specific or particular to the general. Reality is limited to time and context of study and generalizability is limited to transferability of results from one context to another (Teddlie & Tashakkori, 2009).Data is normally presented textually and/or pictorially (Angel *et al.*, 2011).

The philosophical differences between positivist/post-positivist and constructivist paradigms contributed to "tension or wars" (Tashakkori& Teddlie, 1998:3) between quantitative and qualitative researchers, resulting in a third paradigm, the mixed methods research. This attempts to respectfully the wisdom of the extreme viewpoints of Plato(quantitative research) and Sophism (qualitative research)while seeking a workable middle solution for many research problems of interest (Onwuegbuzie,2012). It attempts to consider multiple viewpoints, perspectives, positions and standpoints of both qualitative and quantitative researches. The details of the historical background and philosophical underpinnings and the rationale for its adoption in this study are discussed hereunder.

Tashakkori and Teddlie (1998) trace the history of mixed methods to the 1950s and continue up until the 1980s, which are considered to be the formative years. This period

witnessed the interest in using more than one method in a study. Momentum gathered when Campbell and Fiske (1959) advocated the collection of multiple forms of quantitative data to validate psychological traits. They developed the multi-trait, multimethod matrix which was designed to attribute individual variation in personality scale scores to the trait itself rather than to the method used to measure it. Studies which combined quantitative and qualitative data in this period (Sieber, 1975; Jick,1979) sparked a debate on whether it was possible to combine both forms of data emerging from different perspectives. During the 1970s and 1980s (paradigm debate period) the debate intensified and continues somewhat to this day, with purists who could not mix paradigms, situationalists who adapt their methods to the situation, and pragmatists who believe in using multiple paradigms to address research problems.

The 1980s witnessed a shift towards methods and procedures for designing mixed methods studies, with three individuals (Greene, Caracelli & Graham) in the field of evaluation authoring a classical article that laid the groundwork for its design. They analysed 57 evaluation studies, developed a classification of six types and talked about design decisions that go into each of the types. Consequently, other authors followed suit, marking the genesis of mixed methods research. Brewer and Hunter (1989) focused on the multi-method approach as used in the process of research, whilst Morse (1991) developed a notation system to convey how the components of quantitative and qualitative research are implemented. Creswell (1994) created an easy-to-follow set of three types of mixed methods designs, whilst Tashakkori and Teddlie (1998) mapped the contours of mixed methods procedures paying attention to validity and inferences issues.

The turn of the millennium has witnessed growth of interest in mixed methods research with Teddlie and Tashakkori (2003) providing a comprehensive treatment of many aspects. Creswell (2003) compares quantitative, qualitative and mixed methods approaches in the research process. Onwuegbuzie (2004) positions mixed methods as a natural complement to the two traditional qualitative and quantitative research approaches.

Table 3: Selected writers and their contributions in the development of mixed method research

Stage of development	Authors(year)	Contribution to Mixed Methods Research
Formative Period	Campbell & Fiske (1959)	Introduced the use of multiple quantitative methods.
	Sieber (1973)	Combined surveys and interviews
	Jick (1979)	Discussed triangulation of quantitative and qualitative data
	Cook &Reichardt (1979)	Presented 10 ways to combine quantitative and qualitative data.
Paradigm debate period	Rossman& Wilson (1985)	Discussed stances toward combining methods –purists, situationalists & pragmatists
	Bryman (1988)	Reviewed the debate& established connections within the two traditions
	Reichardt &Rellis (1997)	Discussed the paradigm debate and reconciled two traditions
	Greene &Caracelli (1997)	Suggested that we move past the paradigm debate
Procedural development period	Greene,Caracelli& Graham(1989)	Identified a classification system of types of mixed methods design
	Brewer & Hunter (1989)	Focused on the multi method approach as used in the process of research
	Morse (1991)	Developed a notation system
	Creswell (1994)	Identified three types of mixed methods designs
	Morgan (1998)	Developed a typology for determining design to use.
	Newman & Benz (1998)	Provided an overview procedure
Advocacy as separate design	Tashakkori &Teddlie (1998)	Provided a comprehensive treatment of many aspects of mixed methods research
period	Creswell (2003)	Compared quantitative, qualitative and mixed methods approaches in the process of research.
	Johnson Onwuegbuzie (2004)	Positioned mixed methods research as a natural complement to traditional qualitative and quantitative research

Adopted from Creswell (2006:14).

The current study employed a mixed-methods approach, as neither the qualitative nor quantitative research approach alone would capture the trends and details required to answer the research questions posed (Creswell, Fetters &Ivankova, 2004). When used in combination, these approaches yield a more complete and complementary analysis and offset the weaknesses inherent in each, whilst drawing on their strengths (Creswell, 2007; Devos, 2002).

Maree (2007) defines mixed methods research as a procedure for collecting, analysing and 'mixing' both quantitative and qualitative data at some stage of the research process within a single study to understand the research problem more completely, while Burke et al.(2005) acknowledge that it is a third research movement that moves past paradigmatic conflict. Named variously as 'multi-trait' or 'multi-method' research (Hesse-Biber, 2010), it is a collection of several quantitative and qualitative methods in a single investigation (Campbell &Fiske, 1959), regarded by Steckler *et al.* (1992) as integrating or combining forms of data. Others call it a 'hybrid' (Ragin *et al.*, 2004) or 'methodological triangulation' (Morse, 1991) recognizing convergence of quantitative and qualitative data, and still others refer to it as the 'combined research' (Creswell, 1994). The term 'mixed methods' was coined by Tashakkori and Teddlie (2003), to distinguish them from multi-methods, which use more than one method but restricted to one world view that is quantitative or qualitative, not a mix of both.

Cognisant of the varied names and definitions of the approach, a working definition of mixed methods was adopted for this study, from Creswell (2006) who views mixed methods research as both a method and design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases in the research process. As a method, it focuses on collecting, analysing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone. Creswell (ibid.) argues that by mixing both data sets, the researcher provides a better understanding of the problem than either data set alone. This can be done in three ways, viz., merging or converging the two by actually bringing them together; connecting the two by having one build on the other; and by embedding one within the other so that it provides a supportive role for the other.

Whereas positivist (quantitative) approaches are premised on scientific, objective ontologies and epistemologies and interpretivist (qualitative) approaches on humanistic and existential ontologies and epistemologies, mixed methods are rooted in pragmatism (Cohen et al., 2010:23; Johnson, Onwuegbuzie & Turner, 2007). Pragmatists believe in utility and practicality, which is antithetical to idealism as it prefers practical outcomes to singular pursuits of the most accurate representation of reality. According to Cohen et al. (2010), pragmatism ignores the self-absorbed debate over quantitative and qualitative affiliations by judging research in terms of whether the researcher has established what s/he wants to know regardless of whether the methodology was quantitative or qualitative. No one should be a slave to methodological loyalty (Oakely, 1999), the best approach being the one which best addresses or answers the question. One can use a combination of experiments, case studies, surveys or whatever is available to enhance the quality of research. Although pragmatism can be perceived in terms of 'pragmatism of the left' or 'pragmatism of the right' (Brandom, 2000; Marcy, 2003), where the left implies antirealism and strong pluralism, and the right implies strong form of realism and weak pluralism, Johnson et al. (2007) advocates pragmatism of the middle as the best for mixed methods. Howe (1998) argues that pragmatists accept the compatibility of both qualitative and quantitative but should choose the best from the two. They should determine how best they can use the methods. Values of the researcher play a critical role in determining how the mixed methods design is used, how the study is designed, and how data will be analysed (Creswell, 1998).

Pragmatists have two perspectives about reality, firstly, that it is outside the human, and it can be observed, measured and understood to some extent. This perspective is shared with the positivists and post-positivists. Secondly, there is one truth but several explanations of reality. Cause and effect relationships exist, as they can change and sometimes are difficult to identify. Internal validity, credibility, generalization or transferability of findings, external validity are important along with the idea that hypotheses are tied to both time and context (Teddlie & Tashakkori, 2009).

Informed by the pragmatic philosophy, the current study viewed the problem from both the post-positivist and interpretivist world views. These would seek to generalize findings from a sample and would try to get finer details from a few individuals. This stance was taken with a view to getting a broader view of the different instructional leadership practices and artefacts from a large sample (101 participants), as well as how instructional

leadership was distributed and perceived in the day-to-day interactions of people within the clusters. Thus, questions which sought to answer the 'what' (numerical and quantitative) and 'how' or why' (qualitative) were asked. Tashakkori and Creswell (2007) write that a strong mixed methods study begins with a strong research question rather than requiring only numerical or qualitative. The interviews by a few purposively selected participants permitted multiple realities as both interviewees and interviewer tended to interpret cluster instructional leadership differently. The views given by different participants would not be generalised but could be transferred to other settings. In addition to the ontological stance of the researcher, experiences on school clusters, gained through almost a decade of experience as a district resource teacher coordinating school clusters, and as an educator, provided motivation to adopt an eclectic and pragmatic approach to investigate whether clusters could be sites for instructional leadership.

In view of the above philosophical assumptions, Creswell and Plano Clark (2011) identified the following core characteristics of mixed methods the present study had to consider and adhere to. The researcher should:

- Collect and analyse persuasively and rigorously both qualitative and quantitative data.
- Mix (or integrate or link) the two forms of data concurrently by combining them (or merging them) by having one build on the other sequentially or embedding one within the other.
- Give priority to one or both forms of data (in terms of what research emphasizes).
- Use these procedures in a single study or in multiple phases of a programme of study.
- Frame these procedures within philosophical world views and theoretical lenses.
- Combine the procedures into specific research designs that direct the plan for conducting the study.

Several reasons have been proffered for the need to conduct a study using mixed methods. Creswell (2012:535) writes that one uses mixed methods "when both quantitative and qualitative data provide a better understanding of the research problem than either type". In this case quantitative data alone could not answer effectively the sub-questions nor give a clear picture of the nature of instructional leadership or how instructional leadership is

distributed. On the other hand, understanding the dynamics of cluster instructional leadership qualitatively as well as getting into the minutiae of cluster meetings/workshop would not provide a complete picture of the varied instructional leadership practices and artefacts that were captured quantitatively. Hence, mixing the two data sets in this study enhanced complementarity and triangulation of data sources (Greene, Ceracelli & Graham, 1989) which result in a powerful mix.

Another rationale for using mixed methods is when one type of research is not enough to address the research question. In this case not only did qualitative data complement the quantitative data but it was used to clarify certain issues left out during the quantitative study. Interviews and observations were made to follow up on the questionnaire survey. The descriptive data from surveys could only be predicated with more detailed and specific information from qualitative data.

A strength of the mixed methods research is that it offsets the weaknesses of both quantitative and qualitative research. For example, if quantitative research is weak in understanding the context or setting in which people talk, or when the voice of participants is not heard, qualitative research makes up for the weaknesses (Creswell, 2006). In the current study, identifying cluster instructional leadership and artefacts was carried out quantitatively, using surveys, whilst the qualitative aspect was used to capture the participants' voices with regard to how instructional leadership is enacted, understood and/or distributed. When qualitative research cannot generalize findings because of the small number of participants, quantitative research may be used to offset the deficit. Johnson and Onwuegbuzie (2004) see the mixed-methods paradigm as a means of bridging the disagreement between qualitative and quantitative researchers. Mixed methods research thus provides more comprehensive evidence for studying a research problem than either qualitative or quantitative on their own, and it is practical as people tend to use both words and numbers to solve problems. Creswell (2006) argues that in life individuals tend to use all methods possible to address a research problem, thus, the need for a rigorous and comprehensive study of the cluster instructional leadership practices has necessitated the use of the mixed methods approach in this study (Borkan, 2004).

Notwithstanding the above advantages, mixed methods research can be time-consuming as it demands more resources and time to collect and analyse both quantitative and qualitative data (Ivankova, Creswell & Stick, 2006). The researcher therefore took care to adhere stringently to set timelines. The approach also demands from the researcher expertise and

competence which may not be needed by someone using a single approach. McMillan and Schumacher (2012) warn that with the popularity of mixed methods researchers may mislead readers if the approach does not fully integrate both types of designs as one of the approaches may be used superficially. In this case the researcher took time to carefully read literature on clusters, instructional and distributed leadership as well as on mixed designs, not only to generate comprehensive instruments but also to get clarity on the modus operandi of mixed methods studies. Nevertheless, the study employed the traditional approaches (quantitative and qualitative) sequentially to establish whether school clusters could be sites for instructional leadership.

3.3 RESEARCH DESIGN

Creswell (2007) defines a research design as a plan of action that links the philosophical framework and the specific methods. Creswell and Plano Clark (2011) further advise that key principles have to be considered when designing a study. These are: "deciding on the type of design(whether qualitative or quantitative should be used before the study); identify the design approach to use; match the design to the study's problem, purpose and questions; and be clear about the reasons to use mixed methods" (p,54). Creswell (2012) posits that in mixed methods researchers should decide on: the priority given by the researcher to quantitative or qualitative data collection; the sequence of collecting the quantitative and qualitative data; how the researcher analyses the data; and where in the study the researcher will mix the data. These four considerations help the researcher to locate and identify the design to use. The notation by Morse (1991) below shows how both quantitative and qualitative approaches can be treated in mixed methods research, giving rise to the different designs. Using the notation a study can run two methods parallel (QUANT +QUAL) or it can have two sequential methods (QUANT QUAL/QUAL QUANT).

Table 4: Notation system for a mixed methods study

QUAL + QUANT

QUANT qual →

Notation used;

- + indicates the simultaneous or concurrent collection of quantitative and qualitative data.
- → shows the sequential collection of quantitative and qualitative data.

Uppercase letters indicate a priority or increased weight for either the quantitative or qualitative data.

Lowercase letters indicate a lower priority or weight for either the quantitative or qualitative data.

Source: Morse, 1991 (in Creswell.2012:538)

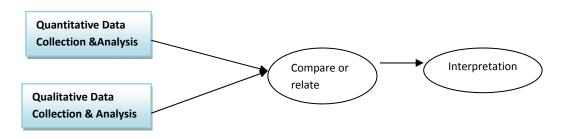
Using the four considerations and Morse's (1991) notation, six mixed methods designs were suggested:

- 1. The convergent parallel designs or concurrent designs in which both qualitative and quantitative approaches run simultaneously or parallel in addressing research problems.
- 2. The sequential mixed designs whereby either of the approaches run one after the other and in which one strand of the research determines the other.
- 3. The quasi-mixed methods in which both research approaches answer two different questions in one study.
- 4. Conversion of mixed designs whereby data is transformed, from qualitative to quantitative or vice versa, in a parallel mixed design.
- 5. Multi-mixed designs or hierarchical research designs whereby different types of data are integrated and/or used at different levels of the research.
- 6. Fully integrated mixed designs in which mixed methods are used at all stages and levels of the research (Teddlie & Tashakkori, 2009).

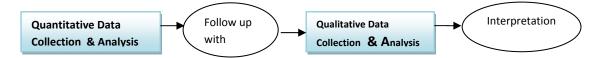
In addition to the above designs, Creswell (2012) in his classification brought in three more distinct designs, namely the embedded, transformative and multi-phase. In the embedded design primary and secondary data is simultaneously collected, with secondary data playing a supporting role. The table below presents Creswell's (2012) classification of the mixed methods designs one can employ.

Figure 3: Types of mixed methods designs

Convergent Parallel Design



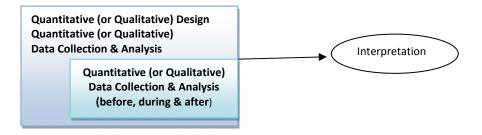
Explanatory sequential Design



Exploratory sequential Design



Embedded Design

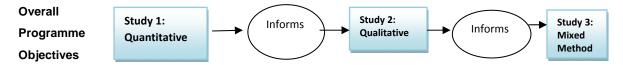


Transformative Design

Transformative Framework



Multi-Phase Design



Adopted from Creswell (2012:541)

Transformative designs use a theoretical framework as an orienting lens for the entire study which can employ either of the convergent, sequential or embedded design (p.558). The multiphase is conducted over time using multiple phases or projects that build on each other and uses a combination of any of the convergent, sequential or embedded.

In this study the sequential explanatory mixed methods research design or two-step phase (Creswell & Plano Clark, 2011) was deemed necessary., which according to Creswell (2012) begins with quantitative analysis which is designed to reveal broad trends related to the phenomenon being studied. Qualitative findings are then used to clarify or explain quantitative results, the rationale being that the quantitative results would provide a general picture of the instructional leadership practices and artefacts prevailing in school clusters, while qualitative results would refine, explain or extend the general picture (Maree, 2007). In this case, quantitative surveys enabled the researcher to gather data from a large population, which would not have been possible with qualitative instruments. The questionnaire surveys administered to a larger sample provided a quantitative picture, presented in numerical figures of the varied instructional practices and artefacts in clusters.

Employed to elucidate and refine certain trends brought to the fore in the survey the qualitative aspect provided clear explanations predicated with thick descriptions not permitted by statistics (Creswell, 2003). The researcher, being the inquirer, then made a follow up of these practices to establish *in situ* how these instructional leadership practices were enacted and could be explained. The study needed to establish how instructional leadership was distributed in clusters and the issue of how leaders and followers interacted in instructional meetings required exploration on the ground. The aim was to obtain an inside view of the actual practices as well as the major instructional leadership actors in clusters (Denzin& Lincoln, 2005). This inside picture and finer details were obtained from only a few chosen clusters and participants. Thus, six participants, comprising two cluster coordinators (school principals), two cluster resource teachers (teacher leaders) and two teachers, were interviewed to elicit their views on how instructional leadership was enacted in school clusters, its challenges and how it could be improved. Interviews also permitted the researcher to determine from participants the impact of instructional leadership on student performance. By so doing one could understand instructional practices from the participants' perspectives.

To triangulate data, observations of two cluster meetings were intended, however, because of the limited time only one observation was made. Observations permitted me to observe

how instructional leadership was distributed in clusters, and by so doing shed light on how cluster instructional leadership is conducted. The interactions between leaders and followers, the dominant people in the meetings, were observed to provide a picture of distributed leadership in the cluster. Findings from both qualitative and quantitative approaches were analysed differently, but later merged to confirm or refute whether clusters could be sites for instructional leadership. The flowchart below illustrates the design used to explore instructional leadership in clusters.

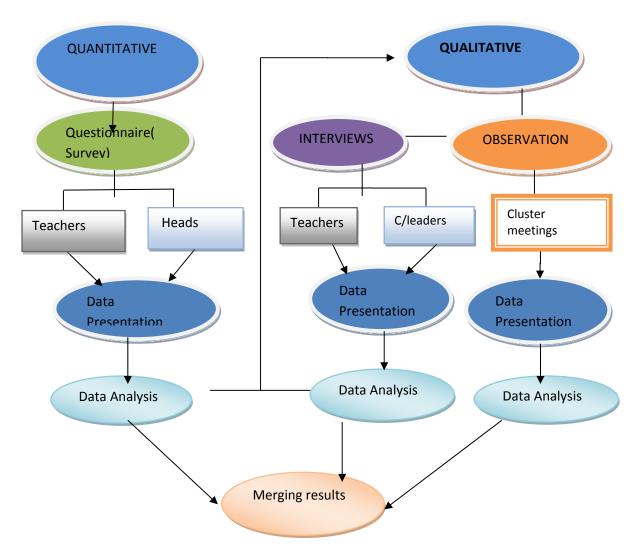


Figure 4: Flow chart to show the study of instructional leadership in school clusters

The sequential explanatory mixed methods design has the strength that the two separate phases are straightforward in being implemented by a single researcher. Easy to describe and report, multiple methods work best to optimise understanding of the research problem (Creswell, 2007). Constructing and administering a valid questionnaire survey which captured the major details of instructional leadership practices and artefacts called for

expertise and good time management. Although two sequential phases being involved might be a limiting factor, considering the nature of the problem under investigation, the limited time available and it being an individual study, the sequential explanatory mixed methods design was preferred.

3.4. GENERAL DATA COLLECTION PROCEDURE

Cognisant that the data in this study was collected in two sequential phases, the quantitative and qualitative, the general approach was as follows. The researcher self-administered questionnaires and interviews to participants conveniently and purposively selected respectively. A total of 101 questionnaires were distributed to teachers and principals from the four clusters studied. Interviews were held with six participants, namely, two school principals, one of whom was a cluster coordinator, two teacher leaders and two ordinary teachers.

Firstly, I sought an ethics clearance letter from the University's Faculty of Education which notified all concerned partners about my status and intentions. Secondly, permission was sought in writing from the Ministry of Education to carry out the study.

On the questionnaire, I attached a covering letter asking for the respondents' cooperation in completing it as well as thanking them in advance. The surveys were distributed by the researcher to ensure a high return rate, and one-on-one interviews were audio tape recorded. The study intended to make observations of two different cluster meetings, however, only one was observed due to limited time. The observation was made upon liaising with the cluster coordinator on dates of cluster meetings. The data collected through surveys was presented separately from qualitative data for analysis, however, findings from both quantitative and qualitative phases were corroborated to establish whether clusters could be sites for instructional leadership.

3.5 THE QUANTITATIVE PHASE

To answer the first and last research questions viz: What are the practices and artefacts for instructional leadership within the cluster? And What suggestions and improvements can be made to the instructional leadership practices of the clusters? a survey which would allow for collection of descriptive data from the sample was used. Surveys seek to describe

trends, identify attitudes, opinions or behaviours in a large population. According to Leedy and Ormrod (2005), a survey seeks to establish the characteristics of a phenomenon, in this case the existing instructional practices existing in the two BSPZ clusters (see research questions 1&5), as well as to capture their suggestions on how best instructional leadership practices in clusters could be improved.

3.5.1 Data Collection

Population

Best and Khan (1993) define 'population' as any group of individuals who have one or more characteristics in common and of interest to the researcher. Oppenheim (2004) posits that a research population comprises all those who fall into the category of concern, or objects or events that conform to specific criteria and to which the intention is to generalize the results of the research. Accordingly, the target population of this study comprised all the school teachers and 163 heads from the 37 clusters in Masvingo district, Zimbabwe, whose demographic characteristics were urban, peri-urban, mining, resettlement, satellite and rural. These categories of schools have different characteristics, ways they implement clusters, and types of instructional leadership differ. They have different challenges. Whilst urban schools tend to be close to each other schools in resettlement areas are sparsely distributed with others having a radius of at least five kilometres for primary schools and 17kilometres for secondary. Satellite schools are also sparsely distributed, having been established in the areas under the government's fast-track land redistribution programme. Most of these schools lacked proper infrastructures with others operating in pigsties or using tobacco barns as classrooms. Whilst schools vary in terms of resources and socio-economic status they were clustered in terms of proximity to each other. The clusters studied were characterized as peri-urban, satellite, rural and mining schools.

The district comprised 37 clusters, each presumably with a resource teacher, but it was not possible for me to involve all of them in the study. I wanted to explore the activities of those clusters which were active with a view to establish whether they could be sites of instruction leadership. I was interested in the activities they engaged in and how they went about them, hence, a representative sample was selected. Leedy (1997) posits that a sample may be representative as a sub-group chosen for direct observation. Meadows (2003) and

Borland (2003) argue that quantitative research results are obtained from samples and are generalized to the population of interest. Thus, results of this study regarding instructional leadership practices and artefacts could be generalized to other clusters. The results of the clusters selected to participate in my quantitative survey could be representative of other BSPZ clusters in the district, thus a general picture of the nature of instructional leadership activities. Arguably, the results can confirm or refute whether BSPZ clusters can be sites for improving teaching and learning. In mixed methods research, the process of selecting part of the population participating, termed 'sampling' (Fraenkel & Wallen, 2011) may be both probability and non-probability in nature. Kemper *et al.* (2003:284) posit that "...the sequential mixed methods sampling involves the selection of units of analysis for the study through the sequential use of probability and purposive sampling strategies that is, (Quantitative-Qualitative) or vice versa.

The study employed purposive sampling to choose the four clusters, which according to Patton (2002) involves the deliberate selection of particular settings, persons or events, leading to a greater depth of information from a smaller number of carefully selected cases. McMillan and Schumacher (2010:138) write, "... the researcher selects particular elements from the population that will be representative or informative about the topic of interest....subjects should be selected to provide the best information to address the purpose of the research". Purposive sampling saves time and ensures ease of administration and greater participation (McMillan & Schumacher, 2003). In this case, the four clusters were selected on the basis of their being active in the district, hence I wished to explore the nature of their instructional practices and how instructional leadership is distributed. All ten primary schools in the clusters and their heads were purposefully chosen to participate, with the clusters to be addressed by their pseudonyms for confidentiality. The selection of teacher participants was both convenient and purposive, based on their accessibility as they were all primary schoolteachers, regardless of their gender and experience. If cluster activities are effectively carried out their effect should be felt by all the teachers. Experience only came into play when follow-up interviews of issues raised in the survey were conducted. In this case those with substantial experience of at least three years in the cluster were consulted, assumed to be an adequate period for one to give credible information with regard to cluster instructional practices and the effects thereof on student achievement.

A challenge, however, was that at times such participants were hard to find due to staff attrition, hence that condition also affected gender equity. Although the literature review revealed that gender has no effect, its role in the study was monitored closely. Because of differences in school sizes the number of participants drawn varied. According to McMillan and Schumacher (2003), the general rule in determining a sample size is to use the largest sample possible since the larger it is the more representative it will be to the population. The idea is to achieve a greater depth of the instructional practices in the two clusters (Patton, ibid.). Below I discuss the general process I took to arrive at the four clusters as well as participants.

Considering that the main motivation of the study was that I was once a district resource teacher for almost a decade, coordinating cluster activities in the district, I wanted to establish what and how clusters were doing after the donor funding period had expired and after the country had experienced serious economic decline, with incessant periods of stagnation. My first call was on the district office, which furnished me with a list of clusters as well as names of clusters which seemed to be operational. These were the clusters I wanted to explore to establish the nature of their activities and how they were doing it. From a list of 37 the DEO went on to identify those that were active. It was from the list of the dominant clusters that I chose four on the basis of convenience and their being rich with information (Patton, 2002). Below are the contexts of the four clusters. The names are withheld for confidentiality.

Cluster one consists of four schools, three primaries and one secondary. The schools are all in what used to be a mining area. Formal and legal mining activities had ceased and workers retrenched. Three of the schools are clustered within a radius of five to six kilometres, and the other school is about 17 kilometres from the others. I managed to administer my questionnaires to almost all the 34 primary school teachers, with interviews held with one of the principals, a clusters resource teacher and an ordinary teacher. I also observed a cluster meeting/workshop in progress.

Cluster two consists of six schools, two secondary and four primaries. Of the six, two are satellites, a primary and a secondary. The cluster is located in a communal, mountainous area. The schools are sparsely located with a distance of about 12kilometres apart. One of the schools was difficult to access and for this reason I failed to distribute my questionnaires or conduct interviews. I could have captured their feelings and opinion with regard to cluster activities since their school was isolated. In this cluster 40 participants

(primary school teachers) responded to my questionnaires. I also interviewed one principal, the cluster resource teacher and another ordinary teacher.

Cluster three is made up of four schools, three primaries and one secondary. The cluster is located in former African purchased areas-farms. The furthest schools are about 15 kilometres apart. These schools were generally small with most teachers teaching more than one classes(composite class teaching). The road network was relatively good. Fifteen questionnaires were distributed to the respective primary school teachers by the cluster coordinator and all were returned for analysis. This cluster was not selected for interviews.

Cluster four consists of four schools, three primaries and a secondary. The cluster is located in farms and a resettlement area. As with cluster three, the schools are small and isolated, about 17 kilometres apart. The road network was not good. Twelve participants responded to my questionnaires, which were distributed by the cluster coordinator. This cluster did not participate in qualitative phase of the study. The final sample for the survey comprised 101 teachers, whose breakdown is as follows:

Cluster 1=34

Cluster 2=40

Cluster 3 = 15

Cluster 4=12

Total = 101

The questionnaire

The study employed a questionnaire to solicit quantitative data with regard to instructional leadership actors and practices in the cluster from teachers and school heads. The aim was to obtain as much information as possible from a large population with the intention of gaining a broader view of cluster instructional leadership practices and artefacts (Patton, 2003). According to Labovitz and Hagedon (2007:70), a questionnaire is "... an instrument comprising of a series of questions that are filled in by respondents themselves". It can be used to obtain information concerning facts, beliefs, opinions, views and intentions (Leedy & Ormrod, 2005), in this case teachers' opinions and views of cluster instructional leadership practices. McMillan and Schumacher (2010:195) posit that "...questionnaires can use statements or questions, but in all cases, the subject is responding to something

written for specific purposes". In this case participants were responding to information with regard to cluster activities.

Questionnaires can be structured (or closed form with selected response or closed ended), semi-structured (or open form to allow the respondent to write in the response he/she wants). McMillan and Schumacher (2010) advise that although there is a large range of questionnaires the larger the size of the sample the more structured, closed and numerical it may be, and the smaller the sample size the less structured, more open and word-based the questionnaire may be. McMillan and Schumacher (op cit.) advance the advantages and disadvantages of each form. Closed-form items are best for obtaining demographic information and data that can be easily categorized and much easier to score and analyse. Highly structured closed questions can generate frequencies of response amenable to statistical treatment and analysis and this can permit comparative analysis between or among samples (Cohen et al., 2010). The disadvantage of closed form items are that they may fail to allow respondents to indicate the choices accurately, especially in some forcedchoice items. Again, structured items cue the respondents. Contrary to the closed form, open-ended items exert the least amount of control over the respondent as s/he can write a free account in his/her own terms. On the other hand, open-ended questions can lead to irrelevant and redundant information being given. They require much time for the respondent to respond and data is difficult to code and analyse (Cohen et al., ibid.).

Cognisant of the advice given above I synchronised the strength of both forms of questionnaire and produced one questionnaire that would be easy to handle and useful in terms of capturing the issues under investigation. The bulk of the questionnaire was structured and only three questions were open-ended. The reason for having a few open-ended questions was to ensure that respondents would justify and elucidate the instructional practices captured and/or left out in the structured section. They could also respond as they wished with regard to the effects of cluster activities on student learning and how they would wish clusters to improve on their current status. The structured section (closed-ended) required individual respondents to simply choose from "strongly agreed, agreed, neutral, disagree or strongly disagree" without justification (Labovitz & Hagedon, 2007).

The five-point Likert scale, which includes a neutral choice, supports McMillan and Schumacher's (2010) view that more often than not respondents are forced to make choices that are incorrect or not to respond at all, especially to the forced-choice format,

thence it is better to include the middle category. In this case I wanted respondents to indicate their true responses as to whether they 'strongly agree,' 'agree', 'strongly disagree', 'disagree' or 'neutral' to the varied instructional leadership practices and artefacts, thus validating the questionnaire as a data collection tool.

The necessity for using a questionnaire lies in its being the most efficient way of obtaining certain information that lies deep in people's minds in a short time, whilst for Leedy (1997) it is a commonplace instrument for observing data beyond physical reach of the observer. McMillan and Schumacher (2010) argue that questionnaires are popular and credible because they can collect information from a large population at a relatively low cost. Questionnaires are similar to interviews, but instead of items being administered and responses recorded by someone else, they can be self-administered and anonymous since no identity can be required. They are also economical in terms of time, having the advantage of focusing on a wide range of topics and collecting data for populations that could not be observed individually (Babbie, 1992). Due to this range of advantages the questionnaire was found to be suitable for collecting data with regard to cluster instructional leadership artefacts and practices. The open-ended section permitted participants to indicate other instructional practices left out on the responses and permitted candid responses on the respondents' perceptions of what they felt could be done to improve cluster instructional leadership.

On the other hand, the questionnaire as a research instrument is also found to have some disadvantages, one of which is that there is no opportunity to probe beyond the given answer to clarify issues or make a follow up. The researcher tried to overcome this challenge by having an open-ended section on 'any other comments' for the respondents to indicate anything s/he deemed necessary with regard to cluster instructional leadership. Another challenge is that it requires extensive preparation to generate clear relevant questions. Pie (2004) believes that the effectiveness of a questionnaire depends on the construction of good, clear and unambiguous items. At times, the use of a questionnaire could be difficult if the respondents are illiterate, so a thorough literature search was made, as well as incorporating expert advice. All respondents were literate, however the instructional leadership jargon could be difficult for them so as a precautionary measure I endeavoured to make the language as simple and precise as possible. In spite of some of the disadvantages cited above, the questionnaire remained a reliable and trustworthy instrument for collecting data in this study.

Structure of the questionnaire

The questionnaire was designed to gather data from both teachers and heads on cluster instructional leadership practices. The questionnaire (see Appendix A) consisted of three sections: Section A, biographical data of respondents; Section B, a structured section or closed questions; and Section C, an unstructured section or open-ended question. Section B consisted of itemized instructional leadership practices and artefacts presumed to be exhibited in school clusters, drawn from the literature review. The structured items were divided into four variables deemed critical to instructional leadership dimensions of a cluster, namely, (i) defining cluster mission; (ii) managing instructional programme; (iii) creating positive climate; and (iv) instructional artefacts. These were subdivided into specific instructional leadership performance indicators, each item being rated in a five-point Likert scale (strongly agree, agree, neutral, disagree and strongly disagree) to determine the extent of its implementation. The unstructured part solicited from respondents their views with regard to any other instructional practices not indicated in section B (structured part), their views on successes, challenges as well as suggestions to improve cluster instructional leadership.

Reliability and validity of questionnaires

Cohen et al. (2011:199) claim that reliability is a synonym for dependability, consistency and replicability over time, over instruments and over groups of respondents. Other terms used are credibility, confirmability, trustworthiness and transferability (Lincoln & Guba, in Cohen et al., 2011). According to Maree (2007), trustworthiness refers to the way in which the inquirer is able to pursue the audience that the findings in the study are worthy paying attention to and that the research is of high quality. On the other hand, the same authors view dependability as the degree to which the reader can be convinced that the findings did indeed occur as the researcher says they did. In this study I sought reliability by pilot testing the survey instruments, a process Oppenheim (1992) defines as a small-scale study run on a trial basis designed to prepare for the main study. In running a pilot test the researcher puts into trial the whole project, from the researcher's aims, instruments, and methods of data collection to the results. It was desirable to make sure, as far as possible, that all aspects of the research would work before the actual study. Thus, a pilot test proved the reliability and validity of the study.

I selected a population with similar characteristics with my intended study, that is, teachers who were conversant with school clusters. Five teachers were given the surveys to complete, thus helping in editing of the instruments, and determining the time participants would take to complete the questionnaires and their level of difficulty (McMillan & Schumacher, 2010).

Cohen et al.(2011) posit that validity is an important key to effective research, without which the study is worthless, whilst for McMillan and Schumacher (2010) it is the degree to which scientific explanations match reality and judgment of the appropriateness of a measure for specific inferences or decisions that result from the scores generated. Cohen et al. (2011:198) postulate that in mixed methods study the term 'validity' should be replaced by 'legitimation' and used try to overcome problems of representation, legitimation and integration. Thus, to ensure the questionnaire was valid I asked a specialist to judge whether the instrument which was constructed after thorough literature review was likely to measure what it was intended to, that is, cluster instructional leadership practices. I also sought assistance from my peers, who were instructional leadership PhD students, for clarity of meaning and in ambiguity of questions (Gall et. al., 2006). Their suggestions, together with my supervisor's comments, were all considered.

The questionnaires were distributed in person to ensure a hundred percent return rate. With the letters of consent to carry out the study I drove to all the six schools in the district. I introduced myself and explained briefly the study purpose to the school head, who in turn introduced me to the staff and distributed the questionnaires to the teachers. Independent completion of questionnaires ensured candid and objective responses since no names were to be written for reasons of anonymity. Individual distribution of questionnaires also permitted me to thank the participants.

3.5.2 Data analysis

Kombo and Tromp (2009) assert that data analysis involves examining what has been collected in surveys or experiments and making deductions and inferences. It includes uncovering underlying structures, extracting important variables, detecting any anomalies and testing an underlying assumption. For Ross and Postlethwaite (1991), it requires a plan that helps the researcher to start thinking about how he/she will answer the research

questions for which he/she is collecting data. With an analysis plan the researcher is ready to slice through the data and glean some messages.

Data from all the questionnaires was aggregated and presented using descriptive statistics, expressed as percentages, means and standard deviations, presented in tables for analysis (Sidhu, 2005). Such a presentation permitted the researcher to reveal cluster trends in terms of their implementation of instructional leadership activities. This implied that instructional leadership practices for each cluster permitted a comparative analysis.

3.6 THE QUALITATIVE PHASE

The study employed qualitative methods to explore the second, third and fourth research questions, as a follow up to certain issues raised in the first, quantitative, phase on different instructional leadership practices and artefacts. Meadows (2003) writes that qualitative research helps to understand social phenomenon in a natural setting, with emphasis on views and experiences of the participants. According to Mason (2006:121), qualitative research is about depth, nuance, and complexity about how people work. Qualitative researchers engage participants and seek to construct realities from the participant's viewpoint. Thus, participants could give an interpretation of what cluster instructional leadership activities entail and in the final analysis their interpretation of clusters and the researcher's interpretation of them are used to construct multiple realities of the BSPZ cluster. In addition, the qualitative studies also involve observations which are determined by the researcher's own values (Teddlie & Tashakkori,2007). Thus, observation was necessitated by the need to see on site how school teachers and heads go about cluster meetings/workshops. Thus, I could come out with my own interpretation of cluster instructional leadership. In this study I intended to move a step further by getting an insider view of how instructional leadership was distributed in school clusters and its possible effect on student achievement from teachers, teacher leaders and principals as cocluster coordinators.

I could get a glimpse of the influences of leadership distribution (context) through interviews, thus, a clear picture of what instructional leadership practice in clusters entail. This phase complemented data obtained from the quantitative phase, thus triangulating data. Issues such as how instructional leadership was enacted in clusters, routines and practices as well as perceptions which could not be well explained through questionnaires

were unearthed through interviews and observations. Thus, the qualitative phase not only addressed the second, third and fourth research questions (cross reference using page numbers) but also explored further major instructional leadership issues highlighted in the quantitative phase.

3.6.1 Data collection

Sampling

Participants for the data collection phase were selected using purposive sampling for their potential in providing rich information on how instructional leadership was distributed in school clusters (Patton, 2003). Both cluster coordinators and cluster resource teachers (teacher leaders) were selected on the basis of their having in-depth knowledge of clusters. These are the people who by virtue of their posts plan, implement, monitor and evaluate cluster activities. Two more teachers (one from each cluster) were conveniently and purposively selected, their names having been provided by cluster coordinators for their experience in cluster activities. They were selected to provide independent views on how instructional leadership is enacted in clusters. All six participants were however selected to provide candid information with regard to how instructional leadership was enacted in clusters, its successes, challenges and how best it could be improved. Each participant was interviewed once.

The interview

The interview is one of the main data collection tools in qualitative inquiry as it elicits people's meanings, experiences, definitions of situations and construction of reality (Punch, 2005). Interviews facilitated triangulation of data as well as following up on views raised through the survey. Cohen and Manion (2011) posit that, unlike questionnaires, when well conducted interviews provided in-depth data, and allow the respondents and the researcher to ask for clarification, increasing the chance of obtaining valid information from respondents. Interviews can give researchers a view of the typical behaviour displayed in society. Labovitz and Hagedom (2007) define an interview as a set of items or questions (structured or unstructured) that are asked and answered by the interviewer in a face-to-face situation with the respondents. Punch (2005) writes that interviews can be structured, semi-structured or unstructured. Structured interviews are closed quantitative

interviews in which respondents answer predetermined questions which they choose from predetermined answers. Semi-structured are what Patton (2002) refers to as the interview guide approach. In this type of interview the issues and topics to be discussed are specified in advance, with sequence and wording of questions detailed in a schedule or protocol. Unstructured interviews depict natural conversations and there is no sequence to follow. For Creswell (2012:217), qualitative interviews occur when a researcher asks one or more participants general, open-ended questions and records them. The purpose of interviewing people is to find out what is in their minds. As Frankel and Wallen (1996:447) put it:

...we interview people to find out from them those things we cannot directly observe. The issue is not whether observational data is more desirable, valid or meaningful than self-report data. The fact of the matter is that we cannot observe everything; we cannot observe feelings, thoughts and intentions.

Creswell (op cit.) writes that interviews permit the participants to voice their experiences unconstrained by any perspective.

Cognisant of the above interviews helped me to observe facial expressions, body language, gestures and other cues, particularly when expressing attitudes, feelings or perceptions of instructional practices and instructional leaders. They afforded an opportunity to verify or refute the information given previously through the questionnaire, thus, allowing the researcher to compare information given by the surveys with information given face-toface. For Best and Khan (1993), the interview is often superior to other data gathering methods because usually people are more willing to talk than to write. Denscombe (2010) posits that interviews provide space for participants to articulate their priorities, opinions and ideas. Participants in an interview have the opportunity to expand their ideas, explain their views and identify what they identify as crucial. By so doing the researcher constructed meaning of what instructional leadership entails and how it is distributed in school clusters. The instrument was found to be appropriate because it involved contemporary interaction between the researcher (interviewer) and the public or participants (interviewees). The proverb 'to err is human' and the feeling 'I have told them my mind' underscore the importance of interviews, especially with regard to instructional leadership. The interviews to some extent permitted the researcher to observe and rate the participants' literacy level of instructional leadership. As alluded to in the literature review (Phillips, 2009), the concept is relatively new and hence could cause some implementation

challenges. Their ease of understanding, and conversely the instructional leadership jargon, could be indicative of familiarity with the concept.

The interview has, however, some limitations. Borg and Gall (1996) note that it betrays subjectivity and bias, especially when the respondents want to please the interviewers. The interview has chances of giving or producing false results (Cohen &Manion, 2007). In this case, depending on one's attitude towards clusters one could give false information about how instructional leadership is distributed and its effects on student achievement. For instance, Chikoko (2007) established that some stakeholders were against the idea of parents funding cluster activities. Such an attitude might overlook the important benefits of clusters to student learning. However, the limitation could be overcome by observing some of the cluster meetings. Interviews can also be overwhelmed by emotional uneasiness when answering questions. Denscombe (2010:93) writes that although using the audio-recorder is vital to capture all interview proceedings it can create an artificial situation that can invade one's privacy making people uncomfortable. To guard against this limitation the research reassured participants of confidentiality (Gray, 2009).

Another way to overcome the above limitations was to familiarize myself with the interview schedule and so avoid waste of time. Correct recording of respondents' answers is also important as failure to do so would cause some distortion. It is also important to show interest in the answers given by the respondents in order to encourage their full participation. The interviewer ensured that all barriers to effective communication were removed. As a sign of appreciation, the interviewer should from time to time thank the respondents for cooperating yet also respect non-responses, such as refusing to answer a question.

Designing the interview schedule

Opie (2004) views an interview schedule as a well-structured list of questions that will be asked during an interview to ensure that an interview goes well. The schedule for this study was constructed after an extensive literature review on how instructional leadership is enacted and distributed, as well as how schedules are designed and conducted. In this study, semi-structured interviews (see Appendix B) were adopted as they were compatible with the social interaction theory. With semi-structured interviews there is no imposition of meaning. Meaning is created through interaction as the interviewer could probe further

for substantiation and expatiation of facts particularly not understood. By so doing the participants developed ideas and spoke widely on issues raised by the inquirer. McMillan and Schumacher (2010) write that semi-structured interviews involve a pre-existing set of questions, but allow the interview the flexibility to deviate and probe further if necessary. Semi-structured interviews were used as they allowed for carefully prepared questions which ensured that all areas were covered and nothing left out. They permitted the researcher to deviate and probe further in order to gain in-depth knowledge of the issue in question (Gray, 2009). Issues such as the way instructional leadership was distributed, effects of cluster instructional practices on student performance, and perceptions of cluster instructional leadership needed probing to go beyond simple fixed answers. The researcher avoided suggestive, leading and double barrelled questions as they could lead to subjective and biases results (Colman & Briggs, 2003).

Quality criteria

To ensure dependability of the interview schedules a pilot test was administered to one school principal and two teachers in the same district, assuring me of the approximate time taken and the clarity of the questions. The researcher had to ensure that those involved in the pilot test were amongst the list of clusters that were active. To increase the dependability of the results, participants were permitted to cross-check for their recorded responses. Prolonged engagements in the field were also made to capture salient issues and note divergent information and themes (McMillan & Schumacher, 2010), with regular peer debriefings to allow for consideration of new perspectives and give opportunities to challenge biases during data analysis. Richardson (2000) prefers crystallization or triangulation of data sources as another way of ensuring dependability and trustworthiness of results. Thus, results from interviews were compared with results from the questionnaire and observation. Again, results from the teachers were also compared with results from other participants, such as cluster coordinators.

As in the case of questionnaires, validity of interview schedules was ensured through specialist judgment. The schedules were assessed by both my colleagues and supervisor, and recommendations considered accordingly. In support of peer reviewing of interview schedules, Mafuwane (2011) argues that peer reviewing provides support, plays devil's advocate, challenges the researcher's assumptions, pushes the researcher to the next step

and asks in-depth questions about methods and interpretations. Credibility was also guaranteed by providing rich, thick descriptions of the participants, as well as observations by the researcher.

Six participants were interviewed: two teacher leaders, two principals (one being a cluster coordinator) and two teachers, to find out how instructional leadership is distributed in school clusters, successes, challenges and views on how it could be improved. I visited each participant at his/her convenient time, briefly explained the purpose of the interview and asked whether the he or she had any questions or concerns. Each interview lasted for not more than two hours and proceeded as per schedule. When further clarification was needed, probing was carried out to ensure elaboration on critical issues, such as how instructional leadership was distributed, its impact on student and participants perceptions of instructional leadership, as well as on what participants felt should be done to improve cluster instructional leadership (Maree, 2007). I tape recorded the proceedings and took abbreviated notes which were later expanded for analysis.I made it a point to thank the participants at the end of each interview session.

3.6.2 Data analysis

Interview data was transcribed, coded and analysed in themes (Kombo & Tromp, 2009). According to Maree (2007), in mixed methods research the purpose of data analysis is not to measure but to interpret and make sense of what is in the data. Before data was analysed each interview was transcribed and returned to the interviewee to check for content accuracy. Each transcript was then coded using predetermined themes, in line with the study objectives, which emerged as units of analysis, such as cluster instructional leadership, cluster professional development, distributed leadership in clusters, perceptions of stakeholders, challenges, successes and suggestions to improve cluster instructional leadership. The data was presented as thick descriptions to increase their trustworthiness, regarded by Mafuwane (2011) as providing as much detail as possible for the reader. To corroborate interview interpretations with what participants had said, member checks were made through revisits (Bogdan & Biklen, 2007). Thus, participants were asked to verify, correct and elaborate on emerging themes and supporting quotations before both the analysis and final report were carried out.

Observations

Observations were made to authenticate the nature of interactions by teachers and heads in cluster meetings, intended to answer the question: how is leadership distributed in clusters? I was also interested in establishing issues that emerged in interviews such as: what did you do exactly in staff development meetings? This was to explore further the nature of instructional leadership activities designed for the teachers (see Appendix B). According to Maree (2007:83), observation is "... a systematic process of recording the behavioural patterns of participants, objects and occurrences without necessarily questioning or communicating with them". MacMillan and Schumacher(2010) argue that observations rely on a researcher's seeing and hearing things and recording the results rather than relying on the subject's self-response to questions or statements. Observations can be of facts, events as they occur or can focus on behaviour or qualities (p.456). For Patton (2002), observational data should enable the researcher to enter and understand the situation that is being described. Thus, observations complemented data obtained from surveys and interviews thereby validating the study findings.

The researcher was permitted to observe *in situ* cluster interaction patterns which promote effective instructional leadership. Observation provides a context opposed to a highly contrived setting and thus gains a deeper insight and understanding of the phenomenon understudy. MacMillan and Schumacher (op cit.) acknowledge that observations are easy, straight forward and can be recorded as events occur naturally. However, they argue that they may be affected by the presence of the observer. Selective and subjective observations may also infringe on the trustworthiness of observation results. Creswell (2012) posits that observation requires good listening skills and careful attention to visual detail. To minimize this I defined in precise terms what I intended to observe as well as the purpose of my study.

As Maree (2007:84) writes, "... the focus should be linked to research questions or subproblems. Define your terms or key constructs to be observed and constantly ask; what are the cues or facts I am looking for? How will I recognize them?"Observations for the current study were focused on who led the cluster professional development meetings, who were the dominant participants, how decisions were made, the nature of responses and interaction, artefacts and their use, the topics discussed, and the routines. The intention was to observe how instructional leadership was distributed in clusters and the effects thereof. Issues such as authority differentials and collegiality raised in the literature review could also be observed during cluster meetings. I tried to get an insider perspective by participating in the cluster meetings, thus, participants' assumptions, values and beliefs could be captured. Before the observations were made the schedules were assessed by my supervisor for validity, whilst to ensure credibility and dependability of the results participants were asked to verify the recorded observations. Once made, the observations were recorded on a template that reflected the date and time, situation, participants, action observed and reflection (Maree, 2007).I endeavoured to record two important dimensions, namely descriptions of the observed and my own reflection about the meaning of what was observed. Both verbal and non-verbal behaviour was recorded, thus, issues such as collegiality and authority differentials could be easily observable.

Conducting Observations

Cluster coordinators were informed of my visits, the purpose of which I explained before the meetings. During the meeting I assumed the position of a participant but remained focused on my role as an observer (Maree, 2007). This offered me an excellent opportunity to see experiences from the participant's view. I remained uninvolved and did not influence the dynamics of settings or behaviour of the workshop participants. My role was to look for the patterns of behaviour of members, that is, how they interacted with one another, who influenced who (authority differential), how they related with one another (collegiality), any notable patterns of behaviour, and how they made use of instructional tools (if any). All these point to how instructional leadership is enacted, distributed and/or understood in clusters. Commenting on the role of the observers during observations, McMillan and Schumacher (2010) note that the role of observer depends on the degree of inference or judgment that is required. At one time the observer makes 'high inference' observations, which are judgments or inferences based on observed behaviours. In this instance the observer records his/her own judgment of what has been observed. On the other hand, 'low inference' observations require the observer to record specific behaviour without making judgments in a more global sense. McMillan and Schumacher (ibid.) subscribe to the latter approach, but this study adopted an intermediate role, whereby the observer recorded the observations and later made the judgments. This saved time and permitted a smooth flow of events. Commenting also on the role of the observer, Creswell (2012) maintains that no one role suits all the situations, but depends on comfort at the site, rapport with participants and how best one can collect data to understand the phenomenon

understudy. One can assume the role of an 'insider' observer engaging in activities of participants or assume the role of an 'outside 'observer who sits on the periphery to watch and record the issues understudy. Creswell (ibid.) argues that it is advantageous to shift or change roles, making it difficult for one to be strictly participant or non-participant. One has to adapt to the situation. In the current study I tried to adapt to the situation and ensured that I observed as much information as possible with regard to my study. This was necessitated by my having built good rapport with the cluster coordinator, school principals and some teachers during the quantitative phase of my study.

3.7. RESEARCH ETHICS

Babbie (2010:75) writes that "ethics are typically associated with morality and deal with right and wrong". In brief, they deal with conformity to the standards of a given profession or group. Throughout the study, in observations, interviews and data gathered from questionnaires, confidentiality was observed. The principles of ethical propriety include consideration of fairness, honesty, openness of intent, disclosure of methods employed, the ends for which the research should be executed, a respect for the integrity of the individual, the obligation of the researcher to guarantee unequivocally individual privacy, and an informed willingness on the part of the subject to participate voluntarily in the research activity. Participants were guaranteed participation without force, intimidation or fear and were not subjected to physical or psychological harm.

According to McMillan and Schumacher (2010:117), "Ethics are considered to deal with beliefs about what is right or wrong, proper or improper, good or bad". Once again, the rules of carrying out research are important in producing unbiased data. Human subjects have a right to refuse to participate in any study, for example, if they think or suspect that the study goes against their cultural, religious or social beliefs. Thus, where names were necessary pseudonyms were used. Fraenkel and Wallen (2011:23) posit that, "human subjects have the right to choose the extent to which and manner in which they will share or withhold information about their behaviour, attitudes or opinions". The researcher respected the wishes of the participants and found ways of gathering information without infringing on private lives.

Responses from participants were kept confidential. Once again, numbers and letters were used in place of names, for anonymity, and were to be destroyed once the study is

complete. Confidentiality identifies a given subject's responses but essentially promises not to reveal its identity publicly. In interviews, the researcher spoke to the subjects, knew their views and their identities but promised not to reveal their identities to those who would read the research. McMillan and Schumacher (2010:122) write that, "confidentiality can be ensured if no one has access to individual data or to the names of the participants except the researcher(s) and that the subjects know who will see the data before they participate". This is to protect the subjects from undue harassment.

Participants have the right to know the intentions of the researcher(s) in conducting research. In this case, the aim of the research was stated in the covering letter. Respondents were assured that the information would not be used for any purposes other than those for which it was intended. Participants were requested to complete a letter of consent as a binding agreement before participating in the study. They could also withdraw at any time they wished.

3.8 SUMMARY OF THE CHAPTER

The chapter provided a detailed description of how data on cluster instructional leadership was collected. It explained in detail the general approach used, its historical and philosophical assumptions, the design employed and the different instruments used in data collection. The chapter elaborately discussed how both quantitative and qualitative approaches were employed to yield the best results for the study. Issues of validity, reliability and ethics were also unravelled.

The next chapter presents and analyses the data gathered using both quantitative and qualitative approaches.

CHAPTER FOUR: DATA PRESENTATION & ANALYSIS

4.1 INTRODUCTION

The previous chapter discussed in detail the approach and methodology employed in collecting and analysing data. A mixed approach was used to explore whether and how clusters could be sites for instructional leadership. The two-pronged approach was deemed appropriate to ensure that the strengths from both the qualitative and quantitative approaches were exploited. The quantitative phase permitted the researcher to explore as many instructional leadership practices and artefacts as possible from a large population, as well as capturing the teachers' views on how cluster instructional leadership could be improved. The qualitative phase, on the other hand, enabled the researcher to make a follow up on salient issues raised in the quantitative phase. It also addressed issues on how instructional leadership is distributed in school clusters and how instructional leadership can be understood or explained. This chapter thus presents and discusses the findings of the study. The presentation and discussion of the findings is conveniently divided into three sections: viz. quantitative data presentation; qualitative data presentation; and a summary that consolidates and relates the findings from both phases.

4.2 DATA PRESENTATION FROM THE QUANTITATIVE PHASE

The quantitative phase of the study, which used a questionnaire, addressed my first and fifth research questions, namely:

- What are the practices and artefacts for instructional leadership within the cluster?
- How are the instructional leadership activities perceived by both teachers and principals?

The sample for the quantitative phase included all primary teachers and school principals in the four clusters that were conveniently selected from the Masvingo District.

4.2.1 Section A: Biographical data

In total, 101 participants responded to the questionnaires, the first part of which sought to generate the biographical data of the participants. Of these, 68(67.33%) were female and

33 (32.67%) male. The numbers of participants and responses are expressed in percentages and rounded off to two decimal places for ease of interpretation. The tables below show the composition and distribution of participants in terms of gender, age, and educational levels.

Table 5: Gender, age, and education levels of respondents (n=101)

Gender	No.	Percentages
Male	33	32.67
Female	68	67.33
Total	101	100
Age		
21-30	8	7.92
31-40	24	23.76
41-50	49	48.51
51-60	18	17.82
61 +	2	1.98
Total	101	100
Professional qualifications		
C.E/D.E	71	70.30
B.A/B.Ed.	20	19.80
M.A/M.Ed./M.Phil.	3	2.97
PhD/D.Ed.	1	0.99
Other (please specify)	6	5.94
Total	101	100

Data from Table 5 (above) indicates that 67.33% of the participants who responded to the questionnaires were female and 32.67% male. These statistics indicate that more females were sampled than males. The reasons for the overrepresentation of women could not be ascertained, since the questionnaires were completed by all teachers in the four clusters. It is possible therefore the numbers simply reflect the actual demographics within the participating schools. Furthermore, the data showed that eight of the participants were below the age of 20 and only two above 60, which is the normal retirement age for women in the Zimbabwean civil service, and 65 for males. The results suggest that the majority (80.19%) of the respondents were aged between 30 and 59 years. Age can sometimes be a

problem when much travelling on foot is required, especially considering that schools in the Zimbabwean clusters are often sparsely distributed. This could also affect teachers' perception of cluster activities, particularly if they conceive of clusters in terms of inconveniences of having to travel long distances. It was thus important for me to establish the demographic characteristics of the participants so as to be able to contextualise their perceptions and other responses.

Regarding the academic qualifications, the study assumed that all teachers had either an Ordinary (O) level or Advanced (A) level as an entry qualification to practice as teachers, there was therefore no reason to include this question on the survey. The composition of respondents in terms of their designation was as follows: Ten school heads, two of whom were cluster chairpersons, 85 qualified teachers and six student teachers. The respondents had varied professional qualifications, ranging from a certificate or Diploma in Education (71 respondents); a Bachelor of Arts/Education (20); a Master's in Education (3); and one PhD. The majority of the respondents (70.3% of n=101) were holders of a C.E/Dip Ed, which is the entry level qualification for teachers in Zimbabwe. Six were student teachers. The necessity to include all teachers, regardless of their qualification, was based on the assumption that if clusters' instructional leadership activities were effectively carried out, their effect would be felt by all teachers, thus the need to get all teachers' perspectives.

Participants were also required to indicate their teaching experience as well as their membership in the clusters. The details are presented in Table 4.2 below.

Table 6: Teaching experience and experience in the cluster. (n=101)

Teaching Experience	No.	Percentage
0-5	16	15.84
6-10	27	26.73
11-15	8	7.92
16-20	19	18.81
21-25	19	18.81
26-30	8	7.92
31 +	4	3.96
Total	101	100
Experience in the cluster		Percentage
0-2	28	30.77
3-4	11	12.09
5-6	6	6.59
7-8	12	13.19

9-10	5	5.49
10+	15	16.48
Nil response	14	15.38
Total	101	100

Table 6 (above) shows the teaching experience of the participants as well as their membership in the cluster. The majority of the respondents (i.e. 85% of n=101) had more than five years teaching experience, with only 17(16.83% of 101) respondents engaged for between 0-5years. Clearly, the data shows that the majority of the cluster participants were experienced teachers [a total of about 84%)] who would be expected to know pretty well what is expected of them in terms of teaching and learning. For this study, in particular it could be expected therefore that the sampled teachers would be able to discuss and assess their experiences of the clusters relative to the expectations of their position, given their longer engagement with teaching and learning (more than five years). The sample was therefore well suited for the purpose of the study, viz. to explore clusters as sites for providing teachers with guidance and support on the expectations for effective classroom teaching.

Paradoxically, though, a sizeable number of these experienced teachers (i.e. 30.77% of n=101) were relatively new to the phenomenon of clusters. This group of teachers registered their membership as between zero and two years, suggesting that they had not even completed their probation period in the cluster. If we again use five years' experience as an indicator of significant experience with the cluster then about half of the sampled teachers (about 42% of n=101) were not as experienced with clusters. The sample was almost split in half in terms of those with five years' experience and those with less as cluster members. About 42% (n=101) had more than five years' experience in the clusters, suggesting a great deal of familiarity with the culture and practices of the cluster, including the knowledge of instructional leadership practices that are enacted within the cluster.

The 50% split in the sample presents an interesting set of possibilities for exploring at least two issues in this case: First, is the one possible implication of the large number of relatively newer participants (that is, those with less than five years' experience), which may suggests a need for the cluster to organize more professional development

programmes to nurture and induct these new entrants into the activities of the cluster. Whether this differentiated focus on instructional leadership to target especially the newer members of the cluster, separate from the older teachers happened in this cluster or not is one question we sought to explore through the data collected. Second, is the exploration of the differences, if any, in the perceptions of the cluster members depending on the length of their involvement with the cluster.

4.2.2 Section B: Instructional leadership practices

Section B of the survey asked participants to indicate how varied instructional leadership practices were enacted in their clusters. The next section thus briefly captures the perceptions on how instructional leadership roles and activities were enacted in the BSPZ clusters and will also explore the variations, if any, based on the demographic features of the sample. Four major instructional leadership roles based on Hallinger's (2012), Jones' (2010) and May's (2010) conceptualizations were identified in the study. These were: defining the cluster mission; managing instruction; creating a positive climate; and use of instructional leadership artefacts and/or resources. The survey used a five-point Likert scale, ranging from *strongly agree* (SA) to *strongly disagree* (SD), to discriminate the extent to which a specific instructional practice was being followed in a cluster. The scale was assigned points, with *strongly agree assigned five points* (SA) =5 points; *agree* (A) =4 points; *neutral* (N) =3 points; *disagree* (D) =2 points; and *strongly disagree* (SD) =1 point. The data was then expressed as percentages. The means and standard deviations were also calculated for comparison and ease of discussion and analysis.

4.2.2.1 Defining the cluster mission

The survey asked teachers to indicate the extent to which the instructional leadership role of defining the cluster mission was performed within their clusters. The role had six specific instructional leadership practices of which respondents had to rate using a scale of strongly agree (SA)=5 to strongly disagree(SD)=1. Their responses were coded as SA=5; A=4; N=3; D=2 and SD=1. This five point scale gives an average(mean) rating of 3.0 and a standard deviation of 1.41, implying a weak agreement or moderate implementation of the instructional leadership practices. The mean (Me) and standard deviation (SD) of clusters for each practice were computed, allowing the researcher to observe the variability

of responses across clusters on each item. Thus, a low SD implies a low variability. In this case, a standard deviation of less than 1.41 suggests a low variability or more homogeneity in terms of participants' opinion of a given instructional leadership activity /role. Using the data from each item, I then calculated the aggregate values (mean and standard deviation) for this variable to answer the question on whether the participants' felt that their cluster incorporated "defining a cluster mission" as one of its key activities.

Table 7: Defining cluster mission (n=101)

Instr	uctional Leadership Performance Indicator		
Defi	ning cluster mission	Mean	S.D
7.	The cluster has a clear vision on student learning.	4.07	0.34
8.	The cluster vision is formulated by cluster members in a participatory meeting(s).	3.76	0.53
9.	The cluster has an achievable action plan.	3.85	0.31
10.	All schools do have the cluster mission.	3.78	0.54
11.	The cluster mission provides benchmarks for success.	3.92	0.27
12.	Many of the participating schools are committed to work towards the attainment of the cluster goals.	3.84	0.21
	Overall mean	3.87	0.30

Statistics in Table 7 (above) show that the means for all instructional leadership practices indicators are all above 3.84, indicating that most respondents agreed that clusters performed well in the main instructional leadership role of defining a cluster mission. All the four clusters were rated above average in this role, with two (clusters 1 and 2) outperforming the others (refer to Appendix I for further analysis by cluster). The SD of clusters was not very large, ranging from 0.21 to 0.54. The statistics also show that all the six specific instructional leadership activities were rated way above average, with the first practice of having a clear vision on student learning rated the best (Me=4.07; SD=0.34). Given that the mission of the BSPZ clusters is to improve student learning, a higher rating on this category suggests that they indeed seem to have galvanised all the participants around this vision. Jones (2010) argues that instructional leaders should then follow a vision with set targets for student achievement. This study was, however, not able to establish the extent to which these benchmarks (on student targets) have been developed in the BSPZ clusters. The responses in Table 7, however, suggest that the cluster missions do

provide some benchmarks for school success (Me=3.92 and SD=0.27). It was also evident from the mode and means of 4 and 3.87 respectively, that respondents agreed that the action plans and cluster missions were available to the schools which could be one step closer to what Jones (2010) sees as the "set targets". Overall, the statistics reflect that the implementation of the instructional leadership practices was generally good across the board, even though the cross-sectional results in Appendix I show that clusters 1 and 2 did even better in these practices. The two clusters had an overall mean rating of 3.51. Most instructional leadership scholars (Hallinger & Heck, 2012; Jones, 2010; May, 2010) concur that defining a school vision or mission is one critical role of instructional leaders. Schools need to map, in advance, where they wish to go in as far as the performance of the school and students in particular is concerned. Hallinger (2012) also argues that the school mission should be collectively defined and by so doing all members have ownership of the whole learning process. Marks and Printy (2008) assert that shared responsibility is key to student achievement. On this question, it can be safely concluded that the BSPZ clusters perform well in the instructional leadership role of defining the school mission.

It is significant to note that there were no differences in the responses of the participants based on gender, status, educational qualifications, teacher experience, cluster participation and pre-service teacher status. Table 8 below shows the relationship between participants' demographic variables and the instructional leadership roles using Pearson' correlation coefficient (r).

Table 8: Participants' demographics versus Instructional leadership roles (n=101; p=0.05)

Instructional leadership role	Gender	Status	age	Experience
Defining Mission	R=-0.49	R=0.007	R=222	R=146
	p=.662	P=.980	P=.393	P=.591
Managing instructional	R=138	R=.135	R=013	R=.008
programme	P= .597	P=.605	P=.962	P=.135
Creating positive climate.	R=274	R=210	R=.408	R=.227
	P=.787	P=.418	P=.104	P=.399
Instructional artefacts &resources	R=270	R=343	R=.333	R=.209

P=.790	P=.178	P=.926	P=.437

It is significant to note that all members of the BSPZ clusters were unanimous about the focus on the mission of promoting and improving teaching and learning irrespective of their demographics. The findings provide a strong statement about this as a key function of the BSPZ clusters. Although there are some negative r-values indicating some disagreements between gender, status, age and experience on the instructional leadership roles of defining mission and managing instructional programme the values are statistically too insignificant. This means that the demographics had no influence on the participants' views with regard to the instructional leadership roles

4.2.2.2. Managing the instructional programme

Participants were required to indicate how they perceived the clusters' implementation of the instructional leadership role of managing the instructional programme. They were expected to rate the clusters' performance of each of the 25 instructional leadership practices which promote the management of instructional programme. The responses were again coded as 5=strongly agree; 4=agree; 3=neutral;2=disagree; and 1=strongly disagree. The mean and standard deviation were calculated to indicate the performances of the clusters on each of the specific instructional leadership practice items.

Table 9: Managing the Instructional Programme (n = 101)

	Managing instructional programme	Me	SD
13	Cluster action plan is aligned to district and ministry of education mission.	4.32	0.35
14	Action plan is stringently followed.	3.52	0.40
15	Workshops are held for teachers on teaching and learning.	3.58	0.52
16	Competent members are invited to facilitate at workshops.	3.75	0.38
17	Cluster engages in common tests.	3.37	0.88
18	Cluster tests results are analysed together by teachers.	3.10	0.76
19	Cluster tests results are analysed together by cluster leaders.	3.09	0.68
20	Feedback of analysed results is provided to teachers.	2.95	0.58
21	Feedback of analysed results is provided to learners.	2.73	0.47

22	Feedback of analysed results is provided to parents.	2.77	0.41
23	Feedback of analysed results is provided to school heads.	3.28	0.67
24	Resource teachers work with teachers on instructional issues.	3.60	0.50
25	Resource teachers demonstrate teaching skills to school teachers.	3.07	0.45
26	Teachers are provided with opportunities to teach across schools certain topic/s.	2.96	0.15
27	Clusters can source skills from within sister schools in the cluster.	3.42	0.27
28	Teachers sit together to engage in syllabus interpretation.	3.32	0.39
29	Teachers develop together and teach from common schemes.	2.92	0.24
30	Cluster heads supervise teachers during classroom teaching.	3.36	0.49
31	Teachers do peer supervision of each other's teaching.	3.25	0.53
32	Cluster monitors and evaluates its teaching activities.	3.27	0.39
33	Cluster monitors and evaluates its sporting activities.	3.98	0.27
34	Cluster monitors and evaluates its assessment activities.	3.51	0.44
35	Cluster committee holds review and annual general meetings.	3.88	0.45
36	Students often meet with other students on academic issues.	2.99	0.53
37	Schools share instructional resources.	3.76	0.53
	Overall mean score	3.35	0.36

Data from the questionnaires show that managing instructional programme(see Table 9) has overall cluster ratings of Me = 3.35 and SD =0.36. Overall, the SD was substantial, ranging from 0.15 to 0.88 percentage points. The 25 varied specific performance instructional activities constituting the managing instructional leadership role were rated and presented in the table above. Managing instructional programme is presented in the literature review as constituting supervising and evaluating instruction, coordinating the curriculum and monitoring student progress (Hallinger,2009). The instructional functions also include monitoring instruction and providing feedback, analysing data and supporting teachers' professional development and modelling instruction (May *et al.*,2012). The statistics in Table 9 (above) show that participants rated most of the activities (21 out of 25) above average, with only four activities rated below the average (Me=<3), implying a somewhat unsatisfactory performance. Nine activities had a strong Me of 3.5 and above. Considering that the average mean rating is 3.0, the overall clusters mean of 3.35 implies respondents positively acknowledged that clusters were moderately implementing the

activities. All clusters with the exception of Cluster 3 (Me=2, 82) had overall ratings of slightly above the average (see Appendix I for a comparative schedule).

It would appear from the data that clusters had managed to align their action plans to the district and the Ministry as required by the policy. Aligning cluster action plans to the district mission implies that clusters pursued the district or Ministry mandates in terms of improving student achievement. Makaye et al. (2014) view such an activity in terms of guided autonomy, which Marzano (2006) agrees is useful to ensure that schools operate within the "required box". Similarly, clusters that operate within guided autonomy have the liberty to do whatever is deemed necessary to improve student learning without losing track of the district's expectation. The activity of aligning action plans with the district also concurs with the best previously rated instructional leadership activity, that of having action plans with benchmarks for success(Table 7), implying that clusters' missions are well stipulated and known by stakeholders and their activities are formal and well laid down. Other than the alignment of action plans, the only other three instructional leadership items that were rated highly on this question were on sporting activities (3.98); holding of the annual general meetings (AGMs) at 3.88 and sharing of instructional resources (3.76). Examining these high scoring items would suggest that even though these activities form part of the instructional programme, they were not as close to the activity of teaching and learning as the others. Could it be then that it is easier for the clusters to focus on the non-teaching and learning activities? In the section below, we disaggregate and discuss the findings from the previous table.

The statistics show that the clusters engaged strongly in sporting activities (Me=3.98 and SD=0.27). This suggests a strong inclination by clusters to engage in sporting activities (extra/co-curricular activity). The practice of clusters collaborating on non-teaching activities is not only akin to BSPZ clusters as Jones (2009) observed that cluster members can jointly collaborate on sports events, excursions, shared teaching resources and joint curriculum development and the planning of teaching and learning(p.134).

Data from the same table above also identifies other instructional leadership activities which were performed well above average (Me=>3.5). These practices include workshops for teachers, resource teachers working with teachers on instructional issues, and cluster reviews. Activities related to assessment generally scored lower than others, with some of the items scoring as low as 2. Together, these represent the weakest set of practices of school clusters. The qualitative interviews explored the way the tests were set and

administered, as well as their impact, in greater detail. Findings from the qualitative interviews are presented in the qualitative section of the present chapter. However, the relevance of these tests seems to be in question if feedback is not provided to teachers and pupils as would be expected. Data indicate that clusters perform below par (Me=<3.0) in the practice of giving feedback. Although it can be acknowledged that giving feedback does probably happen to some extent in clusters, their performance was relatively poor. A standard deviation of>0.5 implies for example that some clusters could be moderately providing feedback to teachers and learners but rarely is it given to parents (for details see Appendix I). It is also clear from the data that feedback of test results is relatively high for school heads (Me=3.28; SD=0.67), perhaps because they are the gatekeepers of their institutions or happen to be present at each cluster meeting, hence tending to be familiar with what will have transpired. Parents are rarely provided with feedback (Me=2.77), which is one of the dominant practices acknowledged in instructional leadership at both the school and district sites. Feedback provides teachers information on the areas in which they have done well and those they need to improve on. Teachers need the feedback to correct and emphasise students' weak areas and the same could apply for students and parents. Blasé and Blasé (2005), Hallinger and Lee (2012) and May (2010) maintain that instructional leaders should provide feedback to teachers, thus there is need for clusters to provide feedback of the analysed test results to both learners and teachers.

Responses from the Table 9 above show that cluster reviews and annual general meetings are a common practice (Me=3.88; SD=0.45). Review meetings are assumed to be healthy for an institution as they allow stakeholders to discuss areas in which they have encountered challenges and successes as well as strategies for improving on their weak areas, therefore learning and teaching strategies as well as how student achievement can be enhanced should dominate them. Data also reveal relatively high scores for staff development workshops for teachers on teaching and learning and inviting competent members to facilitate these workshops. Staff development or capacity development is one of the key instructional leadership roles considered critical by many scholars (Barnes, 2010; Day *et al.*, 2011; Rorrer *et al.*, 2008; Williams, 2010), while Duze (2012) argues that principals who make instruction a top priority endeavour to bring that vision into reality by developing their staff. Most studies on school clusters concur that one of the goals of clusters is to develop staff or provide in-service training for its stakeholders. How these

workshops were carried out and their impact on teachers and student achievement is discussed further in the qualitative section.

Another interesting phenomenon revealed by the statistics from the table is the issue of sharing of instructional resources, which receives a high rating (Me=3.76, SD=0.53). It suggests that cluster schools engage in the sharing of teaching and learning resources. Giordano (2008) suggests that one reason for inter-school collaboration is to encourage sharing of resources, and by so doing the gap between the disadvantaged schools is minimized (Delport & Makaye, 2009). According to Hallinger and Heck (2010) and Rorrer *et al.* (2008), if clusters are to be better sites for instructional leadership they should ensure equity in the provision of both human and material instructional resources to all schools. Some of the instructional leadership practices were rated slightly above average (Me=3.0 to <3.5), indicating moderate implementation that included analysis of tests, teacher peer supervision and resource teachers demonstrating teaching skills. Appendix I presents a disaggregated table that shows how each cluster did perform on the different items discussed.

The practices of teacher peer supervision and resource teachers bring in one current instructional leadership dimension, that of teacher leadership. Firestone and Martinez (2007) and Harris and Muijs (2005) concur that teacher leadership is gaining currency in the current instructional leadership discourse, with Harrison and Killion (2007) maintaining that teacher leaders play the role of instructional specialists, supporting classroom practices, facilitating, learning and becoming catalysts of change.

Data from Table 9 confirms that resource teachers work with teachers on instructional issues and demonstrate teaching skills to teachers. It could be inferred that by supervising each other and demonstrating teaching skills a spirit of collegiality and unity of purpose is developed among teachers, and there is faithful implementation of the curriculum. In support of peer supervision and demonstration of skills, Mokhele (2011:71) argues that the opportunity to observe expert teachers and to be observed while teaching in their own class (after which they receive feedback) are important elements of active learning offered by professional development. However, how these activities are carried out and the direct or indirect effects on the teacher and learners need further inquiry.

Another interesting instructional leadership practice brought to the fore was allowing students to meet with students from other schools to share academic issues. Although this

practice was not prominent in all clusters (see Appendix I, item 36), it could be helpful for them as they might understand their problems better. If students are given the latitude and space to interact with others at their level they can freely do so without any inhibitions. How the clusters organize themselves for these students' exchange programmes and the impact thereof on learning also needs further exploration.

In summary, some instructional leadership practices that were rated highly by respondents were teacher leaders working with teachers on instructional issues; clusters sourcing skills from sister schools; engaging together in syllabus interpretation; cluster monitoring and evaluating its teaching and sporting activities; cluster committees holding reviews and annual general meetings; and clusters sharing instructional resources. Data from Table 9 shows that some teachers were also given the opportunity to cross boundaries in their teaching, that is, competent teachers could teach across grades and/or schools .Cross boundary was also alluded to in the literature review as one of the strategies of distributed leadership (Hallinger & Lee, 2012).For this reason I pursued this issue in my qualitative section to explore how the practice was done in BSPZ clusters and its effects on student learning. The details of these are discussed in the qualitative section as follow-up interviews were made to ascertain how this was done.

While the afore-going discussion has alluded to the instructional leadership practices which were done somehow fairly well (Me=>3.0), such as the instructional leadership role of managing the instruction programme Table 9, also shows instructional leadership practices which were performed below par to moderate (Me=≤0.3). These were provision of feedback to teachers, learners, parents and school heads, as well as developing together and teaching from the common scheme. Respondents also indicated a weak rating on developing and teaching from a common scheme (Me=2.9; SD=0.2). The indications of the data are that there are some clusters which are practicing, albeit at a low note (See Appendix I).

Data also indicated that teachers engage in collective syllabi interpretation, through which a common scheme can be developed to yield positive student results as teachers put together both their pedagogical and content knowledge. Such collaborative practices by teachers support Mokhele's (2011) observation of teacher clusters in South Africa, in that opportunities which allow teachers to engage in meaningful discussions, planning and practices are another form of active learning.

4.2.2.3 Creating positive climate

Participants were also required to indicate the presence and extent to which clusters played the instructional leadership role of creating a positive climate. The role consisted of 11specific instructional leadership activities, each of which the respondents rated as 5=strongly agree;4=agree;3=neutral;2=disagree and 1=strongly disagree, and were computed into the mean (Me) and standard deviation, as presented in the table below.

Table 10: Creating positive climate: (n=101).

		Me	S.D
	Creating positive climate		
38.	Cluster provides incentives to schools.	2.03	0.38
39.	Cluster provides incentives to individual teachers.	1.87	0.30
40.	Cluster provides incentives to students.	1.91	0.40
41.	Cluster rewards academic achievement by schools.	1.97	0.49
42.	Cluster rewards academic achievement by teachers.	2.04	0.75
43.	Cluster rewards academic achievement by pupils.	2.21	0.62
44.	Teachers also take up (academic or curriculum) leadership positions in cluster.	3.50	0.88
45.	The cluster engages effectively with the community.	3.79	0.40
46.	Cluster networks effectively with other clusters.	3.50	0.58
47.	Cluster networks effectively with other organizations with interest in education.	3.69	0.42
48.	Cluster links effectively with the district personnel:-inspectors, DRT, etc.	4.06	0.39
	Overall mean score	2.76	0.37

Statistics from Table 10 (above) indicate that there is variation in how clusters implement the instructional leadership role of creating positive climate. The responses vary from far below average (Me=1.87) to well above average (Me=4.06) with a low overall mean (Me=2.76; SD=0.37). The lowest ratings are on incentives and rewards, indicating that most clusters do not provide them for either teachers or students. The standard deviations also indicate that there was not much difference in the views of participants with regard to the issue of incentives and rewards. Only in Cluster 4 (see appendix I) is the rating for rewards and/incentive slightly above average (Me=3.08). Hallinger and other instructional leadership scholars argue that incentives are key to student learning and teaching as they

play a motivating role. Incentives could play a critical role particularly in a country with an ailing economy characterized by low teacher salaries. The issue of incentives and the effects there of on student learning requires further inquiry.

Related to incentives are rewards for excellence, with the high mean standard deviation implying that there could be a cluster which provides rewards to its teachers. The issue of rewards was followed up in interviews, the findings of which are discussed under qualitative data. Contrary to the other practices of incentives and rewards the clusters were found to be doing well at networking with other stakeholders as well as encouraging teachers to take up leadership posts. It can be concluded that most clusters encouraged teacher leadership, a result that contradicts previous studies by Madungwe *et al.* (2000) which established that teachers were side-lined in BSPZ cluster activities. Teachers are at the forefront of teaching, referred to as 'the chalk-face', interacting with both students and the curriculum, hence their active participation or taking leadership positions in the cluster is likely to influence and promote student learning.

Data from the table suggests that clusters network with other relevant stakeholders that promote learning as well as engage effectively with the community. Since schools and clusters do not operate in isolation from the community the two institutions should coexist. Schools rely on the community and other stakeholders as both material and human instructional resources. Makaye (2011) noted that BSPZ clusters are funded by the community and the cluster comprises different stakeholders that make up the community, however, stakeholder participation in clusters as well as its effects on student achievement is yet to be explored. Harris and Goddall (2007) and Prytula (2011) argue that it is not mere participation of the community that influences teaching and learning but effective and meaningful engagement. It could be inferred that parents fund cluster activities through cluster levies, and can come in as resource persons on certain subjects or topics. They can also contribute to the construction of learning centres as well as purchasing instructional resources, such as books.

Data from Table 10 also suggest that all clusters seem to link effectively with the district, and how the two institutions link is further discussed under the qualitative section. Rorrer *et al.* (2008) and Mazarno (2007) concur that districts should provide schools with the autonomy to do whatever they deem necessary to improve teaching and learning in their schools, however, Mazarno (ibid.) avers that the type of autonomy should be guided to ensure that schools operate within the expectation of the district. Guided autonomy ensures

that cluster operations differ in the way they discharge their instructional leadership duties, depending on the leadership's ingenuities. How autonomy and control play out each other and their effects on teaching and learning in school clusters need further exploration.

The results in the table resolve the overarching issue of teacher leadership indicating moderate to above average (Me=3.5; S.D=0.9) implementation of the practice, with teachers taking up leadership posts in the clusters. The previous presentation on teacher leadership indicated the various roles teacher leaders perform to improve student learning and teaching. The spread of leadership to teachers suggests that leadership is distributed to followers. Spillane and Harris (2004) argue that leadership does not reside in one individual, and that distribution of leadership is in a healthy position since no one person can be a specialist in all fields. How leadership is distributed in clusters is presented in the next section on qualitative findings.

4.2.2.4 Instructional artefacts and resources

Respondents were requested to indicate how clusters implemented the instructional leadership role of artefacts and resources, the responses computed as in the table below.

Table 11: Instructional artefacts & resources (n=101).

	Instructional artefacts& Resources	Me	SD
49.	Cluster has its own lesson observation/supervision forms.	2.53	0.57
50.	Cluster keeps a record of school (academic) achievement.	2.97	0.67
51.	Cluster has its own test bank.	2.73	0.64
52.	Cluster has its own recommended textbooks.	2.08	0.28
53.	Cluster has its own newsletter or magazine.	1.92	0.26
54.	Cluster has a constitution guiding instructional practices.	2.72	0.56
55.	Cluster has its own functional library.	1.84	0.19
	Overall	2.40	0.36

Table 11 (above) indicates that the instructional leadership role of instructional artefacts and resources is poorly performed. Most of the activities were rated below the average (Me=<3) with only one rated average (Me=3) implying poor implementation of the seven instructional leadership activities. The overall ratings of the implementation is generally below the average (M=2.40; SD=0.36). Statistics in the same table indicate that in spite of the poor performance of the activities, clusters seem to perform somehow better on cluster records. Data in Appendix I indicate that Cluster 4 does keep academic records for its students (Me=3.83). Cluster records help clusters plan for subsequent activities as the leaders or members have somewhere to which they can make reference. These records could vary from cluster to school or student performance. Madungwe *et al.* (2000) advise that BSPZ clusters should keep a record of their activities, for example, minutes of meetings or workshops, cluster registers and financial records. This study did not follow up on the clusters records although I observed that the secretary in the observed cluster meeting/workshop was recording the proceedings.

Other instructional leadership practices which were better rated in the poor category were cluster supervision instrument, test banks and constitution. These artefacts can be helpful in teaching and learning since their design and use involve collective effort which can eventually lead to faithful implementation of instructional practices. It can be inferred that the design of these instruments incorporates consideration of key issues that are core to teaching and learning. A test bank can be useful in that school teachers can borrow the tests and revise them with their pupils, and cluster tests could conform to high standards that can even assist pupils in their preparation for national examinations. Whilst Table 11 indicates the presence of these artefacts, how they are used and their impact on student achievement is another area of dispute.

Data from the same table above shows that respondents denied that the clusters had prescribed textbooks, magazines or functional libraries. Whilst the Ministry prescribes essential texts for use by schools, clusters can adopt their own texts for their own schools which they deem critical for the achievement of their students. Likewise, magazines can inform clusters and schools of what is happening in the cluster, including how certain topics can be taught. Both teachers and student articles can be slotted in the magazines. Similarly, the cluster library can assist immensely student learning if well established. Notwithstanding that most schools are rural and disadvantaged, the cluster library could turn the fortune of most of the students' academic life. Delport and Makaye (2009)

established in their study on BSPZ clusters that most had been poorly implementing this role, thus it can be concluded that they performed poorly on the dimension of instructional leadership artefacts. Clusters do not have resource centres in which they can house library books or any other cluster teaching or learning material/equipment, though Giordano (2008) posits that most clusters should have resource centres which they can use as venues for meetings.

Table 12: Overall cluster instructional leadership performance (n=101)

	No. of I.L	Cluster 1	Cluster 2	cluster 3	Cluster 4	Ove clus	
Instructional leadership Role	practices	Me	Me	Me	Me	Me	S.D
Defining cluster mission	6	3.51	3.51	2.89	3.37	3.62	0.50
Managing instructional programme	25	3.39	3.61	2.82	3.57	3.41	0.59
Creating positive climate	11	2.74	2.74	2.33	3.23	2.51	0.44
Instructional artefacts & resources	7	2.19	2.71	1.99	2.70	2.19	0.39
Means	49	2.95	3.14	2.51	3.22	2.96	0.32

Table 12 (above) shows the overall cluster performance of the four instructional leadership roles namely defining cluster mission, managing instructional programme, creating instructional climate and instructional artefacts. The table provides also a comparative analysis of how the four roles were performed in the four clusters. To this end, the overall performance confirms whether clusters can be sites for instructional leadership. Data indicates that clusters perform slightly below average on their instructional leadership roles and activities (Me=2.94; SD=0.32)., with the two major roles constituting 31 activities rated well above average (Me=3.41&3.61; SD=0.4).Data from previous tables and Table 12 above suggest that clusters do offer some opportunities for instructional leadership as half of the surveyed clusters registered moderate performance and the other half slightly below average (Me=2.51 & 2.95). It is clear from the table that the dominant roles performed by the clusters as a sites of instructional leadership is defining its mission, of which most members are aware of, as well as its targets and vision. The mission is a

product of all stakeholders' concerted effort. It can be envisaged that the cluster has the political will to decide on what it wants to do and how it should do it.

The second dominant instructional leadership role is managing the instructional programme, which envisages what the cluster does to ensure that it achieves its goals of improving teaching and learning. The role includes aligning its mission to that of the district, organizing and conducting in-service training for teachers, administration and analysis of cluster tests, providing feedback and resources, monitoring and supervising instructions. Hallinger and Lee (2012) summarily write that managing instructional programme envisages supervising, and evaluating instruction, coordinating the curriculum and monitoring student progress. It also includes providing feedback, analysing data and supporting teachers' professional development (May *et al.*, 2012).

It is also clear from Table 12 above that clusters performed poorly on the instructional leadership roles of creating positive climate and instructional artefacts. Only Cluster 4 recorded a moderate rating in this role (Me=3.23). What it could suggest is that clusters ought to have more effective mechanisms or strategies to motivate their teachers and learners. Whilst the previous discussion alluded to practices such as promoting teacher leadership, community engagement and networking as strategies to create a positive climate, more strategies which directly motivate teachers and learners need to be put in place. Similarly, data in Table 12 suggest that clusters seem to lag behind on instructional artefacts and resources. Cobb et al. (2003) and Spillane (2003) concur that instructional leadership artefacts aid principals and teachers in effecting instructional leadership in school. We could safely conclude that more of the artefacts which could be in form of supervision instruments, checklist, selected textbooks could offer better opportunities for student achievement. Appendix I shows that only Clusters 2 and 3 seem to have artefacts like supervision forms, record of achievement, constitution and test bank. Interviews were carried out to explore further on the artefacts and their utility and findings are presented in the qualitative phase.

4.2.3: Section C: Participants' perceptions of cluster instructional leadership

The survey also asked participants to give their views with regard to other instructional leadership practices that could have been not alluded to in the structured section. It sought to capture participants' perceptions of the impact of clusters on teaching and learning as

well as suggestions on how cluster activities could be made more effective in their quest to improve the quality and efficacy of teaching and learning in schools. There follow details of the unstructured part of the survey.

4.2.3.1 Other instructional leadership practices

More than half of the respondents gave a nil response to the question indicating that they had nothing to add as additional instructional leadership practices. This indicated that section B had addressed the common practices clusters could engage in. However of those who responded otherwise, most of them cited instructional leadership practices that had already been alluded to in section B of the questionnaire. Why participants repeated practices which had been already cited previously could not be ascertained but it could be inferred that they did so as a way of emphasizing, or they could have misinterpreted the question which asked them to indicate instructional activities not alluded to in section B of the questionnaire. Staff development workshops, cluster tests analysis and feedback, demonstration lessons, and pupil exchange problems were some of the practices which recurred in the responses (see Table 13 below). A few respondents indicated essay writing competitions, computer lessons, cultural exchange programmes and heads' workshop as some of the practices clusters engaged in. These activities were not previously mentioned in section B and how the practices influence student achievement could not be ascertained. The activities are a pointer to the varied practices clusters could engage in, however, clusters engaging in the activities are indicative of the spirit of collaboration in their endeavour to improve the quality of learning and teaching in their respective schools. Other activities which were skirted were pupil exchange programmes as well as exchange of weekly tests. These activities, if effectively conducted, can have some positive impact on student achievement. The details of how the cultural exchange programmes impact on student performance were followed up in the qualitative phase of the study.

Table 13: Other instructional leadership practices (n=101)

INSTRUCTIONAL LEADERSHIP PRACTICES	RESPONSE	
	S	
	No.	%
Staff workshops	10	9.9
Assessment of teachers by cluster	1	1.0

Charter tests analysis and food heals	6	5.9
Cluster tests analysis and feed back		5.9
Computer lessons		3.0
Common schemes		2.0
Demonstration lessons	4	4.0
Pupil exchange programs, cultural exchange	2	2.0
Essay writing competitions	1	1.0
Cluster reading resources for teacher	1	1.0
Incentives for teachers	1	1.0
Inter cluster networking	1	1.0
Supervision by cluster school heads	1	1.0
Sporting activities	1	1.0
No idea	2	2.0
Nil	65	64.4
TOTAL	101	100.0

4.2.3.2 Instructional leadership artefacts

Participants who responded to this section indicated cluster tests, textbooks and computers /laptops (to type tests) as cluster instructional artefacts. Cluster tests were indicated to be one of the instructional leadership activities performed well by clusters (see Table 9), while cluster textbooks were poorly rated. Overall data from section B indicates a poor performance of the instructional leadership artefacts. By acknowledging that laptops were instructional leadership artefacts it could be inferred that some of the respondents could have misconstrued what instructional leadership tools/artefacts were. Acknowledging Phillips' (2009) view that the instructional leadership discourse is a new phenomenon in most developing countries, respondents to this question could not be conversant with the jargon as indicated by some 'No idea' responses, however, how the said artefacts aid teaching and learning could not be established. Spillane (2004) posits that instructional leadership artefacts assist in supporting teaching and learning. From my observation and interview with one of the cluster resource teachers the laptop was used to analyse data and printing syllabi for cluster schools. According to Honig (2012), tools for representing data and other material artefacts have received attention in instructional leadership studies at school and district level.

The survey also sought to establish perceptions of respondents with regard to the impact of cluster activities on the performance of students, particularly in Grade 7 examinations. Thirty participants gave a nil response or not applicable. Most of the participants who responded to the question cited varied views, with 42(41.6%) saying that clusters improve student results. Sixteen specified that they have improved Grade 7results while others

indicated that they slightly improved. Some participants cited varied ways clusters impact on teaching and learning. These varied from permitting and encouraging sharing of a wide range of information by schools, encouraging teachers discuss learners' problems and monitoring their progress to providing opportunities for schools to compete for better results. One participant envisaged that clustering encourages oneness amongst teachers. These views were also observed by several scholars on instructional leadership and inter school collaborations as benefits of school cluster (Aipinge,2008;Giordano,2008;Jita & Dlalane,2009;Jita & Mokhele,2012;Jones & Harris,2010).Table 14 (below) indicates that clusters in general improve teaching and learning and ultimately student performance. With only six responses indicating that clusters had little impact on student improvement and four denying noticing any impact, some positive pay-offs to clusters have been pointed out.

Table 14: Impact of clustering on student performance (n=101)

IMPACT	RESPONSES	
	No.	%
Improves pass rates, Grade 7 results, good positive impact	42	41.6
Cluster tests are very helpful	1	1.0
Wide range of concepts, information	1	1.0
Slightly improved exams	8	7.9
Little impact	6	5.9
Schools compete for better results	5	5.0
Help monitor progress, discuss learner problems, encourage oneness	3	3.0
Prepare for final exams	1	1.0
N/A	13	12.9
Nil response	17	16.8
Non noticed	4	4.0
TOTAL	101	100.0

The last part of the questionnaire solicited for participants' suggestions on how cluster activities could be improved to better student learning. Table 15 (below) captures participants' views on what they thought could be done by clusters to improve student learning. Several responses indicated that clusters should engage in more tests(17.8%),

more professional development workshops particularly on syllabus interpretation (27.7%), and award academic achievement as well as incentives (13.9%). The former two suggestions were indicated to have been common cluster instructional leadership activities in section B whereas the latter was poorly rated. The recurrence of the activities implies that they are critical to teaching and learning. Giordano (2008) and other scholars on clusters (Mafuwane, 2011; Aipinge, 2007; Jita&Mokhele, 2012) concur that they are mostly established for pedagogical reasons and one of the core activities is professional development of teachers. Scholarship on instructional leadership affirms that professional development and incentives which can come in the form of recognizing and awarding academic achievement are amongst the core of instructional leadership at both the school and/or district sites (Hallinger & Lee, 2012; Rorrer et al., 2008). Effective professional development is embedded in classroom practices and it sharpens skills teachers acquire during their formal training. It is only through professional development that teachers are kept in tandem with the everyday demands of their profession. Participants also specifically identified syllabus interpretation as deficient for most teachers and suggested that teachers receive in-service training in that area. Teachers who lack skills to interpret and teach according to the syllabus were likened to a physician who misdiagnoses and gives the wrong treatment to a patient, with negative consequences.

Jones (2009), Jita and Mokhele (2014) have revealed that planning together how to teach challenging topics or going through experiments by teachers in clusters helped them improve on both their content and pedagogical content knowledge. By planning together, teachers help each other interpret curriculum frameworks, and they can discuss the methodology as well as instructional material to use. Other suggestions to improve teaching and learning in school clusters are improving the regularity of supervision and professional meetings, making the post of the cluster resource teacher full-time and establishing libraries in clusters. Lineburg (2010) has argued for more professional time being provided to teachers. Findings from the deliberations at the observed meeting indicated that both parents and teachers felt that teachers should meet twice or thrice per term on matters to improve teaching and learning. Hammond *et al.* (2009) cited examples of teachers in developed countries, such as the USA and UK, where teachers spend about two thirds of their time either work shopping each other and/or demonstrating. Teacher clusters under the JICA programme in South Africa engage in cluster activities on weekly basis (Jita & Mokhele, 2014; Mokhele, 2011).Developing countries can also learn from

these experiences, however, the challenge could be that teachers in developed countries are given incentives for professional development whereas in developing countries such as Zimbabwe they do so using their free will. Long distances between schools, coupled with lack of transport and poor road networks, could also contribute negatively to the frequency teachers meet for cluster activities. It was also revealed from the interviews that some teachers seemed to be reluctant to participate in cluster activities, citing poor remuneration.

The issues of cluster resource teachers and cluster libraries and/or resource centres were also revealed in interviews as better ways to improve cluster operations. Participants seemed to appreciate the importance of the role of the CRT in coordinating cluster activities and felt that the government should remunerate him/her commensurately. Stanley (2011) also in her study of collaborative teacher study groups alluded to the need for such a teacher who coordinates and schedules professional development activities. Other suggestions are indicated in the table below.

Table 15: Suggestions to improve school clusters (n=101)

SUGGESTIONS TO IMPROVE SCHOOL CLUSTERS	RESPONSES	
	No.	%
More regular workshops, meetings (on ICT, syllabus	28	
interpretation)		27.7
Full time resource teacher	7	6.9
Reward teachers, incentives	14	13.9
Common schemes	3	3.0
CRTs exchange programme, public speaking, newsletter		3.0
Resource centre, cluster library, own vehicle		5.0
More tests and teacher demonstration	18	17.8
More supervision activities(teachers, HODs, Heads, SDCs)	14	
monitoring		13.9
Involve teachers in planning, leadership	2	2.0
Nil/No idea	7	6.9
Total	101	100.0

4.3 FINDINGS FROM THE QUALITATIVE PHASE

The qualitative phase was used to gather data addressing the following research questions:

- How can instructional leadership practices be understood and/or explained?
- What suggestions and improvements can be made to the instructional leadership practices of the clusters?
- How is instructional leadership distributed within the cluster?

The phase was not only used to address the above questions but also to corroborate and complement data obtained from the surveys in order to explore on whether and how clusters can be sites for instructional leadership. It also sought to clarify certain issues raised in the survey. Two instruments were employed, namely semi-structured interviews, specifically focusing on the two former problems, and observations on the latter.

4.3.1 Data from interviews

The sample for the interviewees included two primary school principals (one being a cluster coordinator), two cluster resource teachers and two ordinary primary school teachers, all of whom were purposively sampled from the four clusters that participated in my quantitative survey. All interviewees were drawn from the two clusters code-named Cluster M and Cluster K. Data from the interviews which did not last for more than two hours each are presented below. For reasons of confidentiality, pseudonyms of clusters and participants are used.

Table 16: Pseudonyms

Cluster M	Designation	Cluster K	Designation
Mr.Beto	Head and cluster chairperson	Mr. Chomu	Head and Cluster secretary
Mrs.Yuna	Teacher	Mr.Choto	Teacher
Jones	Cluster Resource Teacher	Toro	Cluster Resource Teacher

Data is presented in terms of themes generated from the interviews, as follows

4.3.1.1. Cluster instructional leadership practices

Interview data from the participants, viz teachers and principals, supports that from surveys on several instructional leadership roles performed by clusters. The data, however, helps to explain in specific terms what clusters do and how they perform these roles. The major question asked was: What instructional activities or practices do you engage in? Participants mentioned cluster tests (setting, administration and analysing), lesson supervision by peers and networking with parents as dominant roles but how the roles were performed differed from cluster to cluster. Mr.Beto, a school principal who was also the cluster chairperson, said "we carryout supervision as a cluster. This is carried out by heads, TICs, senior teachers and deputy heads. We also observe lessons done by teachers".

The same question was asked to both teachers to triangulate with what the principal had said.

Mrs.Yuna said: "We supervise each other as peers and hold workshops on topics of interest". Whilst both the principal and teacher participant concurred that the cluster engaged in supervision it can be concluded that supervision played a dominant role in the cluster. Participants explained how this supervision was carried out. Mrs.Yuna explained that:

We visit our schools as a cluster. That is principals, SDCs and teachers. When it comes to supervision teachers will supervise teachers. They observe the teacher teach, scrutinize the record books and classroom layout. We don't leave anything. After the observation we give the teacher feedback

The same views were echoed by the cluster teacher leader, Jones:

We assess the learning environment, that is the classroom, books, classroom and observe the lessons. As we will be working as teachers, SDCs will be discussing with other SDC members, sharing best practices. Heads also assess and supervise themselves. After the observation feedback is given to the observed teacher

The SDCs could not be interviewed on how they interacted as cluster members, what issues they discussed or the impact of those issues on the overall or specific development of the school. They were not part of my study focus, though their views could greatly improve instructional leadership practices in clusters. This could be another area of debate. However, my probing of the principals indicated that principals also discussed issues to do with the overall administration of their schools. Mr. Beto for example had this to say:

We looked at everything, including office layout, financial records, buildings, teacher discipline and even discuss issues to do with raising student pass rates. If there is need to have a combined meeting with our SDCs we always do so. We don't have any problem at all.

The same principal indicated that the cluster had its own supervision instrument, used whenever they supervised classroom teaching and did lesson observations. This could be the cluster whose members (participants) indicated in the previous questionnaire survey that they had a supervision instrument as an artefact to help them discharge their instructional leadership role of supervision. The interview with Mr.Beto and Mr. Jones(cluster chairperson and teacher leader respectively) indicated that they tailored the instrument to suit their situation and needs as a cluster. Both the principal and teachers concurred that they also run cluster tests: "We also set and moderate tests for the cluster" (the principal).

From the interviews I could deduce that the cluster was strongly engrossed in supervision and lesson observation as its dominant instructional practices. It had also designed its own supervision instrument that was adaptable to its needs, with emphasis more on actual teaching and learning. Supervision, lesson observation and feedback are considered critical and esteemed instructional leadership practices by several instructional leadership scholars, such as Hallinger, Lee and Hammond, with Spillane attesting to supervision instruments as one other instructional leadership tool schools or clusters can use. These instructional leadership practices and artefacts were also highlighted in the surveys. Although, data from the surveys had indicated poor rating on instructional leadership artefacts the interview excerpts above suggest the effective use of the supervision and lesson observation instruments.

It emerged from the interview excerpts that teachers deal with issues to do with their craft alone, which Jita, Makaye and Mapetere (in press) conceive of in terms of teacher autonomy and as giving birth to creativity, ingenuity and diversity of cluster activities. The views from another cluster reveal interesting activities clusters could engage in to improve teaching and learning. It can be concluded that clusters provide teachers with the autonomy to decide on what they deem necessary to improve teaching and learning.

Another interesting lesson drawn from the excerpts is that the issue of collegiality is at the centre of cluster supervision and activities. Clusters use the strategy in supervision,

whereby teachers supervise each other and school heads likewise. Often advice from peers has a more enduring effect than the one from authority figures, who in most cases are associated with fault-finding.

Mr. Chomu said:

...the cluster engages in cluster tests, sporting activities. We have cultural art festivals annually. The cluster also holds staff development workshops which are quite beneficial to teachers. The cluster is making some quite good things for the schools.

Mr. Choto, a teacher, described the cluster activities as follows:

The cluster is doing quite a good thing, particularly for remote schools like us. It engages in cluster tests. We have the Sanganai cluster festival every year, where pupils and community members showcase and compete in poetry, drama, music, traditional dance and public speaking. The cluster also holds workshops for teachers.

Asked how the cluster engaged in the activities, Mr. Choto explained:

School cluster reps meet and allocate to schools subjects they can set. The schools set the tests and bring them to the cluster for moderation. Sub-standard tests are returned to schools for re-setting. If they meet the grade they are printed and distributed to schools, ready for administration. The tests are marked at schools and results are analysed at cluster level where ambiguities of questions are revealed. Tests assist greatly improve student performance since they are syllabus-based, hence teachers will teach from the syllabus.

Probed further, Mr.Choto revealed that the cluster administered tests for Grades 1-6 for the second and third terms. ¹⁵Grade 7 sits for the District and ZimSEC examinations in second and third terms respectively. The effectiveness of the cluster tests was described by Toro: "One of the schools that used to record a pass rate of four percent had its pass rate improve to twenty percent since we started these cluster tests. So how can one doubt the importance of cluster tests?" Cluster tests are one of the instructional leadership artefacts in the clusters with positive results so further research is encouraged, particularly on how they can impact positively on student performance. However, Zbar (2009) argues that

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¹⁵ The Zimbabwe school calendar has three terms.

analysing data is one critical practice in which instructional leaders, be they principals or teachers, should engage. Results from analysing data assist in making informed decisions on where, what and how to improve, but can only become useful as feedback on where, what and why schools had gone wrong, and how they could address failure. Thus, data becomes useful in teaching and learning once it is analysed and feedback is given to those concerned. It can also be a source of other future cluster meetings or workshops. Results of analysed data can show areas in which pupils are weak or strong and teachers can make several suggestions to improve. Thus, subsequent workshops can be aligned to equip teachers with pedagogical skills to solve those problems.

The other instructional leadership practice both the school principals and teacher identified was the annual festival. The cluster teacher leader related:

The festival focuses on drama, poetry, music, traditional dance and public speaking. So, we focus on problematic areas which affect our community such as epidemics like AIDS, social vices such as crime, drugs, prostitution, etcetera. Schools and the community members prepare their presentations along the suggested themes. The theme is suggested by us. The festival is funded by our friends abroad. The festival develops in pupils skills like speaking, reading ... you know even the language improves. It also affords us with the opportunity to interact with the community and other teachers thus promoting cohesion and oneness. Because of this we have partnered with ... University department of Arts, National Museum and Monuments of Zimbabwe and Ministry of Health.

The excerpt raises the idea of collaboration with the community, cohesion and networking as necessary for success, and as resulting in community support for school programmes and projects. The idea of networking has also helped the cluster secure material resources for teaching and learning. Toro explained:

We have our friends in UK who sponsor our Arts festival activities. They have also donated laptops to the school and a printer. All our schools have twinned with schools in UK and this has culminated into good pay offs. Most of our pupils have friends they communicate with in UK, and that's a good experience. As you can see I am printing syllabi for our schools using this heavy duty printer. The problem is that most teachers are not computer literate hence I am the only one to use the laptops. We intend to train our teachers in computers.

From the narrations one can infer that networking with others promotes teaching and learning, particularly when partners assist needy friends (clusters) with teaching and learning resources. Twinning creates long-lasting synergy for both teachers and learners and some pupils will have lasting friendships with their peers perhaps motivating them to strive for better results. Fullan (2009) argues that schools no longer operate alone but should move "from going it alone to alliances" and encourage collaboration and synergies by teachers. In support of this idea of teachers collaborating, Lieberman and Mace (2010) argue that they should move away from the 'four walls' of the classroom and work with other teachers. The interview excerpts also showed that the annual festival had become an instructional leadership routine for cluster K, the kind of routine Sherer (2008) argues is critical in cementing instructional practices in schools.

A particularly problematic activity that emanated from the interviews and that has recurred from the survey is the popularity of sporting activities. Although not academic, physical education is being developed as a subject and the more schools participate in sporting activities the more the illusion is strengthened. Since a few individuals have been able to make a short-term living through sport, some clusters have considered it important.

4.3.1.2 Cluster professional development

The study intended to establish how, when and by whom the workshops were carried out, their frequency and impact being the major foci of the interviews. The major issue to be addressed was how clusters determine topics for professional development or in-service training. All participants agreed that there was consultation with teachers on the topics to be workshopped, although they differed on the modalities. In cluster M, the cluster resource teacher made a needs analysis, whereas in cluster K staff development topics were decided by school cluster representatives who would have consulted the teachers.

Mr. Jones described how he identified the topics:

We choose topics which are relevant to the needs of the teachers, both professional and academic. For instance we recently called for a workshop on conditions of service, whereby we called the district human resource personnel come and workshop us on the acts of misconduct, etcetera. You see we can't have teachers who don't know their condition of service. We lost a number of our good teachers

who were implicated in improper association with pupils as well as abuse of leave. So the meeting was very crucial.

Affirming Mr. Jones, Mrs. Yuna from the same cluster echoed similar sentiments: "In most cases we see circulars from the Public service but fail to interpret them. As a result we are found on the wrong side of the law, so workshops like that are very important".

It could be deduced that knowledge about the teacher's condition of service can be equally important to craft knowledge, namely, pedagogy and content knowledge, since it concerns 'bread and butter' issues. Conditions of service can motivate or demotivate employees so knowledge of them is crucial to teachers.

Mr. Jones cited other meetings that had nothing to do with teachers' pedagogical and content knowledge but which impacted equally on teaching on learning:

We also held e-e-e workshops on 'meeting morale of Grade Seven teachers' and 'challenges faced by children'. The purpose of the workshops was to share best experiences on how clusters can retain competent teachers by motivating them. It's no point to have teachers who do not live longer at a station. It disadvantages pupils. At the same time it is important for teachers to be conversant with pupils' challenges so that they can be in a better position to assist them.

Mr.Beto identified other topics for professional development he could vividly remember:

We held one on conditions of service [cited by Jones and Y above] and on teaching composition. The latter was facilitated by our secondary school teachers. You see there is that gap between secondary and primary education. Interestingly this was also attended by both primary and secondary teachers. So we wanted to close that transition gap.

Interview excerpts from the above revealed interesting lessons on the content and nature of professional development meetings and workshops for clusters, but though the topics addressed the cluster's current needs they could not be replicated to other clusters. UNICEF (2009) and Giordano (2008) have established that clusters engaged in varied activities of their own needs and choice, while Ndlalane (2006) in his study of teacher clusters in South Africa also revealed that voluntary teacher clusters (external) engaged in varied activities they deemed necessary and helpful to improve on their craft as teachers. They also dealt with issues of interest. The use of secondary school teachers to facilitate workshops affirms one of Hallinger's (2012) strategies of boundary crossing, whereby an

expert can cross the boundary of his/her grade or section to model or teach a particular skill for the benefit of the learners. The strategy also promotes a spirit of colleagueship, cohesion and unity of purpose. Both primary and secondary school teachers regard each other as peers and if well-articulated this strategy can work well in most clusters as they are dominated by primary schools and thus the isolation encountered by a solo teacher in small secondary schools can be overcome.

Such synergies and strategies, however, can be another area of debate, as Mr. Jones indicated in the interview:

You see there are some primary teachers who have done university degrees in some of these subjects so they can compete equally well with their counterparts at secondary level given the latitude and space they can show case their knowledge for the benefit of fellow teachers and students.

The strategy of boundary spanning used by clusters can motivate teachers as well as help students with better instruction. Considering that most teachers in both secondary and primary schools are now holders of several degrees, whom the government cannot pay commensurately, participating in cluster activities can motivate teachers in their work. In a study of teacher clusters in South Africa, Ndlalane (2006) revealed that voluntary external clusters combined primary and secondary school teachers as they held the view that knowledge has no boundaries and cannot be divided or segmented into knowledge for primary school teachers and knowledge for secondary school teachers. They can all benefit from each other through sharing. If well-articulated the strategy can yield positive results in terms of student achievement.

Mr. Chomu from cluster K pointed out that: "We have held one on the running of Early Childhood Development [ECD]. There were also demonstration lessons on ECD. It was an eye opener as most of us could see for ourselves how it is done at ECD level". It can be inferred that cluster K covered activities from ECD to other higher levels, with their professional development including techniques such as demonstration or model lessons. Most cognitive psychologists and instructional leadership scholars argue in favour of demonstrations as fostering understanding of concepts rather than simple talking. A question which also needs to be addressed is how participants are selected for these meetings and how they would take what they would have learnt to their stations to ensure effective implementing in the classroom by teachers. Mr.Choto represented the views of

most interviewees: "...selection of teachers for cluster professional development meetings is based on merit. When it is for ECD, the ECD teacher is invited and the same applies for other workshops". Asked how they would ensure that what was learnt from the workshop would be taken home. Mrs. Yuna indicated that those who attended cluster meetings were given time to give a full report of what would have transpired at the workshop (feedback). Usually, the head allocates the afternoons to ensure that teachers are not disturbed by pupils. Mr.Beto, from the head's perspective, affirmed:

I have to make sure that all the teachers benefit from the workshop attended. I can devote the whole day and give facilitators ample time to make their presentations as they cascade to others what they would have learnt. Yes! One or a few can attend cluster workshops but the rest of the teachers benefit in this way.

Mr.Choto's views and those of others acknowledge the view that teachers were given time to provide feedback:

Although I haven't attended any one cluster workshop but those who attend are given ample time to provide feedback. I remember one workshop on marking essays. The report back has helped me and most teachers as we can now mark essays according to ZimSec standards. Unlike kudhara[before we participated in the workshop] marking is no longer subjective as we used to do. You now consider things like gross errors, etcetera.

The above excerpt may indicate that those who attend cluster professional development meetings were being provided with the opportunity and autonomy to cascade in as many similar ways as possible to do what they would have done to other teachers. Giving feedback is another important instructional leadership practice principals have been encouraged to use for better student teaching and learning (Hallinger & Lee, 2012). Since cluster activities are carried out during the normal working days only a few attended the meetings whilst others remained occupying the learners, so it is prudent to have effective feedback for the benefit of others. Feedback had also been acknowledged to be low in the previous questionnaire responses, although this was for cluster tests analysis. It was evident from the interview excerpts that teachers were provided with feedback on cluster workshops to ensure that they cascaded down to all the teachers expected.

How and whether the workshops and feedback were effective, Mr. Jones indicated that supervision helped in monitoring and evaluating their impact on professional development.

However, Mr.Beto vehemently challenged any claim that pupils had improved their English writing skills: "I tell you there has been a great improvement. I can show you some of the pupils' essay exercise books". I also saw some quality essays from books submitted for supervision to the head, although it was not part of my research plan to observe documents.

It can be inferred that cluster professional development workshops have a more positive impact than traditional workshops, which are divorced from realities of their participants(teachers). Cluster workshop are needs-driven (Makaye,2011) and results are likely to be faithfully implemented. This is different from the one-off traditional workshops which are alienated from the needs of the participants (Mokhele, 2011), however, findings also revealed that participants needed more of these meetings. Most teachers felt that one or two meetings per term were not enough, sentiments echoed during one meeting I attended. Teachers and SDC members suggested that these meetings be increased as they were beneficial, and from the proceedings at the meeting observed, one SDC member said that it was good for teachers to meet regularly for the purpose of "cross-pollinating" ideas on issues related to teaching and learning. Mrs. Yuna agreed in the interviews, saying "one or two meetings" were not enough. The same sentiments were also made by respondents in the questionnaire surveys.

4.3.1.3. Distributed leadership in clusters

Asked to explain whether cluster instructional leadership tasks and roles were distributed, participants' responses in the interviews concurred with workshop or meeting observations that suggested leadership did not reside in one person but was distributed according to the situation, confirming the view of Sherer, Harris and Spillane.

Choto spoke on leadership distribution in clusters:

Although we have our cluster chairperson Mr --- and our cluster resource teacher, the two do not work alone. All heads in the cluster have a role to play. We also have school clusters representatives. These coordinate cluster activities at the school. For instance, they can mobilize teachers to participate in cluster activities. The school clusters identify professional needs for the cluster together with others at the cluster. They are also important in allocating subjects for testing by schools. They can also moderate and analyse the tests.

Jones said: "almost all stakeholders play a part to lead the activities in the cluster. Teachers supervise each other, they can inspect both teachers' and pupils' books." Jones and Choto's excerpts reveal an interesting emerging issue of teacher leadership. Clusters promote leadership by teachers, who are peers, and principals in the clusters grant complete autonomy for teachers to operate under guided autonomy, that is they are required to do whatever they want within the jurisdiction of the cluster. Ishmail (2012) argues in favour of guided autonomy to school principals as it gives them freedom to operate freely but within the guidelines of local authorities.

Drawing from observations of the cluster meeting I learnt also that cluster leadership is spread across different stakeholders, including teachers, parents (represented by SDCs) and school principals. In cluster M. the treasurer was a woman from the secondary sector, who ensured that all cluster activities were funded and to whom principals had to pay their subscription. Jita and Mokhele (2012) argue in favour of the institutionalization of school clusters in South Africa, with results from their study showing that institutionalization of cluster activities does not require a blueprint from the government as recommended by Makaye (2011) for Zimbabwean clusters, and Aipinge and Weber (2007) for Namibian clusters. Clusters require commitment by members and stakeholders, astute leadership focused along teaching and learning, and one who can put it into practice.

Observations also confirmed the view that there was task distribution in the cluster among members. The cluster chairperson's or coordinator's main role was to facilitate and ensure that matters were on course. What is not known, however, is whether teachers can independently organize successful cluster activities. From both the interviews and the observations I could infer that teachers and principals played a complementary role. The following excerpts from the cluster meeting clearly show this complementary role: Mr Beto: "Mosara muchipedzisa mozotipawo cluster test committee yamaselector. (You finish up your business as well as selecting that cluster committee"; and Mr. Jones: "Ngatichipedzisa vakuru vasati vasvika/ (Let's finish up before the leaders have come back)."

The excerpts bring to the fore interesting views that the principals may have the final authority or want to give teachers autonomy to do and make their own decision without hindrance or interference from the authority figure of principals. Answers to these can be found by further exploration of teachers' and principals' perceptions of leadership

dynamics and decision making in school clusters, and how they matter in teaching and learning?'

In the interviews with Mr.Beto, the cluster coordinator, he tended to say: "Let's consult my colleagues" or "Let me consult Jones", implying that decisions in the cluster on what should be done, by whom and when, did not reside with one person, thus, attesting to the fluidity of leadership concept by Spillane (2004). In this instance the cluster was not conceived of as a personal entity or as an individual institution, but rather all contribute to its success.

Jones highlighted how instructional leadership in a cluster was distributed:

You see our cluster management committee comprised of five, school heads, SDCs chairpersons and teacher representatives. Each plays his/her own role with ease. The treasurer [teachers] controls our funds; the cluster resource teacher coordinates our activities, etc. so in our cluster we work as a team. Right now I am waiting for Mr---, the resource teacher, so that we organize dates for the next cluster meeting.

Phase two of the BSPZ cluster as well as Cluster guidelines by Madungwe *et al.* (2000) clearly state that cluster management committees should be representative of all stakeholders in teaching and learning. Namibian school clusters have also similar committees (Pomuti& Weber, 2012). However, little is known on how effective these committees are to improving teaching and learning in schools. From the excerpt above and observation of the meeting it was evident that clusters were composed of a cosmopolitan grouping of members. Teachers, principals and parents were observed to be not only represented in cluster activities but also actively engaged with the cluster.

4.3.1.4. Perceptions of stakeholders of school clusters

The study also sought to capture participants' perceptions of cluster activities, how they perceived leadership by the teacher leaders and the principals as cluster chairpersons. They also revealed what they liked best about the cluster activities, successes and challenges and what they felt should be done to improve cluster activities.

Mr.Beto could not conceal his view:

I feel different by belonging to a cluster. I have learnt a lot as cluster chairperson, from how to coordinate fellow principals and teachers as well as organizing

activities and that has impacted positively on teaching and learning. However, I am one of the happiest man since most of our schools have changed drastically for the good. You can see some trophies and certificates which we were awarded for being an outstanding cluster as well as for producing good results.

Mr.Beto's office had a chart with a cluster programme, leaving no doubt that he was the cluster coordinator.

Nor could Mrs. Yuna conceal her perceptions:

So far so good! The cluster is doing a wonderful thing for us. The workshops are very helpful. We cross-pollinate ideas as teachers. Just imagine if your class is inspected by others you definitely make a self-introspection of yourself so that next time you are not found wanting. We also get to know each other as teachers because we rotate schools. This is one thing I like about our own cluster. Of course I feel different by belonging to this cluster.

Jones had his own views about the cluster:

As a cluster resource teacher I say that cluster activities are allocated little time. As a full-time teacher the task is very demanding. I would wish the post be made non-teaching or some form of incentive be given. Imagine I use my personal vehicle for cluster activities without compensation. It's hard particularly these days when the economy is bleeding. The post calls for commitment. It's high time that we establish a resource centre as a cluster. We can house library books, computers and typographical equipment for our clusters. Not only that but our records. Imagine a situation where I keep all records for the cluster in my house. What about if I transfer?

From the above quotes it can be inferred that clusters are perceived as important by school principals, teachers and cluster resource teachers (formal teacher leaders). Participants view clusters as sites for 'cross-pollination' of teaching and learning ideas, as teachers can assist each develop their teaching prowess in a collegial manner. Because of the significance of clusters there is a view that more time should be allocated to their activities. The issue of incentives for cluster resource teacher was also alluded to by almost all participants. Interviews concurred with questionnaires that clusters rarely reward teachers for the good performance or give some form of incentive for the hard work they perform in the cluster. Viewing the commitment and how strategic the post of cluster resource teacher is,

participants, both from the questionnaires and interviews, felt that they should be remunerated in some way. From Toro's view the post was challenging but interesting.

Delport and Makaye (2009) in their study of BSPZ clusters recommended astute leaders for the BSPZ, and with cluster chairpersons they should be effective leaders who should think and act in an imaginative way. Jones voiced a different opinion: "Of course I feel different by being a CRT.I have the respect among teachers". It can be inferred that relationships between the teacher leader and other teachers was warm and cordial. Jones told us that his post had been advertised and he secured it on merit. Data from the surveys also confirms that teachers and principals respect their cluster resource teachers, they seem to appreciate their instructional leadership roles and feel that they should be rewarded for the sterling job. Vandernburg and Stephens (2010) assert that teachers perceive teacher leaders as useful when they direct their attention to teachers' instructional needs. The warm relationship between teachers and the teacher resource teacher could also be viewed in terms of Harris and Muijs' (2005) contextualization that teacher leaders are peers with no authority over others whose role is to improve practice. Perceptions of teachers of the cluster teacher leader are one interesting area one can investigate with regard to cluster activities.

Mr. Chomu also gave his perceptions of his cluster: "I am happy about the space given to clusters by the district. Clusters have the autonomy to decide on whatever they deem necessary to improve the teaching and learning." He also liked the idea of sharing. "It's good to share. We share ideas, resources -almost everything. As a result we have improved on our performance. The routine of inspection we have embarked upon as heads has also improved even the way we manage our record books and the office in general."

It was evident from the principals' offices visited that heads advised each other on how best they could transform their offices into 'talking offices', neat and informative. Although it was not part of my study to observe the office setup for the school principals I could see the school mission and vision as well as the districts on display in Mr.Chomu's office. Whether members understood the mission statements could not be established. Table 5 of the Survey questionnaires, however, indicates that most respondents believed that they were conversant with the cluster mission and were working towards its accomplishment. Similarly, Mr.Chomu remarked that he felt vibrant in belonging to a cluster, claiming that he had gained much since joining nine years previously.

Choto was also enthusiastic:

The idea of clustering is quite noble as it brings people from different backgrounds together. As a satellite¹⁶ school we also benefit from sharing material and expert resources. I am also happy about the autonomy granted to clusters. We are at liberty to decide whatever is necessary to improve our situation. The tests have raised the pass rates for most of our schools including, Njerere [pseudonym] which used to record zero pass rate.

Choto stressed the importance of tests by saying;

I am really happy about the clusters tests. You see most of our schools are poor and most of our tests are written on the boards, which is completely different from what the pupils will experience at Grade Seven. So giving them individual typed tests will prepare them for the final Grade Seven examinations. So I am glad about that. I really praise our cluster leaders for that.

From the excerpts above one can infer some successes registered by the clusters in their bid to improve the quality and efficacy of education, however; the successes have also drawbacks which can negatively impact on teaching and learning. The positive perception of cluster leaders, *inter alia* teacher leaders, is one other recurring phenomenon among teachers and principal participants. I could infer that cluster leaders were positively viewed by both teachers and principals, perhaps because of how they discharge their role of improving teaching and learning in the cluster. Affirming this inference, Mulford and Silins (2004) posit that teacher leaders who discharge their instructional leadership roles command respect from teachers. Another lesson drawn from the excerpt above is that clustering addresses the issue of equity. All pupils are exposed to the same cluster examination regardless of their status and this has also helped poorly resourced schools to improve on their results. In support of this Rorrer *et al.* (2008) argue that one of the district instructional leadership roles is to provide equity in schools.

¹⁶Satellite schools were established after the land reform. Most lack proper teaching learning facilities and can follow a multi-grade system. Until they attain proper facilities they remain attached to a nearby established school.

4.3.1.4. Challenges to clustering

Participants were also asked to relate their challenges as a cluster or what they disliked about it. It was surprising that Mr.Beto denied having any challenges:

We don't have any problems. Cluster activities are needs driven, stakeholders identify their problems and solutions to solve those problems. So how can we identify problems we cannot solve? Otherwise they are deemed no problems at all. We contribute funds for meetings or workshops. Our SDCs are forthcoming so really I see no problem.

This was echoed by one SDC member during a cluster meeting I observed, who suggested that teachers should hold more professional development meetings. However, the same views contradicted my previous assumptions that cluster activities were negatively affected by poor funding and support from government and the community. At the time of the study cluster activities had not been receiving subsidies from the government, but rather the parents were contributing through a cluster levy. Most clusters have ceased due to poor funding, an impediment which was also observed of most school clusters (Giordano, 2008; Pomuti & Weber, 2012).

Mrs. Yula shared her views with the cluster chairperson: "There is nothing I can say I dislike about the cluster". However, Jones has his own perception of the challenges: "There is too much load on the CRT. The post should be non-teaching. I have a full classroom load .Again, funding of the clusters is a challenge. I use my own pocket." It can be inferred that whilst the cluster could fund meetings it did not consider cushioning the CRT on travelling and other responsibilities. The capacity of the cluster in funding its activities at a time when government is facing economic challenges can be viewed in terms of 'will and support'. According to Rorrer *et al.* (2008), generating will to do and capacity to do so is a manifestation of shared vision, motivation and beliefs that underlie an implementer's response to a policy's goals and strategy.

On the other hand, Mr. Chomu from another cluster (K) highlighted his perceptions about the challenges or what he felt should be improved in the cluster:

Funding is a very big problem. Most of the parents don't have the money and this limits the number of meetings and activities we should have as a cluster. We also encounter transport problems. Some of the schools are more than ten kilometres apart and the area is mountainous so travelling is a challenge. This limits our

monthly review meetings as a cluster. I also feel monitoring and evaluation of our cluster activities leave a lot to be desired and we should improve on that.

The challenges of cluster funding and transport problems were also raised by Mr.Choto:

We are facing challenges of finances and resources. As a satellite school we lack proper teaching and learning resources and we feel our clusters should come to our rescue. We receive a lot of support from the mother school. Because of the financial situation exacerbated by our poor economy as a country there are negative attitudes from some teachers who expect to get something after attending a cluster meeting/workshop. These negative elements resist participating in cluster activities.

The challenge of negative attitudes was also emphasized by Toro:

There are some negative elements amongst school leaders that are not forthcoming when it comes to participating in cluster activities. But what surprises me most is that we are trying to help them. They don't support their teachers. We have tried as a cluster to help them and they have improved greatly. Imagine from a zero percent to twenty percent. The same school is letting us down as a cluster since all our schools have twinned with schools in a cluster in UK. They are even denying pupils chances to network with peers abroad.

Toro also criticised lack of communication between the cluster and district resource centre:

There is no communication at all probably because of the absence of the District resource teacher. We cannot even network with other clusters outside. The district should have been facilitating this but since the departure of Mr....no one has been appointed. This is a blow to the whole programme (BSPZ).

The excerpts brought to the fore interesting challenges, some of which were not alluded to by participants from cluster M. The challenges of inadequate resources and finances have been raised by both teachers and principal participants in Cluster K to signify the magnitude of the problem. UNICEF (2009), Aipinge and Mafuwane (2011) in their studies on school clusters have observed similar challenges.

One of the participants was from a satellite school which required many material and structural resources which they might seek from the cluster. Other challenges that emanated from the interviews, but were not alluded to by participants from cluster M, were negative attitudes and lack of networking with the district and other clusters. These can

impact negatively on cluster instructional leadership. That some school principals were not cooperative on cluster activities was an attitude detrimental and retrogressive to student achievement. Prytula (2007) observed such attitudes amongst cluster heads who could not find time to attend to instructional leadership practices, whilst Lineburg (2010) explained that principals who renege on teachers' needs isolate them, withhold resources and prevent their advancements, thus negatively influencing student achievement. The absence of a coordinator at the district centre can also impact negatively since it plays a complementary role to cluster activities. Nieto (2009) underscores the need for a climate of openness, shared vision, shared decision-making and collaboration.

4.3.1.5. Suggestions to improve cluster instructional leadership

Participants suggested both solutions to do with cluster structure (structural) and those they regarded as core to cluster instructional leadership, I have termed 'proximal'.

4.3.1.5.1 Structural solutions

Participants pointed out that the district education office should as a matter of urgency appoint a district resource teacher to coordinate the BSPZ cluster activities at the district. Emphasizing the critical role of the DRT Toro said:

The DRT's post is very critical for coordinating purposes. Right now there is no one to coordinate cluster activities in the district. You tend to question the seriousness of the district and the Ministry at large. Since I was elected CRT I have never met with my counterparts, CRTs from other clusters. No induction was done. So...there is a problem.

Mr.Beto, from another cluster also expressed the view:

There should be a substantive post of the DRT. Someone permanent is needed if cluster activities are to tick since they are a watch dog of quality education delivery.

Zvamaivapoimizviyamaclustersaifambazyiyazvokufamba.MuchizobvakuchiuyaMr. E-e-akaitavo.Zvino hatizivi kuti vanodei, kungobvisa mari kudistrict asi maclusters haachafambi ose. E..e kuvaka hako padistrict but maactivities kucluster ndiko kune basa racho ndiko kunofanira kufamba". (When you were coordinating [referring to the interviewer who is a former DRT himself] clusters used to operate effectively. After your departure there was Mr. E-e who also did his best to make clusters operate. Now there is no one to coordinate and most clusters are at a standstill. Schools contribute money to the district but nothing meaningful is happening at cluster level. They are building the District Resource Centre but teaching and learning exist at the cluster.)

Responses from the questionnaires also revealed that the district should appoint teacher leaders (DRTs) to coordinate cluster activities from the district. There was no a clear link between clusters and the district office. The issue of the DRT was also highlighted by Makaye (2011) in the review of literature. Participants felt that clusters were better coordinated when there was a DRT at the district to coordinate and monitor cluster activities.

Another suggestion was the cluster resource centre, which Jones felt clusters should have. "Resource centres house cluster equipment and records. They can also provide library facilities as well as typographical and computer services to stakeholders-students, teachers and the community. They can be venues for our workshops/meetings". Toro agreed. The issue of resource centres had also been raised previously in the survey thus indicating the seriousness of it to cluster instructional leadership

4.3.1.5.2. Proximal solutions

Apart from the structural solutions to clustering, participants suggested specific activities and roles for clusters. Some of the suggested solutions were advanced during the quantitative phase of the study, thus validating the study findings. Three participants suggested that the clusters should have more meetings/workshops on pedagogics. Mrs.Yula stressed that "We should revisit several topics that concern our core duties as teachers and these should be regularly done". Toro explained in specific terms some of the topics he so desired in his cluster: "workshops, such as on syllabus interpretation, are crucial to teachers". He also pointed out that clusters should encourage regular peer supervision: "During peer supervision teachers cross pollinate ideas about teaching and learning, hence the possibility of improving student performance".

Mr.Choto mentioned another strategy clusters could employ:

There is need to create strong synergies with our counterparts in the secondary school sector. They should also actively participate in the cluster activities. We want a situation whereby we can cross the boundaries if we have the expertise. For instance an expert in teaching Art at secondary can teach that to primary pupils as well or vice versa. It's not that a primary school teacher cannot teach at secondary.

The views by Choto are supported by distributed instructional leadership scholars such as Hallinger and Walker (2012), who also established positive effects of cross-boundary strategies. Choto provided the suggestion from a background in which the secondary school teachers were not actively involved in cluster activities. In most cases clusters comprise one or two secondary schools and this scenario can present challenges when teachers want to share subject expertise. However, his point remains valid if clusters are to effectively change the teaching learning terrain of schools, hitherto student achievement.

Mr.Chomu suggested that clusters should have a common curriculum drawn from a national one. It was envisaged that a common curriculum would standardize cluster operations as well as making it easy to run cluster tests. This view was also raised in the surveys, where a common scheme for the cluster was suggested. Its feasibility and possibility needs further exploration since others may think it can thwart teacher and school initiative, and creativity.

Lastly, Mr.Beto called for total cooperation amongst cluster stakeholders. Collegiality, unity of purpose and political will are all a precursor to cooperation and are essential ingredients to instructional leadership. The views of Mr.Beto concur with those of Wahlstrom and Louis (2008) who propose that principals set the tone for collaborative staff development programmes and can stimulate teachers intellectually. Likewise, the cluster coordinator (cluster chairperson) can set the tone of his/her cluster, particularly in times of economic challenges when teacher salaries are low.

4.4 DATA FROM OBSERVATIONS

Observations were carried out to complement data obtained from both questionnaires and interviews as well as to establish how instructional leadership is enacted in school clusters. They sought to answer the study's research question: how is instructional leadership distributed in school clusters? Observations also permitted me to capture *insitu* how

teachers and school heads interacted in cluster meetings or workshops. Thus, the observation protocol included the following:

Whose voices are being heard?

Are there any voices being denied or challenged?

Where and are there any silences?

Who appear to be acting as boundary keepers in terms of social interaction and topic focus?

What artefacts are used, if any?

By whom and how?

How much time is spent on an activity?

Observation permitted me to capture some of the voices of participant with regard to clusters instructional leadership; the major advantages being that it permits the researcher to use both senses of sight and hearing and ask for explanations. It also helped me to gain a better picture of cluster instructional leadership.

Cluster meetings and workshops were some of the key instructional leadership practices both interviews and questionnaires revealed. However, how these were conducted and the effects on teachers' professional growth on student learning, was the premise of the study. It was also pertinent to observe and take particular interest in the topic(s) cluster(s) deliberated upon and the relevance to instruction and how the topic was traversed. The study expected to observe two meetings, however, because of factors to be explained in chapter five, only one meeting was observed, a two-pronged one focusing on both instructional and administration issues. This confirms Giordano's (2008) assertion that most clusters do play both administrative and pedagogical roles. In the meeting observed, school principals and school development committees were preoccupied with administrative issues, whereas teachers were looking at how they went about their teaching. Chappuis et al. (2012) warn that instructional leaders should safeguard against collaboration time turning into non- instructional time, and alluded to punctuality. My observations confirmed that cluster participants were punctual for the meeting, all at the venue by nine A.M. and ready to start, including participants from the furthest school, about 18 kilometres distant. The one school that arrived late was only ten minutes behind.

4.4.1 How the workshop/meeting proceeded

Participants were seated so they could see each other, heads in front together with the cluster chairperson and teachers and school development committee members together with ease. The meeting was led by the CRT, who encouraged punctuality and time-consciousness. Proceedings kicked off with a word of prayer from a volunteer, after which announcements were made and housekeeping issues noted, including the cluster school members having made some contributions (US\$20.00) towards the feeding of participants. Such funding also applies to voluntary external clusters in South Africa (Ndlalane, 2006).Rorrer *et al.* (2008) view this in terms of political will, with motivation and members having the autonomy to decide on how they can solve their own problems. This was contrary to my previous assumption that cluster activities were negatively affected by the withdrawal of the donor funding in the programme.

After the announcements the CRT introduced the teachers and SDC members and asked the deputy head (also a participant) to introduce the principals. The host school principal welcomed the participants and the Cluster chairperson (head) was given the chance to introduce the visitor (participant observer) as well as outlining the purpose of the meeting/workshop. He also ended his welcome by appealing to all to work towards improving results. "It's my wish ladies and gentlemen that the top three schools in our district's two thousand and fourteen Grade Seven results come from our cluster", challenged the cluster chairperson. Such a statement is referred to by several instructional leadership scholars as 'defining the mission' and/or 'setting overarching goals' (Hallinger, Jones, Lee, 2012). After the welcome participants under the leadership of one, whom I later learnt was a deputy head of one of the cluster schools, deliberated on setting of tests. He allayed participants' fear of competition by stating that: "The purpose of cluster tests is not to have a cut-throat competition with each other but with the system (teaching and learning) and to evaluate our system". Mrs X¹⁷ (leader) led the participants through the expectations of the Shona Grade 3-7 examinations. After the Grades 3-7 she talked about the grades 1-2. All participants debated the structure of the paper, including whether infants should write essays.

Mrs X: Grade one *inozvikwanisa here pafirst term*? [Is it possible for the Grade Ones to write essays in the first term?]

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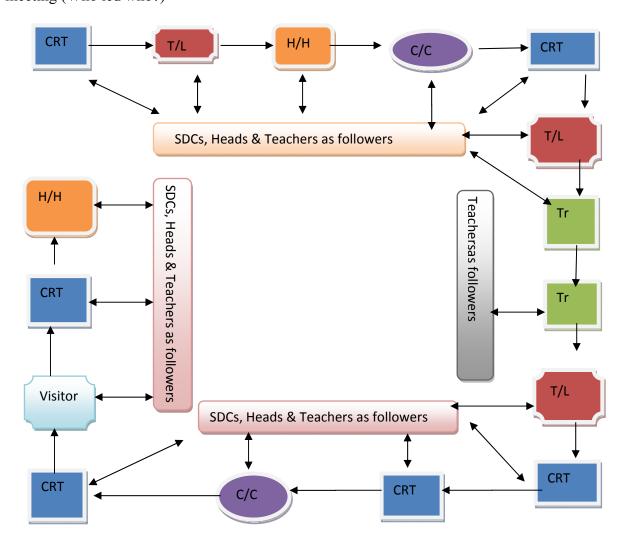
 $^{^{\}rm 17}$ All names used in this section are pseudo.

Teacher Y (participant): *E-e-e zvinogona nokuti ku ECD vanoita masyllables* [It's possible since they do syllables at ECD level].

Head (cluster chairperson): *Totenderana here? Syllabus inotii*? [Do we agree? What does the syllabus say? That's our Bible!].

The discussion was educative and lively, as it included SDC members, and they could consult the syllabus. The SDC member, Mr TK, was given a chance to explain how essays were marked. The head, secondary participant (Mr.Beno) proposed that cluster members should come up with the cluster scheme taken from the main syllabus. The first session lasted for almost an hour, after which members broke for tea together. During the tea break participants could communicate freely with each other, after which teachers were left to deliberate alone on how tests should be set, the expected content for each paper, and elect a committee to oversee the setting and moderation of the tests, while heads and SDC members went to discuss modalities on fees collection and infrastructural development. The heads were to choose a member from their group to represent them in the cluster committee. I could not go with the SDCs and principals to observe how they went on with their discussion as I wanted to find out how teachers' workshops were conducted. However, after three hours there was a plenary session for all members. The CRT briefed the SDCs and heads on what had transpired, on the committee they had elected to oversee the running of the examinations in the cluster, and the due dates for submission for examinations. The cluster chairperson thanked all members present and wished them the best in their endeavour to increase student results. The visitor (participant observer) was given the time to make remarks and thanked the cluster for allowing the study. Members broke for a communal lunch. The proceedings are captured in the flow diagram below.

Figure 5: Flow diagram of how instructional leadership was distributed during the cluster meeting (Who led who?)



Note: The single arrow shows the direction of leadership and the double arrow shows an interactive flow.

The diagram illustrates how instructional leadership was distributed in the meeting /workshop observed and the power differentials during the day, that is who led who and who was the boundary spanner in terms of control, and whose voices were louder/loudest. It could be inferred that most participants were given the chance to lead, that is, teachers(T/L), including one deputy head(D/H) who assumed the role of teacher leader in charge of cluster tests, the Cluster Resource teacher(CRT) and school heads(including the host head(H/H) and the cluster chairperson(C/C). Harris (2007), Spillane (2004) and Sherer (2008) argue for the distribution of leadership in institutional settings, Sherer (ibid.)

that it should be the situation which dictates and determines who to lead. This type of leadership is viewed by Spillane (2004) as the instructional leadership practice aspect.

From the diagram one could infer that the workshop was dominated by teachers, who in terms of formal authority positions are subordinates. The cluster chairperson was not a dominant figure and his voice was only heard twice, firstly when he was outlining the workshop objectives and defining the target for the cluster in terms of results, and secondly when he was giving his closing remarks. Between these he was a mere participant. The cluster resource teacher appeared to be the one in control of the activities, able to control the time, assist in refocusing the discussions, as well as facilitating. However, he could also be led in certain circumstances, for instance when other teachers were facilitating. In terms of social interaction, the cluster provided a collegial learning environment in which both leaders and followers could interact for a common purpose. Undergirding the social interaction theory, it is through such interaction of cluster members that they construct meaning or have a shared vision of what they should do and uphold as good practices. As teachers they could construct meaning of what a good examination paper is. The same applies to school heads, who set their own cluster standards about what a good office or school is. It could be inferred that it calls for a spirit of creativity, ingenuity and unity of purpose for members to have a common ground on quality productive goals.

Further inferences on the social interaction that involved most participants in leadership could be that although leadership was distributed during the meeting, the influence of formal leaders such as school heads could be felt. Reference could be made to where teachers felt they could not make decisions beyond their jurisdiction, in which case they would reserve such questions for the principals. Examples of such issues include the number of meetings per term and whether tests should be duplicated for the whole clusters. These issues call for some financial obligations outside the teachers' jurisdiction, thus, one can safely conclude that the success of cluster activities can also be influenced by the principal's support. If principals support what the teachers would have agreed to implement there is likely to be a positive result. It can also be envisaged that student success in teaching and learning is a result of both administrative and pedagogical linkages. Gamage *et al.* (2009) argue that principals should encourage networks amongst teachers and ensure that they share their expertise with others. This may also imply that principals can inhibit effective interaction of teachers.

It could also be inferred that the cluster engaged well with parents, which is likely to improve on student results since parents are aware of school expectations. They are part of the school hence are likely to faithfully support student learning. The SDC members were actively participating and could make constructive contributions. Mr Taps, a Grade 7 Language examiner, was also given the floor to share his expertise with both teachers and principals. He promised to provide some handouts on marking and testing Languages. Mr. Zero, another SDC member, encouraged teachers to engage regularly in such meetings. Members also felt that meeting once per term as a cluster was not enough. Such a situation in which parents engage in the learning and teaching of students is an esteemed instructional leadership practice which most institutions lack (Halinger, 2012).

Gamage (2009) warns that it is not parental involvement in schools which matters but rather their engagement which improves student learning. Parents provide material and financial resources as well as expert advice to the school. These findings contradict previous studies by Madungwe (2002) and Chikoko (2007) on a BSPZ cluster, which revealed that parents were marginalized in its running and school heads dominated cluster activities.

Besides the warm collegial interaction exhibited by the cluster during meetings, there was also a need to focus attention on the relevance of cluster workshop/meetings. Several scholars (Liberman & Mace, 2010; Jita & Mokhele, 2012; Ndlalane, 2006) on instructional leadership and teacher professional development have negatively criticized the traditional form, advancing as reasons that they are divorced from the needs of the recipients and are autocratic. The observed meetings were focusing on cluster tests, fees collection and infrastructural development, topics driven by the needs of the schools. From the proceedings of the workshop it was learnt that most of the teachers had little knowledge of how tests were constructed or where they should derive their pedagogic content. The issue of the use of syllabi was greatly emphasized as all examinations should come from them (their "Bible").

Attesting to the importance of cluster tests, Prytulla (2013) established that principals felt professional development in specific areas of teaching and assessment strategies would improve teachers' instructional practices. However, how this was going to be cascaded to the teachers who did not attend the workshop requires exploration. It was promised that the participants would give comprehensive report to their schools. Cluster activities should be needs driven, a phenomenon which may be different from traditional workshops. Another

interesting finding from the observations was that the cluster seemed to be aware of focus. Whereas teachers were deliberating on matters of their trade, principals and SDCs looked at administration issues. Such a realization could be conceptualized in terms of time consciousness and time utility. Gamage (2009) warns of effective utilization of collaborative time. The short presence of principals was perhaps a way of registering their support of what teachers were doing. Hallinger and other instructional leadership scholars conceive of appearance and 'walk throughs' in terms of instructional leadership practices principals can exhibit. Their presence could bring some comfort to the teachers or on the other hand inhibit them. Teachers may feel in secure to discuss issues to do with their trade freely. Thus, the appearance and disappearance could be a strategy to ensure that subordinates (teachers) discuss freely at the same time assuring support (by the presence of leadership) of what they do.

It could also be inferred that cluster activities strive to bring about equity. Fullan (2008) attests to a paradigm shift from "going it alone to going in alliances". The cluster strives to ensure that all its schools reach certain uniform standards. Fees collection is one of the most difficult and sensitive exercises, especially in poor economies, which are also polarized in terms of politics in which education for all is being politicized. Most parents appear to be unforthcoming in terms of fees payment, making it difficult for schools to sustain their activities. By coming together, discussing issues and solutions to their problems, challenges of competition for students are also reduced.

The observation also revealed that the meeting/workshop was well organized. Facilitators were prepared and had made prior preparations. Leithwood *et. al.*(2009) warn that when distributed leadership is neither planned nor aligned then the self-sustaining culture drifts and gradually loses its collective sense of vision and purpose. This becomes Balkanized, with each teacher or school focusing on his/her own classroom and working in isolation from colleagues, typical of child play.

The observation also indicated some distributed techniques observed in other previous studies in different contexts. Giordano (2008) acknowledges that most clusters comprise primary and secondary schools, however, how they operate for effective teaching and learning is little known. Hallinger (2012) avers that articulation bridges the gap between teachers and administrators who were structurally compartmentalized in their classrooms. Articulation as a strategy involves collaborative decision making, and the involvement of teachers, parents (SDCs) and school principals (both secondary and primary) was a clear

indication that the cluster provided collaborative opportunities for instructional decision-making.

4.4.2. Emerging issues from the observation

From the observations made the following issues and lessons emerged:

- Cluster leadership is fluid and distributed among teachers and school heads.

 Leadership is dependent upon the situation and does not reside in one person.
- Formal leadership in a cluster plays a facilitating and leading role rather than an authoritarian one. The post of cluster chairperson is of facilitating mutual and focused collaboration of the cluster.
- The cluster resource teacher post calls for someone who is tactful, knowledgeable of the craft, self-driven, sociable and can implement theory as practice.
- Leadership which has the support of other peers is respectable, goal- and resultsoriented and commands followership.
- Where teamwork and colleagueship prevail members are free to share and open up their professional strengths and weaknesses with ease.

4.4 DISCUSSION OF THE FINDINGS

This section discusses findings gathered from both quantitative and qualitative phases. It harnesses findings from surveys, interviews and observation(s) with a view to understand how instructional leadership is happening in school clusters, thus validating or invalidating the study purpose: To explore whether and how school clusters can be sites for instructional leadership. The discussion is structured according to the following major themes.

4.5.1 Cluster instructional leadership and artefacts

The major instrument to solicit for cluster instructional leadership practices was the questionnaire, which was divided into four major instructional leadership roles or critical dimension focal areas, namely, defining cluster mission, managing instructional

programme, creating positive climate, and instructional artefacts and resources. These four roles were derived from the works of prominent instructional leadership scholars such as Hallinger, Jones and May, as well as previous researches on district and school instructional leadership in general and school clusters in particular (for details refer to the literature review, chapter two). The four roles were further delineated into specific activities which in my survey I termed specific performance indicators (refer to the questionnaire survey appendix A). The details of the extent of the implementation of these activities were previously highlighted and showed those which are dominantly, moderately and/or poorly implemented. The discussion explicates areas in which the instruments concur or disagree in terms of their findings, thus validating the research results.

Findings, especially from the surveys, revealed that the instructional leadership role of defining a cluster mission was the most dominantly implemented of the four, followed by managing instructional programme with a mean and standard deviation of 3.41 and 0.59 respectively. Defining cluster mission entails the clusters having cluster action plans formulated through a participatory process and the plans providing benchmarks for success. In concert with the participatory approach to action plans and formulation, interviews by the teacher leaders confirmed that cluster programmes, including the workshop topics, are a result of consultation of stakeholders (mainly teachers). Modalities however differ from cluster to cluster, one circulating needs assessment surveys whereas the other sends school representatives to deliberate on the final plan. Participatory approaches engender ownership of the product as well as a spirit of commitment towards the accomplishment of the set targets. Marsh (2012) argues that where there is ownership and a shared vision there is likely to be faithful implementation. However, whether each school had a copy of the cluster mission was not established, though it was felt pertinent to do so by the researcher. Importantly, it could be inferred that consultation and team work in defining a cluster mission as well as setting targets are important instructional leadership practices in a cluster. Consultation on topics to deliberate on cluster meetings/workshops ensures that clusters scratch on where it itches. Whether that could be directly on teaching or learning the stakeholders determine what is fit for them. This approach differs from the traditional approach which can be divorced from the needs of the teachers. Affirming cluster targets, one of the cluster coordinators/chairperson enunciated the cluster vision at a meeting: "It's my wish ladies and gentlemen that the top three schools in our district's two

thousand and fourteen results come from our cluster". Hallinger (2012) and Fullan (2008) alluded to goals as a cornerstone to instructional leadership.

The second critical instructional role was managing instructional programme. Specific indicators to this role are, *inter alia*, following the action plan stringently, engaging in cluster tests, modelling or demonstrating instruction, giving feedback, staff development, monitoring and evaluation and resource sharing. It was evident from the survey that some activities were poorly performed whereas others were moderately or excellently performed. Practices which were rated highly (Me=>3.5) were alignment of cluster action plans to the district or LEAs, stringently following of the plans, monitoring and evaluating of cluster activities such as sports, holding review and annual general cluster meetings. Action plans resurfaced in managing instructional programme, indicating that cluster operations were not haphazard but planned. Leithwood *et al.* (2009) conceive of such organization of clusters activities in terms of 'planful alignment', in which unity of purpose is espoused.

It also emerged from the findings that the clusters held workshops for teachers on teaching and learning and competent members were invited to facilitate these workshops. From the follow up interviews and the meeting/workshop observed it was revealed that the clusters drew their facilitators from amongst the teachers in the cluster. One school head was ecstatic about the calibre of facilitators invited: "I tell you we had one of the best workshop! It was facilitated by our teachers from our local secondary school". Although interviews with the cluster resource teacher from the same cluster indicated that they had also used facilitators from the district to facilitate one of the workshops on 'the condition of service for teachers', it could be implied that clusters selected relevant and competent facilitators for their meetings or workshops. They made use of local members who were familiar with their problems. The rationale for clusters is for those within the same geographical area to find their own home-grown solutions to problems they encounter. The use of local facilitators from the sister secondary school is laudable as it promotes collegiality and teamwork. It also breaks the isolation usually associated with teachers from distant and isolated schools. This is different from the traditional workshops which are in most cases far-removed from the realities of the local people (Jita & Mokhele, 2012; Hammond et. al., 2009). Trudie (2010:548) posits "... effective staff development is embedded in daily practice, is needs based and is linked to learner needs and tailored to meet specific circumstances or contexts of teachers".

Highlighting the relevancy of staff development meetings or workshops, UNICEF (2009) argued in support of the 'teacher teach teacher' model to solving teaching and learning problems in school clusters. There was evidence of the model during the observed cluster meeting as teachers took turns to lead and teach each other on how tests in the four major subject papers at primary were set. Thus, participants through interaction with one another cross pollinate ideas and construct meaning of what constitute an ideal paper.

Responses from surveys, interviews and observations illustrate that common tests were another instructional leadership activity or practice embedded in school clusters. With no one strongly disagreeing to that practice, interviewed participants revealed that cluster tests had actually raised the pass rates of their students. Of importance about the tests, however, is not the question papers per se but the whole process of setting them, the administration and the final analysis of the results. It also surfaced from the observation that teachers are subjected to a rigorous process of item writing, after which they set the tests. "The emphasis is on setting from the syllabus, which is the Bible", said one of the meeting participants. This quote implies that teachers were obliged to teach from the syllabus, not textbooks. Most teachers who teach outside the syllabus actually do a disservice to both the students and the whole curriculum.

In a post-observation interview with the cluster resource teacher it emerged that the cluster spent two full days moderating the tests from the teachers. The committee engaged in a thorough exercise with syllabi on the table and guided by the ZimSec standard format for each paper. The CRT confirmed that administration was easy considering the cluster size and geographical set up. Each of the three schools in the cluster would visit each other during and after the examinations and a report would be given to the cluster. Monitoring of the administration of the examinations safeguards malpractices such as cheating. Analysis of the test results would be done at school level and the same results would be analysed and discussed at cluster level by the examinations committee, and feedback of the cluster test results would be conveyed to schools by the principals. Whilst it was possible for such a rigorous test administration exercise to take place in cluster M, where schools seemed to be relatively close to each other, a different story could be told of cluster K, which has a mountainous terrain and dispersed schools. Such an exercise can be perceived in terms of capacity and political will. Rorrer et al. (2010) conceptualise capacity in terms of providing and selling the vision, providing the resources, encouragement, adapting to standard operating procedures and handling disturbances. Cluster leadership, particularly in cluster

M, could be assumed to have built that capacity and strong will to promote teaching and learning amongst its teachers.

Gamage (2004) has also raised an important aspect of analysis of test data and has considered data analysis for the purpose of informing teachers on decision-making as one example of instructional leadership artefacts. Although the survey data shows a low rating on the analysis of tests results by teachers, this was only strongly disagreed upon by one respondent, implying that both clusters analysed test results. However, responses from the surveys tend to show that feedback of the analysed tests was not given to those deserving them for instance teachers, pupils, parents and school principals. Interview responses on the other hand, indicated that analysis of test results is done at cluster level by school representative during the presence of school heads and the CRT. However, what could be missing is the analysis of error, which shows areas students will have failed or passed. This process calls for intensive engagement of team members and more thoughtful examination and analysis of data characteristic of high-performing systems (Supovitz & Tognatta, 2013). Feedback from such a process is very crucial for future teaching and planning. It is more important than the feedback on the performance of schools. It is from the feedback that pupils and teachers are informed of their performance in tests with a view to mapping a better way to remedy where they would have gone wrong (Hallinger, 2012), Jones & Lineburg,2011).

Whilst giving feedback was not satisfactory the practice and activity of monitoring was excellent (Me=>3.3).Responses from the survey clearly show that the clusters engaged in monitoring and evaluation of sporting activities, its activities in general and review of annual general meetings in particular. It is important for clusters to review their activities at least once per year, and one cluster indicated that it had become routine to meet and review its activities almost once per term. High rating on monitoring and evaluation of sporting activities suggests that clusters may sometimes focus their attention on non-teaching issues. Whether that will not be done at the expense of pedagogical activities is not known. Findings from a cluster meeting/workshop observed suggested that participants were worried about the frequency of professional development meetings/workshops. Some teachers and SDC members at a meeting observed suggested that cluster activities should be held regularly. Hammond *et al.* (2009), in one of their studies, established that it was important for schools to devote time for professional development. With most teachers in developed countries such as Britain devoting half of their professional time to professional

development the trend in developing countries is that staff development time is outside the normal professional time. Although results indicated that cluster professional time is done during the week the challenge is for teachers and parents to start thinking about collaborative professional researches in clusters as well as increasing the number of times they meet for cluster meetings or workshops. Whilst BSPZ cluster guidelines state that clusters should conduct action research (Madungwe, 2000), such a practice was not evident in clusters. Results from the interview indicate that it is something clusters can start thinking about.

Some of the specific activities clusters embarked on moderately are supervision of teachers by heads, teacher peer supervision and common tests. These activities were found dominant in one cluster although not pronounced in the other cluster as revealed by interviews. Supervision is one form of teacher professional development (Hammond *et al.*, 2009). From the interviews by one teacher it was evident that feedback was given after supervision and book inspection was made. Such feedback was positively viewed as it makes one reflect on the presented lesson. It also permitted professional advice from peers, which seems to be more enduring and lasting than feedback from principals or other formal leaders, often viewed as 'snoopervisors' bent on finding faults with teachers (subordinates). Advocates of clinical supervision (Sergiovanni & Staratt, 2007) argue for collegiality and feedback as one of the tentacles of an effective supervision cycle.

The surveys also revealed how the cluster engaged in its instructional role of creating a positive climate. Specific performance indicators show that the clusters have a poor incentive system, as illustrated by few participants who affirmed this, whilst the majority strongly disagreed to the existence of incentives, be they for pupils, teachers or the entire school. Incentives are a form of motivation although some critics point to the tantalizing effect of them, particularly when they are in short supply. The only form of incentives which were observed, though outside the study focus, was an award certificate for good performance of certain schools and that of the best managed cluster from the district BSPZ. More direct incentives to teachers could motivate them to participate actively both in class and cluster activities. It could be that cushioning CRTs on travelling expenses can go a long way in motivating them. This was also suggested in both interviews and survey data. Cluster K, which holds annual festival competitions, can be better off on incentives as best teams from different schools in various disciplines are given prizes.

On the other hand, it emerged that the cluster promotes teacher leadership as well as promoting networking and engaging with the community. Such links have a positive bearing, directly or indirectly, on student performance. Through such links some have actually gone further to twin schools and pupils with those outside the country, but the extent of these synergies created by both schools and pupils is unknown. One cluster leader participant indicated that as a cluster they were given some computers and a printer they were using to print cluster syllabi. The partners also extended their funding to music, poetry, dance, sport and public speaking, and these activities had created good community - school rapport, as well as communication skills in pupils. Aipinge (2009) alluded to the varied activities of school clusters as they tried to respond to the needs of their local contexts. Networking with others having a stake or interest in education is one esteemed activity educational institutions should practice. Fullan (2009) writes of schools going into alliances with other institutions or organizations as vital in promoting professional infrastructural development. It is through networking that schools can share both material and human teaching and learning resources. Networking promotes cross-pollination of craft expertise as clusters can network with others inside or outside the district. The twinning of schools in one cluster can offer learning opportunities to other clusters.

Lastly, the role of instructional artefacts and resources was the least performed of all the four major roles in the survey. Participants spelt out that lesson observation or supervision instruments, and cluster constitution contribute some of the dominant instructional leadership artefacts in the cluster. One cluster had devised its own supervision instrument to cater for its needs. According to Honig (2012), tools focus learning by specifying what individuals should and should not do. Participants who also responded to the survey included laptops as other important instructional leadership tools. Further probing with these individuals revealed that the laptops were used as data storage facilities for cluster tests and other records, confirming Honig's (ibid.) argument that tools for representing test score data and other material artefacts have received attention in instructional leadership studies at both school and district level. However, there is a need for cluster newsletters and cluster libraries. Tools can help principals and teachers to effect instructional leadership (Honig, 2012), and interviews alluded to the need for its tools to aid instruction of students.

4.5.2 Distributed leadership in school clusters

Jita and Mohkele (2012) posit that leadership in clusters is inevitably distributed. Interviews and observation of the meeting attempted to establish how instructional leadership was distributed in school clusters. It was evident from the cluster leadership composition that leadership was distributed among teachers, parents and school principals. The observed meeting illustrates that Spillane's (2004) and Sherer's (2008) conceptualization of instructional leadership practice dominated cluster meetings as leadership does not reside in one individual. It is the situation that dictates who leads what and who? From the observation a 'see-saw' type of leadership was evident, as different teachers alternated in leading the different sessions. One teacher would be seen leading on how a certain subject was set whilst others were followers, after which another took the lead on another subject. The whole interaction discourse illustrates that leadership is fluid and does not reside with one person. From the observation it was evident that the dominant distributed leadership perspective was the instructional leadership practice aspect, not the leadership plus, akin to delegation (Spillane, 2004). There was not a single moment when the cluster chairperson delegated duty to the other but each participant knew his/her own role.

Another interesting aspect of cluster instructional distributed leadership was how teachers from the secondary sector contributed to cluster activities. All heads and teachers were led by the female teacher from the secondary school on matters related to cluster finances. It could also be inferred that distribution of leadership took no cognizance of gender, confirming Mafuwane's (2011) conclusion that this had no influence on execution of teaching or learning. Consideration and giving space for both genders is indicative of leadership distribution. On a similar note, the interviews also highlighted that some secondary school teachers were invited to facilitate and model good teaching practices for both primary and secondary school teachers at workshops. Such practices or strategies are viewed by Hallinger (2012) as boundary-spanning and promote collaboration, unity of purpose and collegiality. It was also evident that although clusters distribute leadership there is a need for a symbiotic relationship. Both teachers and principals benefit from the relationship. There are matters that teachers would need to be resolved by principals, who would rely on teachers since they are practicing teaching. As Sherer (2008) argued, leaders and followers are not mutually exclusive categories but are rather dynamic roles that change over time and across contexts.

The observed cluster meeting as well as the interviews reflected that clusters promote teacher leadership development, a realization that could perhaps be from Lieberman's (2000) conceptualization of teachers as sharing good practice and learning together that there is increased quality of teaching. It emerged from the observed meeting that teachers ran their own meetings, with principals and SDCs only appearing for a short time to grace the workshop, and thereafter leaving teachers to run their own business. Mafuwane (2011) advises that school principals should attend staff development programmes together with teachers if they are to be effective lesson observers.

4.5.3. Participants' perceptions of cluster activities: successes, challenges and way forward

Varied perceptions with regard to the successes, challenges and what need(s) to be done to improve school clusters as sites for instructional leadership were proffered by participants through surveys and interviews. There was a general consensus from participants that school clusters were impacting positively on teaching and learning. Participants from both surveys and interviews revealed that there was a marked improvement in terms of student results. One participant said that: "Through cluster activities one of our schools has its Grade Seven pass rate improve markedly from four percent to twenty percent", a head respondent indicated that "...even the quality of essays written by our pupils have improved drastically because of the professional development programmes in our cluster. So surely I don't have anything to complain". These excerpts are a few of the testimonies that concur with findings from studies on clusters by Aipinge (2007), Lieberman (2012) and UNICEF (2009) on the utility of school clusters. Whereas the research findings revealed positive advantages of clustering on the general improvement of primary school student results, similar studies can be carried out to establish cluster instructional leadership practices for specific subjects, particularly in developing countries.

It was also revealed from the surveys and interviews that clusters bring schools together and thus break that isolation of teachers. Considering that most schools in rural ecologies in Zimbabwe and other developing countries are not less than five kilometres apart, and road networks and recreational facilities are poor, most school teachers feel dejected and lonely, both socially and professionally. It could thus be inferred that clusters break that loneliness and isolation (Giordano, 2008). Apart from that it also surfaced from

participants' views that clusters permit and encourage sharing and cross-pollination of ideas.

It could also be inferred from findings that cluster activities strengthen school-community ties. It emerged from the interviews that when parents are actively engaged in cluster activities there is more parental support. Parents pay fees in time and social vices such as burglary, vandalism are limited. This could be attributed to the members of a cluster knowing and relating with each other, and the youths being occupied. In one of the clusters the community also takes part in annual festival competitions, affirming Hammond *et al.*'s (2009) and Harris and Goddall's (2007) assertion that parental engagement is more important to student learning. Considering that most parents are educated, with some even more educated than the teachers, their education can only be put to good use when they interact and cross pollinate worthwhile knowledge with teachers. It was evident from the observation that parents could also share craft expertise with teachers.

Another inference I could draw from the findings is that clusters promote collegiality, unity of purpose and shared vision amongst principals and teachers. Where these attributes prevail misguided elements such as mistrust, absence from duty or absconding are minimal. Both teachers and principals identify with their cluster and/or their schools, an inference based on the interviews and meeting observation, as none of the participants said anything negative about his/her school, principal or colleague.

Divergent, contradictory and similar views were unearthed from both interviews and surveys with regard to cluster challenges. In one cluster both the teacher and the principals revealed that financial challenges were negatively affecting cluster activities. Respondents cited funding as being inadequate to meet travelling and subsistence expenses for cluster meetings or workshops. Cluster coordinators could therefore not convene meetings, thus exacerbating activities. Inadequate funding also limited clusters ability to give monetary incentives to teachers and learners who might otherwise have excelled in results. Attesting to this view is Geeves (2003), who reported inadequate funding as a challenge to Cambodian and Kenyan clusters.

The problem of inadequate funding also extends to the cluster leaders (CRT) who do not receive any subsidies from the cluster, LEAs or government for the role they play in coordinating cluster activities. One CRT complained that he even went to the extent of using his own car, a situation also experienced in Kenya and Cambodia where cluster

tutors spend out of their own pockets to sustain activities (Giordano, 2008). The question of inadequate funding also leads one to question the form and nature of autonomy given to clusters by LEAs if they are not provided with financial resources, in particular to operate effectively. The issue of autonomy or control from LEAs is another area of debate.

Interestingly, on the issue of financial problems, the other cluster seemed to operate in a different way, since both the principal and teachers vehemently denied having any challenges. The chairperson said: "So far so good! The cluster is doing well. If we just need anything for our cluster parents through schools contribute". I also learnt from one of the cluster meetings that the cluster had a bank account. Madungwe *et al.* (2000), in the guidelines for BSPZ cluster, write that clusters should have bank accounts and adhere to sound financial administration. The differences in terms of participants' perceptions and cluster activities could be conceived in terms of political will, capacity and ingenuity on the part of cluster leadership and/or cluster members. Where leadership is forthcoming, visionary, flexible, accommodating, resourceful and initiative, teachers do not see obstacles but opportunities for engaging in more activities which promote learning as well as their wellbeing.

Findings from interviews also revealed that negative attitudes upset cluster activities. As expressed by one teacher leader participant; "...there are certain elements that have negative attitudes yet they have been assisted to improve their school standards". The quote implies that there are some schools which are not forthcoming when it comes to cluster activities yet they need assistance to improve their standards. Negative attitudes can be a result of several factors which can be explored in other studies. However, several instructional leadership scholars argue that the principal plays a critical role in promoting or discouraging collaboration in clusters (Giordano, 2008; Harris, 2007; Mulford & Slins, 2004).

4.6 CONCLUSION

Chapter four has presented data, gathered through both quantitative and qualitative methods, on whether and how school clusters could be sites for instructional leadership. It was presented and analysed in three stages, namely quantitative presentation of survey data, qualitative presentation that included data from interviews and data from the observed cluster meeting. The last section of the presentation harmonized data from all the

three sources. Similarities and differences were discussed, and inferences drawn to validate data. In all cases reference was made to the research problem, sub-problems, literature review and findings as provided in the form of quantitative measures(for questionnaire surveys), interview excerpts and narratives for qualitative data. The rationale for doing this was to permit triangulation as well as authenticating my research findings. The final chapter of my thesis will give a summary of the whole study, present the major findings, highlight the limitations encountered during data collection and draw the conclusion to the study. It will also suggest recommendations from some of the findings that emerged from the study and suggest possible areas for further research in this area.

CHAPTER 5: SUMMARY, FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

The previous chapter discussed the data gathered from both the quantitative and qualitative phases of the present study entitled, School clusters as sites for instructional leadership: a case of the Masvingo Better Schools Programme of Zimbabwe (BSPZ). In this chapter, I discuss the major findings of the study, draw conclusions and suggest possible recommendations for consideration by various stakeholders. Lastly, I highlight some of the limitations of the study as well as possible areas for future research.

5.2 Summary of the study

The present study sought to explore whether and how school clusters could be sites for instructional leadership, with a special focus on the Masvingo district Better Schools Programme of Zimbabwe (BSPZ) as a case in point. Specifically the major research question and sub-questions were as follow:

5.2.1 The Major Research Question

The main research question to be addressed by the study was: How is instructional leadership enacted in the BSPZ school clusters? (1.4)

5.2.2 Research questions (1.4.1):

The following sub- questions were generated to assist in answering the main research puzzle for the study:

- What are the **practices** and **artefacts** for instructional leadership within the cluster?
- How can these practices and the use of artefacts be understood and/or explained?
- How is instructional leadership distributed within the cluster, if at all?
- How are the instructional leadership activities perceived by both teachers and principals?

• What suggestions and improvements can be made to the instructional leadership practices of the clusters?

Chapter one of the report provides the background to the study, reveals the problem, subproblems, and sets out the study aim and objectives. It also provides the statement and motivation of the problem, as well as my own motivation for conducting the study. Limitation, delimitation and significance of the study were also expounded in that chapter. The chapter was summed up by defining some of the key operational terms.

Chapter Two reviews some of the existing knowledge related to my study. It does so by consulting previous journal articles, books and the internet on related themes and topics. The review interrogated the literature as it relates to my problem and sub-problems as well as the current state of the BSPZ clusters. Some of the major themes that emerged from the literature chapter are: definition and history of clusters, cluster typologies; the BSPZ cluster; instructional leadership and clusters, distributed leadership in school clusters, perceptions of teachers and challenges of school clusters. The chapter also provided insights on the conceptual and theoretical frameworks of the study. Some of the key scholars consulted include Aipinge, Giordano, Lieberman and Mace, Jita and Mokhele, who all explore the work of school clusters. Hallinger, Lee, Hammond, Diamond and Spillane, Harris, Jones, May and Mouza all helped to conceptualise both cluster instructional and distributed leadership practices. These scholars provided the literature which helped to frame my study. Furthermore, Aipinge, Giordano, Lieberman and Mace helped particularly in shaping my understanding of teacher collaborations and/or school clusters. The focus was on the conceptualization of clusters, how they are constituted, their roles and challenges. Literature by Hallinger, Lee, Hammond, Diamond and Spillane, Harris, Jones, May and Mouza helped me to bring together the two key conceptual anchors of the present study: namely, the concept of instructional leadership and that of distributed leadership. The literature was interrogated to bring to the fore what instructional leadership and distributed leadership practices entail. The different practices and roles constituting instructional and distributed leadership were reviewed. The latter body of scholarship further helped me to conceptualise and explore the use of artefacts for both instructional leadership (Firestone & Martinez,2007; Harris & Muijs,2005, Harrison & Killion,2007 & Grant, 2010) and teacher leadership (Cobb et al., 2003., Honig, 2012., Spillane et al., 2007, Zbar, et al., 2009) in the clusters.

The chapter also discusses in detail how the social interaction theory, as discussed by Blumer informed the study. The theory upholds that human beings learn about themselves and construct meaning through the interaction pattern they encounter within the natural and social worlds they inhabit (Cohen *et al.*, 2011). Thus, the interaction patterns, which can be studied, provide meanings for teachers as well as the community as they engage with each other in social settings. The social interaction theory helped me to study and understand the inter-school collaborations or what we have referred to as clusters, as institutions where teachers from different schools meet and cross-pollinate ideas about what constitutes successful teaching and learning for them. By interacting with knowledgeable others, teachers construct meaning of what constitute an "effective teacher" in their context. The theory therefore enabled me to investigate the what and how of instructional leadership as it is enacted in school clusters.

Chapter three discussed the research approach employed by the study: viz. the mixed methods. I began by tracing the history and philosophical assumptions of mixed methods approaches. The fact that I could take advantage of the strengths of both the qualitative and quantitative approaches was the major impetus for my adoption and use of mixed methods in the present study. The specific research design, viz. the sequential explanatory mixed methods or Quantitative-Qualitative, was employed, in which the quantitative phase was used first and then followed by the qualitative phase. The qualitative phase was employed as a follow up to the quantitative phase, thus permitting elucidation as well as triangulation of the data from the quantitative phase. The advantages and limitation of the mixed methods approach were discussed in detail. Furthermore, the instruments employed which included; the survey questionnaire to explore the instructional leadership practices and artefacts as well as the perceptions of teachers were discussed. The questionnaires were distributed to a total of one hundred and one (n= 101) participants who included teachers and school principals in the four clusters that I purposively selected. The purpose of the survey was mainly to provide a general picture of the different instructional leadership practices and artefacts in the clusters and how instructional leadership is perceived by teachers and school principals. Informed by the social interaction theory, semi-structured interviews and observation of the cluster meeting/workshop were also employed to establish how instructional leadership is enacted and how it is distributed in the school clusters, as well as to validate data obtained from the survey. A total of six participants,

who included two principals, two cluster resource teachers and two ordinary teachers drawn from two of the clusters, were all purposively selected to participate in the follow up interviews. One cluster meeting was also observed to get a "real feel" of how instructional leadership is enacted and distributed, as well as the kind of interaction that take place during cluster meetings/workshops. The chapter also discussed the strengths and limitations of each instrument as well as its administration. Ways of enhancing the validity and reliability of the findings were also discussed in some detail. I summed up the chapter by exploring the ethical considerations for the study in question. To this end confidentiality and all efforts to protect the participants were upheld. Participants could withdraw their participation at any point during the study if they so wished.

Chapter four discusses data obtained from both the qualitative and qualitative phases. It does so by presenting quantitative data in phases. That is mostly the quantitative data is presented first and then the qualitative data later. The analysis and discussion of the findings followed three major themes that are drawn from my sub -questions, the literature review, as well as from data generated in the study. The major themes addressed included the following: cluster instructional leadership and artefacts; distributed instructional leadership in school clusters and participants' perceptions of cluster successes, challenges and the way forward.

Chapter five, which is the last chapter of this study presents the summary of the study, the major research findings, draws the conclusions and suggests possible recommendations as well as other unresolved questions for future studies. It also highlights some of the limitations to the study.

5.3 SUMMARY OF MAJOR FINDINGS

The findings of the study are presented in line with the sub-headings of my research subquestions.

1. What are the practices and artefacts for instructional leadership within the cluster?

Both the quantitative and qualitative phases revealed the following instructional leadership practices and artefacts as characterising the BSPZ clusters: Cluster tests, supervision,

collaboration with the community and professional development. Data suggest that the four sets of activities were the most dominant amongst a range of instructional leadership practices performed by clusters. There were variations, however, in how each of the clusters perform on these practices, as confirmed through interview data and the questionnaire surveys. The discussion on the findings is guided by the four instructional activities dominating clusters.

Cluster tests

In all clusters, there seems to be committees which are representative of all schools, selected to administer the tests, allocate subjects to schools, moderate the tests and analyse the results. However, various aspects in the conduct of the cluster tests, such as the provision of feedback on the test results were shown to be rather under-developed aspects of instructional leadership in the clusters. For example, the survey data suggests that feedback appears to be a preserve of the school principals, with teachers and pupils not being provided with effective feedback on the cluster tests. Further inquiry through interviews established that although the practice of providing effective feedback was indicated to be low for teachers and pupils, it was also dependent on how schools conducted their cluster business. Furthermore, the interviews also suggested that the committee in charge of cluster tests was usually made up of teachers representing all the schools within the cluster to make it easier for the lessons and information to be cascaded back to their respective schools. All schools in the clusters were expected to benefit from the cluster activities since they are represented by both the teacher(s) and the school head. An important question to raise at this point could perhaps be on how the school head conceives of what is worth reporting to teachers as feedback, as well as creating opportunities for the teachers to share their craft knowledge. Harris (2007) and Williams (2010) argue that more often than not the principal creates such a culture and climate for teachers to collaborate and share insights on pedagogical knowledge. Interviews with both principals and teachers in one of the clusters indicate that teachers were provided with the space to share expertise and knowledge with others. In a cluster meeting that I was able to observe, it was clear that the schools were allocated subjects on which to set tests, which were then moderated at cluster level by a multi-school committee. Where funds permitted, the tests were typed and photocopied by the cluster. It was suggested that the practice of cluster tests had also raised schools' pass rates, as teachers know what to teach and how to assess student performance. As one of the participants attested "...school has its pass rates

risen from zero percent to twenty percent". Further inquiry into whether and how cluster tests helped to raise the school pass rates was beyond the scope of this study and remains to be explored.

Supervision

The findings also suggest that clusters engaged in peer supervision, through which teachers would observe others teach and where the heads would supervise each other as well. Feedback would be given to the supervisees after the exercise, a practice that has the potential for some far-reaching effects on the achievement of the learner. Some of the literature reviewed in chapter two suggests that professional advice from colleagues may have long enduring effects on improving teaching and learning (Lieberman & Mace., 2010).

One participant had this to say regarding the peer supervision: "It is always good to get advice from other colleagues. They observe you teach, scrutinise pupils' books and thereafter discuss. One actually benefits from these cluster supervision!"

Hammond *et al.*(2009) and Lineburg (2010) concur that supervision from colleagues has a more long-lasting effect than that from formal leaders, who in most cases are viewed as 'snoopervisors', bent on fault-finding. Findings from the observations also showed that whilst the teachers were supervising each other, school principals also shared on how best they could improve on their administration skills. This was also confirmed during the observed meeting wherein the principals and SDCs held a separate meeting from the teachers. The general office set up of the school heads was also strikingly uniform, indicating that indeed the school principals helped each other in a variety of ways designed to raise the standards of their schools.

"We assist each other on the office layout, etcetera as part of our supervision .There is nothing left out when others come to visit you." Concurred Mr. Chomu, one of the school heads who was interviewed.

This confirms Pomuti and Weber's (2012) view that the objective of school clusters is to improve on among, others, school management, school supervision, and teaching and learning. The success of this peer-learning practice could be attributed to a spirit of tolerance, where by one accepts his/her failures as well as others' criticism.

Professional development

Data further suggested that the clusters engaged in the instructional leadership practice of staff development rather differently. The topics differed from cluster to cluster, as they are determined by the participating stakeholders and usually covered a range of topics ranging from pedagogical and general professional knowledge. The cluster resource teachers consulted other teachers on the topics for staff development as well as the facilitators for these workshops. Most of the facilitators for the workshop were drawn from the clusters themselves or the district based largely on the belief that only local people could be conversant with their own needs and know the best way to solve them. Hammod et al.'s (2009) provide some basis for such belief when they argue that effective professional development should address the concrete everyday challenges in teaching and learning rather than focusing on abstract educational principles or teaching methods taken out of context. The participants of these workshops would take the models from a few teachers, drawn from the cluster schools, attending a workshop at cluster level and then cascade it down to others. Although this approach has drawn criticism from some sections of the literature (Mokhele, 2011), the participants in this case did not appear to see anything wrong with the cascade model, as long as there was "ample time for feedback".

There was some testimony of the positive payoffs of this approach to sharing and dissemination of information, as others would say that their skills in marking essays had greatly improved from the workshops held at the cluster level and cascaded to the schools. As one of the participants argued: "I have never attended any workshop from the clusters but have benefited greatly from the feedback they give after attending the workshop...for instance I can now mark essays effectively."

Giving feedback is one of the key instructional leadership roles that principals should play(Blasé &Blasé,2004; Goddard *et al.*,2010; Hallinger,2012).Data suggested that the frequency of the cluster workshops was also determined by the availability of financial resources, and the time available. In one example of both instances studied in this research, workshops or meetings were held about three times per term, which while impressive comes nowhere near what seems to be a common cluster practice in development countries, such as Japan, wherein teachers spent most of their time workshopping each other (Hammond *et. al.*, 2009).The BSPZ clusters fell into the category of most voluntary clusters in developing countries, in that stakeholders had to fund for their own activities.

Networking and Community engagement

Another important finding was that cluster activities were dependent on the community and/or stakeholders' support. In both clusters where interviews were conducted, participants concurred that stakeholder contribution was critical. The community provided funding for clusters by way of subscriptions that schools make to the clusters. It was evident that the broader community did not only contribute to the clusters but also engaged with them. In both cases, cluster committees included a community representative who would also contribute to decisions with regard to the cluster activities. In one cluster for example, a community member also assisted with his academic knowledge on how to set tests, while in another cluster the community members also participated in the cluster activities, such as the annual festivals. Engaging the community also assisted greatly in maintaining good positive relationships and brought positive results, such as reduction in school burglary and student indiscipline, which are antithetical to effective teaching and learning practices. Networking helped one cluster to support partner schools with teaching and learning resources. Prytula (2012) and Harris and Goddall (2007) argue that it is not parental participation which improves teaching learning, but parental engagement with the school. When schools engage with the community there is ownership, a sense of belonging, teamwork and faithful implementation of the curriculum. This suggests that the community will be in the school and vice versa, producing a shift from 'Their school to our school, they do to we do'. Thus, there is ownership and accountability of teaching and learning by both teachers and the community.

Instructional leadership artefacts

Findings on the instructional leadership artefacts showed a variety of artefacts that are used in service of instructional leadership within the clusters. Such artefacts as the cluster supervision forms, cluster tests, constitution and laptops, were being used to guide the improvement of teaching and learning in the clusters. While most clusters have a constitution that guides them on their overall activities, I was not able in this study, to observe or check on the adequacy of the document in relation to the function of instructional leadership. This was beyond the scope of this study.

The cluster tests did expose the pupils to a form of standardized testing akin to what they would be expected to take at the end of the primary school teaching and learning cycle. In a way, this artefact did appear to offer learners with additional opportunities to practice

and improve their test-taking skills at the least. This concurs with Cobb *et al.*'s (2012) views that tools often help principals and teachers in effecting instructional leadership in their schools and eventually teaching is accomplished. Such an artefact can aid teachers in a way by structuring their teaching as well as aligning it to expected examination standards. Thus, tests become one of useful instructional leadership artefacts in the cluster.

The supervision form developed by one of the clusters appeared to have been tailor-made for the needs of that particular cluster. There was a clear identification of areas that the cluster felt was critical to supervising an effective teacher, such as mastery of content and delivery, class management, quality and quantity of written work. Spillane (2004) writes that instructional leadership artefacts, such as supervision forms, may help in providing guidance on how to improve teaching and learning. To this end, the forms can facilitate the interaction between the leader (supervisor) and the follower (teacher/supervisee). Thus, affirming Spillane's (2005) assertion that tools are the means through which people act and they may include everything from student assessment data to protocols for evaluating teachers (p.145).

I was also able to establish that clusters performed poorly on the instructional leadership role of creating a positive climate. It was evident from both interviews and questionnaires that teachers were given neither incentives nor rewards by the clusters to motivate them. The only form of rewards was given by one cluster, which engaged in a festival. The rewards were given for those schools, teachers and members of the community who would have won in the competitions. Rewards and incentives are regarded as some form of instructional leadership practice (Hallinger, 2012), though they have been criticised for having a tantalizing effect, especially when they dry up. In developing countries, with low incomes their motivational influence may be important. Sensitising communities to ways of providing incentives where the government or local authorities are unable would go a long way towards motivating teachers to work even harder.

The discussed findings unravel the major instructional leadership practices and artefacts of BSPZ clusters as examples of teacher professional collaborations as well as demystifying some of the controversies surrounding their utility. Apart from the common instructional leadership practice of professional development of teachers, clusters were found to engage in setting ,administration and analysing of tests, direct engagement with parents on teaching and learning issues as well as lesson supervision. The findings demystify the notion that clusters engage in haphazard unplanned activities (Mphakhele, 2014) .It was

evident from the findings that cluster could engage in some planned professional development workshops embedded in the needs of the schools contrary to the traditional professional development workshops. The workshops adopt the cascade model which proved effective and beneficial to participants challenging the conception that it is not effective (Mokhele, 2011). With ample time and support from the principals the cluster workshops can be effectively cascaded down to the school.

The findings also point out some of the artefacts (tests, supervision instruments, cluster constitution) clusters can employ to improve teaching and learning thus adding value to the current instructional leadership discourses. Most studies have alluded to instructional leadership artefacts at the school and/or the district (Spillane, 2004; Rorrer *et al.*, 2008).

2. How is instructional leadership distributed in school clusters?

The study also sought to establish how instructional leadership was distributed in school clusters. Both the interviews and observations provided evidence that leadership was distributed amongst leaders, followers and the situation. Despite the cosmopolitan composition of the cluster coordinating committee, which comprises school heads, teachers (cluster resource teacher) and parents, it was evident that this was not only in principle but also in practice. In one cluster, wherein I had prolonged visits, I observed that the principal who happened to be the cluster chairperson seemed to employ democratic and consultative principles of leadership as well as providing teachers to take the lead in some instances. He could arrive at a decision after consulting with fellow heads and the cluster resource teacher, including when the cluster chairperson could not answer questions on workshops in the clusters. This is contrary to previous studies by Madungwe *et al.*, (2000) and Chikoto (2007), which established that cluster resource teachers (teacher leaders) were sidelined by principals.

It appeared as if the issue of authority differentials was played out in cluster activities, and the observed cluster meeting/workshop also revealed that teachers were granted the autonomy to lead others. In the observed meeting one teacher could facilitate on a topic while others including principals were following, and vice versa. It is the situation which determines how leadership should be distributed (Neumereski, 2012; Spillane, 2005). Where the cluster required the services of an English expert, they would invite one from the cluster to lead them. Members of the cluster assumed various roles as listeners,

facilitators, observers, supervisors and supervisees. This leadership was also extended to the SDC members who could lead teachers and principals in a workshop.

It was also evident that both primary and secondary teachers could integrate amicably and effectively in the clusters. One secondary school lady teacher was responsible for the cluster finances and others would also facilitate at cluster workshops suggesting permeable leadership structures. The latter practice is viewed by Hallinger and Heck (2012) as 'boundary spanning', which although rare in most developing countries, as well as scantly documented in instructional leadership discourses, if well implemented can produce better student achievement as they will be provided with better instruction. It came out from the interviews that cross boundary would motivate teachers who hold various professional qualifications apart from the basic teaching certificate in that they would have found at least somewhere (the cluster) to prove to the world that they have done something.

The discussed findings confirm and show how instructional leadership is distributed in school clusters. Whilst previous studies by Chikoko (2007) and Madungwe *et al.*(2000) concur that leadership in BSPZ clusters was confined to school principals only and parents and teachers were marginalised. Findings established that leadership is spread across teachers and the parents. It was evident that the situation or task to be accomplished determines who leads who. This scenario is described by Spillane (2005) as the leadership aspect or the romance of leadership where leadership practice takes form in interactions between leaders and followers, rather than as a function of one or more leaders' actions (p.146). Contrary to the traditional form of leadership where parents play the peripheral role of providing material resources to schools it was learnt that parents could provide expert advice on teaching and learning to schools. Such articulation strategies as they are called by Hallinger *et al.* (2012) are associated with distributed strategies at the school and not the cluster. Thus, it is the distribution of leadership in clusters which defines the core technologies of teaching and learning activities.

3. How are instructional leadership activities perceived by both teachers and principals?

It was one of my assumptions before the study that the bad state of the economy had made teachers and principals more likely to perceive cluster instructional leadership negatively, the findings revealed on the contrary some positive, albeit varied perceptions. Most participants concurred that cluster activities, inter alia tests, peer lesson observations,

supervision, staff development workshops or meetings had a net effect of improving student achievement. The interviews uncovered that in one of the clusters a school saw its Grade Seven results improve from a near zero percentage point to 20. Results from both the survey questionnaires and interviews point to the importance of collaborative activities in school clusters. The collaborative activities seem to have impacted positively on student performance since schools share craft ideas which can improve on their pedagogic competencies and thus rendering school clusters better sites for instructional leadership.

Both teachers and school principals felt that they were different after belonging and participating in cluster activities, with Principal, Mr. Chomu confirming his feelings as follows:

I actually feel different and proud...since joining this cluster I have improved on my administration and school management skills, we share amicably everything as school heads. We have learnt to work as colleagues and our pass rates have greatly improved.

Toro, a teacher from cluster K, also echoed the sentiments when he said:

Clusters have greatly improved our pass rates. We learnt a great deal through workshops and one of our schools has greatly improved its Grade Seven pass rate from four percent to twenty percent.

Overall, the data appears to establish that although clusters may seem to offer great opportunities for school improvement, there were some pros and cons to them. For instance, negative attitudes of some heads who were not forthcoming when it comes to participating in cluster activities, denying teachers opportunities to participate with others in cluster staff development programmes in spite of their schools performing below the expected level. This runs contrary to the call by Gamage *et al.* (2009) and Mafuwane (2011) that principals should encourage teachers to share their expertise and collaborate with others in clusters. One head, Mr. Chomu from cluster K could not hide his feelings about his fellow head from a neighbouring school and the students in general

Just imagine he (non-participating Head) does not usually pitch up for cluster meetings. He could at times deny teachers to take part in collaborative activities. Imagine all our schools (in the cluster) have twined with schools abroad with the exception of his. This has also disadvantaged the pupils because all our pupils have

friends abroad. I don't really understand what he is up to. But we are trying our level best to assist him.

Acknowledging the importance of the BSPZ cluster as a vehicle for instructional leadership, the participants felt that the time devoted to cluster meetings or workshops was a bit inadequate. The participants felt that meeting at least once a month would be better than once or twice a term as that would permit them to engage in more pedagogic and content pedagogic workshops, for instance syllabi interpretation and/or specific subject topics. Meeting frequently would also allow them to engage in collaborative lesson planning and more lesson supervision. Collaboration time for professional development and the nature of professional development have always been a cause of concern for different scholars (Goddard *et al.*, 2009; Harris.2007; Hammond *et al.*, 2009) as teachers complain of lack of time to engage meaningfully in cluster activities.

4. What suggestions and improvements can be made regarding the instructional leadership practices of the clusters?

Participants proffered several suggestions with regard to how instructional leadership practices in clusters could be improved. I have divided their suggestions into two categories, viz. the *structural*, implying those that deal with the cluster as a structure, and the *proximal*, which describe those suggestions that address the internal logistics or operations of the cluster.

Structural

It was unanimously agreed that BSPZ clusters could be effective if linked to the district and hence there was a need for someone such as the district resource teacher (DRT) to coordinate district cluster activities. One CRT even lambasted the lack of a district coordinator, to coordinate even the staff development of CRTs, where they could also learn the best practices from varied clusters. The reappointment of DRTs was also suggested by Makaye (2011), but up to the time of this study the district had not employed one, indicating a lack of system support and will on the part of LEAs.

It was also suggested that clusters construct resource centres with a library books, Internet and typographical facilities, to ensure that cluster records would be safely housed. Participants also felt that local authorities or cluster stakeholders should provide some

form of remuneration to the cluster resource teacher, whom they viewed as carrying out extra and important roles outside their normal designated duties.

Proximal

Acknowledging the utility of cluster staff development workshops, participants suggested that more workshops on pedagogic as well as pedagogic content knowledge be held. The major concern was on the frequency with which members should meet. More meetings would permit more activities, such as modelling, lesson observation and class supervision. Participants also felt that clusters should have common schemes of work or syllabi aligned to the national curriculum, ensuring that the set tests would be valid. This supports Hammond and Richardson's (2009) assertion that student achievement improves when teachers plan and interpret the curriculum together.

Summarily, the findings pointed out to some steps which can be taken to improve the status of clusters if they are to be sites for better teaching and learning. Participants felt that there are better opportunities in clusters to improve the efficacy and quality of teaching and learning only if the government seriously considers the restructuring of clusters. To this end, dedicated teachers leaders should be appointed to coordinate cluster activities at both the cluster and district. Jita and Ndlalane (2009) argue that it is not merely the existence of structure namely, cluster but it is the interactions among teachers which matter most. Thus, government or Local authorities should move away from rhetoric to praxis when it comes to inter school collaboration professional development. Findings reveal that there is a lot of 'capacity and will' amongst teachers and the community which local authorities should complement through supportive policy frameworks. These policy frameworks will ensure that cluster activities resonate around the core areas of teaching and learning.

5. How can cluster instructional leadership and artefacts be understood and explained?

This mixed method study provided us with spectacles and means of exploring instructional leadership practices which could not have been possible with one research approach. School clusters or inter school collaborations as they are known in other countries have become an acknowledged educational reform strategy whose utility and modus operandi are a source of debate and contestation (Aipinge,2007; Jita & Mokhele,2012; Pomuti & Weber,2009; UNICEF,2009). It was this controversy that has led me to embark on this

study particularly in a country whose economy is haemorrhaging, teachers appear demoralised, and ironically where strategies to turn the fortune of the nation are long desired through quality learning and teaching. Thus, the obvious assumption was that teachers and the community would not be motivated to engage in any meaningful cluster activities, in part because they would require additional resources such as time and money.

The major purpose of the study became the overarching question of the study: what instructional leadership practices and artefacts do clusters engage in and how? How is instructional leadership distributed considering the cosmopolitan grouping of the clusterprincipals and teachers? These questions have always been pertinent to the researcher who was once a DRT, during the hay days when the cluster innovation was receiving funding from the Royal Netherlands. Thus, the need to capture the views of almost all the members of the four selected clusters was deemed necessary and important. Initially, two clusters were thought ideal but casting the net to a wider area helped to give a more general and valid picture of what the teachers' perceptions of cluster instructional leadership practices and artefacts are. To this end, 101 teachers including school heads responded to the questionnaires. The qualitative phase in form of interviews and observation assisted in elucidating and explaining key trends emerging from the survey, as well as in establishing how instructional leadership was distributed within the clusters. Admittedly, it was not possible to interview all participants considering the time and other resources, hence only two clusters were chosen from the four and six participants were interviewed. In short, the mixed methods approach enabled me to make sense of cluster instructional leadership practices and artefacts and how it is distributed.

It emerged from the findings that cluster instructional leadership practices and artefacts can be conceived of as any activities carried out as a result of collaboration between schools. The activities are perceived relevant and useful by members of the cluster, who were able to decide on and workout the best way to produce from the available resources. This attests to the social interaction theory which holds that meaning is constructed through interaction. As teachers and principals meet in clusters they determine activities which are ideal to improving teaching and learning. Thus, their construction of what is ideal and best for their situation could only be better understood by the members. The professional development activities they engage in and how they go about them are shaped and perceived as effective by cluster members. The modus operandi of cluster activities vary from cluster to cluster indicating in most cases their will, capacity and ingenuities of

its leadership. The distribution of instructional leadership within clusters confirms of effective interaction whose meaning should be shared by other persons (Hogg & Vaughan, 2011) for the common good of the learning

5.4 CONCLUSIONS AND RECOMMENDATIONS

The study aimed to establish how and whether school clusters could be sites for instructional leadership. Drawing from findings, the sub-questions and literature review, the following conclusions may be drawn.

First, the inter-school collaboration or clusters in Zimbabwe take different forms and vary in terms of their activities and how they are carried out. Clusters which were studied engaged in administration and analysis of tests, lesson supervision, professional development meetings/workshops and networking with parents amongst others activities which many scholars have characterised as key aspects of instructional leadership (Blasé & Blasé, 2004; Hallinger & Heck, 2010; Hallinger, 2012; Jones, 2009; Spillane, 2005). However, while we can then conclude that clusters are potential sites of instructional leadership the nature of the practices they engage in and how they perform these practices and/or roles seem to vary across sites and with the composition of each cluster. What seems to distinguish each cluster from another, in terms of instructional leadership practices and artefacts, is partly defined by the capacities, political will, and initiatives of both cluster stakeholders and leadership. Capacity entails knowledge, skills, personnel and other resources to carryout the task whereas will encompasses attitudes, motivation and beliefs which underlie one's response to a policy goal (Rorrer et al., 2008). Initiative refers to one's creativity and/or innovativeness. These three attributes characterise the success or poor performance of clusters. The major instructional leadership role performed by all the clusters is that of defining the cluster mission. It was evident from the findings that most stakeholders were clear about cluster goals of improving teaching and learning. Although the cluster mission document was not available at all the different stations, members seemed to be aware of it and admitted that they were involved in the formulation of the mission and cluster action plans.

The second dominant role, though performed moderately by clusters, was monitoring instruction. In this role, the activities of the clusters included, amongst others, engaging in the administration and analysis of cluster tests, peer lesson observation /supervision, and

organising staff development workshops. Whilst these were common to all clusters, the frequency with which they engaged in the activities and the nature of the staff development for example varied from cluster to cluster. The variations would seem to suggest that BSPZ clusters had considerable autonomy to craft and recast some of their functions, including the autonomy to decide on what, where and how to do so, as long as it improved the quality and efficacy of learning. However, more work is needed to ensure that the staff development activities of the clusters address the core activities of teaching and learning in the schools by engaging teachers in more collaborative professional development workshops that focus on both pedagogies and pedagogical content knowledge. It was not clear from our data that any of the clusters had managed to shape their activities to link more tightly with teaching and learning in the schools. This can only be effectively performed when teachers willingly open up their classroom and work with, teach and learn from others (Jones, 2009; MClenskey& Waldron, 2010).

None of the clusters seemed to do well on the instructional leadership role of creating a positive climate and providing instructional leadership artefacts. These aid instructional leadership amongst principals and teachers. Teachers and pupils felt that there were no adequate incentives or rewards to motivate them to teach and learn effectively, especially in the context of the rather declining salaries of teachers and less than ideal economic conditions in the country. The conclusion to be drawn in this case is that the sustainability of the clusters would appear to be at risk as the economic situation in the country deteriorates. More creative ways of providing incentive, even non-monetary ones, need to be explored for the sustainability of the cluster movement.

The only cluster artefacts that were provided for were the supervision forms, tests, and cluster constitutions. Only rarely were computers and laptops, which are regarded as important artefacts or tools for instructional leadership, provided for data storage in the clusters, particularly in remote and disadvantaged learning ecologies.

As argued earlier, the effectiveness of the instructional leadership activities is influenced largely by collegiality, unity of purpose, political will, capacity and ingenuity of cluster members and leadership. These factors were also observed by Rorrer *et al.* (2008) as being visible at the district site. Where there is collegiality, schools (teachers and principals) and parents work together to define their own goals, specify standards and work towards maintaining it. In the clusters we studied, it was clear that the various stakeholders were sometimes successful in raising the necessary resources, albeit no government support is

available to develop the capacities of the members to improve their teaching competencies. Strong partnership and synergies with parents appears to be a strong driver of effective cluster operations.

It was also evident that cluster leadership is not static, with members assuming multiple roles from being learning facilitators, presenters, questioners and supporters to figures of authority. This had the effect of equalising the power relations within the clusters, thus leading to an interesting distribution of leadership to teachers as well. Such redistribution of power is relatively rare within schools in the Zimbabwean context and thus constitutes an important and significant contribution by clusters through their operation as sites for instructional leadership. Cluster leadership, specifically the cluster chairperson and the position of cluster resource teacher, was characterised by collegiality, respect for others, dedication, shared vision and a capacity to harness and tap on the interests and capacity of others. These tenets led to cluster cohesion and strong support from followers. The realization that teachers can contribute to their wellbeing as well as student learning has given rise to a new interest in teacher leadership within the clusters. In many cases, followers wish to associate with such leadership. This is yet another important contribution of the cluster movement for instructional leadership within the BSPZ specifically and perhaps to the many schools in Zimbabwe generally.

5.5 RECOMMENDATIONS

From the findings and conclusions above, the study makes the following recommendations as possible ways to improve on the current status of instructional leadership in school clusters.

5.5.1 Structural

Considering the critical role of the district resource teacher within the clusters, it is suggested that the Ministry of Education, together with the public service commission, consider delineating specifically (perhaps through legislation or regulations) the posts of the district resource teacher, and provincial and national coordinators who would be in charge of quality assurance within the clusters. These leaders should have both a lateral and vertical communication structure to influence district and provincial leadership on matters of improving teaching and learning, while at the same time making their

contribution to the schools and clusters. Laterally, they should report to either the district, provincial or national head respectively, and vertically to the district, provincial and national coordinators. This approach equalizes power as well as ensuring that clusters and district instructional leadership activities are synchronised.

Similarly, the government or local authorities should provide a policy framework which engenders effective operation of clusters. Such a framework should provide and support a system to incentivise teacher leaders, for example. A clear cut policy that permits stakeholders to provide such incentives, particularly when clusters are supported by the community, would be helpful in removing doubt and insecurities. This would motivate the teacher cadres to work harder outside their normal teaching duties. Local authorities should also devise strategies to institutionalize the operations of school clusters, thus each education inspector or officer would be aware of the cluster activities and action plan for each school term. Currently, there is no policy that clearly specifies the operations of BSPZ clusters, and this partly explains the poor operations of some clusters as well as the absence of the DRT to coordinate cluster activities.

In some nations with stable economies, financial support is often provided to clusters, to enable them to construct resource centres and/or to carry out cluster activities, such as workshops and other professional development activities. Emanating from this study, therefore, is the recommendation that clusters increase the frequency of their professional development activities, lesson observations and workshops. Meeting on a monthly basis to review the progress of their activities can have some far-reaching effects on student performance. To ensure that teachers and heads participate actively, attending cluster workshops should be part of the principal's key performance areas, or result-based performance management. This will go a long way to encourage heads to participate as well as to allow teachers and support them to collaborate effectively with others in cluster activities.

More workshops on pedagogy and pedagogical content knowledge should be held for teachers, to ensure that they address the core issues relating to their classroom practices. The use of audio and video tapes from lesson observations can also help to document teachers' practices for subsequent examination and discussion during reflection.

The use of electronic tools to organise and schedule cluster activities, as well as produce and share documents to increase their accessibility to other members of the cluster, including the community, is strongly recommended. To this effect, clusters can also embrace electronic collaborative learning and thus exploit some Internet 'chat groups' to aid teaching and learning.

The issue of inter-student collaboration through cluster exchange programme is one of the innovations worth exploring in the quest to improve student learning. Opportunities for students to meet, interact and share their experiences are rare, particularly in developing countries, yet they can offer some solutions to their own challenges if given the platform.

Whilst the study concludes that clusters do provide better opportunities for instructional leadership, questions on what activities and how they are performed, as well as what effect they have on teaching and student learning, cannot be generalised and remain unresolved. However, I am optimistic that the lessons learnt from this study can be transferrable to other settings and can offer promising solutions to most countries in their quest to improve student learning as well as to add value to existing instructional leadership discourse. The study has also contributed to the debate and opened up other academic terrain for further inquiry.

5.5.2 Recommended areas of further study

The study recommends further inquiry in the following areas:

Autonomy and control in schools clusters.

How the two play out each other in school clusters and the effects thereof on teaching and learning. The support given to school clusters by the local education authorities has remained an uncharted area of study. If school clusters are a national strategy what support do LEAs provide and how do school clusters operate within/out this autonomy and what effect does this autonomy or lack of it have on student achievement?

Perceptions of teachers of the roles of the cluster teacher leaders.

Stakeholders' perception of the CRT's role will ensure the type of instructional activities they want in the clusters, thus creating awareness of how both the CRT and other teachers can operate effectively in school clusters. The study will pacify the acrimony and challenge the hegemony which sometimes exist in school clusters and render them ineffective.

• The role of the district resource centre.

Resource centres have been synonymous with clusters however little is known on their influence to teaching and learning. The BSPZ has no exception to this strategy and has established district resource centres. The utility and impact of these centres has been a subject of debate more so the centres are funded by stakeholders. The study will therefore uncover those roles which impact on learning and how they impact. The study can help improve the way district resource centres positively influence teaching and learning at the school or cluster site.

• Exploring the effects of boundary spanning as an instructional leadership activity in school clusters.

Boundary spanning is one of the distributed instructional leadership practices this study has established though its details are scanty. As one of the strategies of distributed leadership which is often skirted around in instructional leadership discourses of developing countries, a study may explore how the strategy can be implemented in developing countries. Perspectives of stakeholders are crucial if successful implementation of an innovation is to be effected. To complement stakeholders' views an insider's view of how this strategy is carried out, by whom and the effects thereof on student learning is worth studying.

 Teachers' and principals' perceptions of leadership dynamics and decision-making in school clusters: how they matter in teaching and learning.

Success of inter-school collaborations rests on the understanding of what and how stakeholders perceive ideal leadership, what they expect to be carried out by leaders and how leaders should lead them in their quest to improve teaching and learning. How instructional leadership is distributed needs to be problematised.

 Feasibilities, possibilities and dilemmas of a common cluster scheme: stakeholders' perceptions.

A common cluster scheme is a result of concerted effort of members of the cluster. Questions include: Is that feasible? What purpose does it serve? Is it really necessary in a cluster? What effect will it have on teaching and learning?

Professional development in inter-school teacher collaborations.

The quest for effective staff development remains an uncharted terrain. How should clusters organize their staff development? What should they focus on? Who should facilitate it?

• The study recommends that similar studies be carried out qualitatively by looking at specific cluster sites. Thus, issues of what instructional leadership artefacts and practices, how leadership is distributed, the issue of teacher leadership can form some of the research questions.

5.6 LIMITATIONS OF THE STUDY

The following limitations could have threatened the validity and reliability of the study. I had intended to observe two cluster workshops in session but only one was observed because events in the school calendar took precedence over the other. Schools were preoccupied with national youth games and were preparing for the national Grade Seven examinations soon after, hence cluster activities had to be postponed in the other cluster. Two or more observations would give a clearer picture of the nature of how instructional leadership is distributed in clusters, the nature of cluster workshops or meetings, as well as how they are held. Establishing the impact of school clusters on teaching and learning would require a longitudinal study which might permit follow-ups on some of the instructional leadership activities revealed in the surveys and interviews, such as peer supervision. These could not be observed or ascertained, however, in spite of the limitation cited, the study ensured that all the expected measures were taken to ensure validity and reliability of the results. I am optimistic that the observed meeting or workshop at least offered a glimpse of how and what instructional leadership entails in school clusters. These limitations can also be taken care of in subsequent studies.

5.7 CONCLUDING REMARKS

Whilst the major question encountered in the study was whether and how school clusters could be sites for instructional leadership, it concludes that they can offer and provide opportunities for better instructional leadership to schools if school authorities give them the necessary support and autonomy to develop their capacity, as well as generate the will to collaborate for teaching and learning. Thus, shared vision and responsibility,

commitment, collegiality, tolerance, community engagement, creativity and initiative are the cornerstones of effective instructional leadership, particularly in disadvantaged collaborative learning ecologies. These attributes give rise to distributed instructional leadership in school clusters.

The moderate implementation of the instructional leadership roles as revealed by both qualitative and quantitative studies indicate that BSPZ clusters operate on some kind of voluntarism albeit being a national strategy. To this end, effectiveness and efficiency of activities are dependent upon astute leadership of the cluster that can stir and motivate other school principals, teachers as well as parents to appreciate the benefits accrued from collaborating. While cluster activities are dependent entirely on community and sometimes teachers contribution the government through LEAs should demonstrate its support and commitment to this endeavour by providing expert advice to ensure cluster operations or activities are aligned to Ministry of Education mission. Thus, stringent monitoring and participation of district education officers/inspectors would ensure that clusters focus their activities on the core business of teaching and learning. Representing LEAs education officers/inspectors should also participate in cluster activities such as drawing of the action plan, supervision of instruction, demonstration lessons, professional development workshops as well as prize-giving ceremonies. Such commitment will ensure that all clusters operate effectively and can also network with other clusters as well as the district. The current state of affairs exudes a situation where the government has reneged on its obligation to fund capacity development programmes to the schools and the community. This was echoed by one participant who said, "...You tend to doubt whether the government is very serious about BSPZ (clusters). It has not reappointed the DRT since two thousand and ten..." Successful discharge of cluster instructional leadership roles by clusters depend also on the effective coordination of clusters by a committed and knowledgeable DRT.

The implication of this study is that government should complement teachers and community efforts to improve teaching and learning by putting in place systemic policies which send the same message and complement each other. Thus, to demonstrate its commitment to cluster activities it should ensure that district appoint DRTs as a matter of urgency and mandate communities and schools to reward and incentivise hard working teachers and students. If it is serious about cluster activities both school principals and education officers/inspectors should also be assessed in terms of their participation in

cluster activities. Cognisant that inter-school collaboration has gained international prominence governments should support clustering to ensure that its utility to the overall teaching and learning is realised. To this effect the quality of peer supervision, professional development workshops, administration of tests, demonstration and parent engagement revealed as the dominant cluster practices can be enhanced. Suffice it to say that the social interaction theory provided spectacles for this study to explore and trouble the terrain of instructional leadership in school clusters. The perceptions of participants and an in-depth study of how instructional leadership is distributed could only be possible through the mixed methods approach.

The study has thus revealed to the researcher that through will, capacity, astute and visionary leadership, clusters could engage meaningfully in some activities which can improve student learning albeit minimal financial support from the government. The clusters studied are an epitome of how challenges have instilled shared vision and ingenuities and a desire to turn the fortune of the quality and efficacy of teaching and learning particularly in disadvantaged schools. The onus is on the government to complement cluster effort to improve the quality and efficacy of teaching and learning by legislating supportive policy frames. Whilst the findings of the study could not be generalised, I am optimistic that they can be transferrable to other settings. I conclude that BSPZ clusters have the potential to provide instructional leadership in schools particularly if they receive some leverage from the government.

References

- Aipinge, L.(2007). Cluster Centre Principals' Perceptions of the Implementation of the school Cluster system in Namibia. Unpublished Masters Dissertation. Grahams town, Rhodes University.
- Ali, S. (2011). Communities of Practice and Teacher Development-Lessons Learnt From an educational innovation in Pakistan. *Journal of Research and Reflections in Education*, 5(2), 70-82.
- Angell, B., & Townsend, L.(2011). Designing and conducting Mixed Methods. Workshop for the 2011 society for social work and research annual meeting of RUTGERS: The State University of New Jersey.
- Atkinson, R., & McGee, J. (2008). Instructional leadership and the secondary assistant principal. Partial pilot study. *Unpublished paper, Virginia Commonwealth University*.
- Atkinson, M., Springate, I., Johnson, F., & Halsey, K. (2007). *Inter-School Collaboration:* a literature review. Bershire: National Foundation for Educational Research.
- Babbie, E. (2004). *The Practice of Social Research*. Belmont: Wadsworth.
- Barnes, C.A., Camburn, E., Sanders, B.R., & Sebastian. (2010). Developing Instructional Leadership: using Mixed Methods to Explore the Black Box of Planned Change in Principals' Professional Practice. *Educational administration Quarterly*, **46**(2), 241-278.
- Bean, R. M., Draper, J. A., & Hall, V. (2010). Coaches and coaching in reading first schools: A reality check. *Elementary School Journal*, **111** (1), 87-114.
- Berardo, S.A. (2006). The use of authentic material in the teaching of reading. *The Reading Matrix*, 6(2), 60-69.
- Best, J. W., & Kahn, J. V. (1993). Research in education. Boston: Allyn and Bacon.
- Biber-Hess, S.N. (2010). Mixed Methods Research: merging theory with Practice. New York: Guilford Press.
- Blase, J., & Blase, J. (2004). The dark side of school leadership: implications for
- Administrator Preparation. *Leadership and Policy in Schools*, **3** (4), 245-273.

- Bogdan, B., & Biklin, S.(2007). *Qualitative research for Education*. Boston, MA: Allyn and Bacon.
- Borden, A. (2011). Relationships between Paraguayan principals' characteristics, teachers' perceptions of instructional leadership and school outcomes. *International Journal of Leadership in Education*, **14**(3), 2003-227.
- Borkan, J. (2004). Mixed Methods Studies: a foundation for primary care research. *Annals of Family Medicine*, **2**(1), 4-6.
- Borg, W.R and Gall, M.D. (1996). *Educational Research*, 5th Edition. New York: Longman.
- Brewer, J., & Hunter, A. (2006). Foundations of multimedia research: synthesizing styles. Thousand Oaks, CA: Sage.
- Brunswick, E., Valerien, J. (2003). *Multigrade schools: improving access in rural Africa?*Paris: IIEP-UNESCO.
- Bush, T., Joubert, R., Kiggundu, E. & van Rooyen, J. (2009). Managing Teaching and Learning in South African Schools. *International Journal of Educational Development*, doi:10.1016/j.ijedudev.2009.04.008.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait–multimethod matrix. *Psychological Bulletin*, *56*, 81–105.
- Chappuis, S., Chappuis, J., & Stiggins, R. (2009). Supporting teacher learning teams. *Educational Leadership*, 66(5), 56-60.
- Chikoko, V.C. (2007). The school cluster system as an innovation: perceptions of Zimbabwean teachers and school heads. *Africa Education Review*, **4**, (1), 42-57.
- Chikoko, V. (2008). Negotiating the role and responsibilities in the context of Decentralised school governance: A case study of one cluster of schools. Retrieved from http://.topkinsis.com/cnference/CCEAM/wib/index/outline/PDF/CHIKOKO%20Vitalis.pdf
- Creswell, J. W. (1998). *Qualitative Inquiry and Research Design: choosing among the Five Traditions*. Thousand Oaks, CA: Sage.
- Creswell, J. W., Tashakkori, A., Jensen, K., & Shapley, K. (2003). Teaching mixed methods research: practice, dilemmas and challenges. In A. Tashakkori & C. Teddlie

- (Eds.). Handbook of mixed methods in the behavioral and social sciences. Thousand Oaks, CA: Sage.
- Creswell, J.W. (2005). Educational Research. Planning, Conducting, and Evaluating

 Quantitative and Qualitative Research (2nd Ed.). Upper Saddle River, New Jersey:

 Pearson Education, Inc.
- Creswell, J. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.
- Creswell, J., & Plano-Clark, V. (2011). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.
- Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research, 4th ed. Boston: Pearson.
- Crow, G. M., Hausman, C. S., & Scribner, J. S. (2005). Reshaping the role of the principal. *Yearbook of the National Society for the Study of Education*, **101** (1), 189–209.
- Cobb, C. (2004). Turning on a dime: Making change in literacy classrooms. *The Reading Teacher*, **58** (1), 104-106.
- Cobb, P., McClain, K., de Silva Lamberg, T., & Dean, C. (2003). Situating teachers' instructional practices in the institutional setting of the school and district. *Educational Researcher*, **32**(6), 13–24.
- Cohen, L., & Manion, L (2007): *Research Methodology in Education*: Beckenham: Croom Helm.
- Cohen, L., Manion, L., & Morrison, K. (2007). Research methods in education. London and New York: Routledge.
- Cohen, L., Manion, L., & Morrison, K. (2011). *Research Methods in Education* (7th Ed.). London: Routledge.
- Crow, G. M., Hausman, C. S., & Scribner, J. P. (2002). Reshaping the role of the school principal. *Yearbook of the National Society for the Study of Education*, *101*(1), 189–210.
- Darling-Hammond, L., & Richardson, N. (2009). Teacher learning: What matters? *Educational Leadership*, **66**(5), 46-53.

- Datnow, A., Park, V., & Wohlstetter, P. (2007). Achieving with data: How high-performing school systems use data to improve instruction for elementary students.CA: Center on Educational Governance, University of Southern California.
- Day, C., Jacobson, S. L., & Johansson, O. (2011). Leading organisational learning and capacity building. In K. A. Leithwood (Series Ed.) and R. M. Ylimaki & S. L. Jacobson (Vol. Eds.), *Studies in Educational leadership*, **1** (12), 29–49.
- Delport, A., & Makaye, J. (2009). Clustering schools to improve teacher professional development: lessons learnt from a Zimbabwean case study. *Africa Education Review*, **6**(1), 96-105.
- Denzin, N., & Lincoln, Y. (2005). Handbook of qualitative research. London: Sage.
- Denscombe, M. (2010). The Good Research Guide for small-scale social research projects (4th Ed.). New York: McGraw-Hill.
- De Vos, A.S., Strydom, H., Fouche, C.B., & Delport, C.S.L. (Eds.) (2011). Research at the Grassroots for social sciences and human science profession (4th Ed.). Hatfield: Pretoria: Van Schaik.
- Dimmock C., & Walker, A. (2005). *Educational leadership: culture and diversity*. London: Sage.
- Dinham, S. (2008). *How to get your school moving and improving*. Camberwell, Victoria: ACER Press.
- Dittmar, F., Mendelson, J., & Ward, V. (2005). *The School Cluster System in Namibia*. Windhoek, Namibia: Raison.
- DuFour, R., Eaker, R., & Many, T. (2006). *Learning by doing: a handbook for professional learning communities at work*. Bloomington, In: Solution Tree.
- Duze, C.O. (2012). The Changing Role of school Leadership & Teacher Capacity Building in Teaching and Learning. *Journal of Emerging Trends in Education Research & Policy studies (JETERAPS)*, 3(1), 111-117.
- Feger, S., & Arruda, E. (2008). *Professional Learning Communities: Key Themes form The Literature*. Spring: Brown University.
- Feldman, M. S., & Pentland, B. T. (2003). Reconceptualizing organizational routines as a source of flexibility and change. *Administrative Science Quarterly*, **48**(1), 94-118.

- Firestone, A., & Martinez, C. (2007). Districts, Teacher Leaders, and Distributed Leadership: Changing Instructional Practice, *Leadership and Policy in Schools*, **6**(1), 3-35.
- Fraenkel, J.R., & Wallen, N.E. (1996). *How to Design and Evaluate Research in Education*: 3rd Edition: New York: McGraw-Hill, Inc.
- Fraenkel, J.R. & Wallen, N.E (2011). *Educational Research: A Guide To The Process*. New Jersey: Taylor and Francis.
- Fullan, M. (2006). Leading professional learning: Think "system" and not "individual school" if the goal is to fundamentally change the culture of schools. *School Administrator*, **63**(10), 10–15.
- Fullan, M. (2007). *The new meaning of educational change*. New York: Teachers College Press.
- Gall, M. D., Borg, W. R., & Gall, J. P. (2006). *Educational research*. White Plains, NY: Longman.
- Gamage, D., Adams, D., & McCormack, A. (2009). How Does a School Leader's Role Influence Student achievement? A Review of Research Findings and Best Practices. NCPEA. Retrieved from http://www.leadershipeducators.org/Resources/Documents/jole/2014_spring/V13I2shantal.pdf
- Geeves, R. (2003). *Operational Planning for School Cluster Development: Inception report.* Phnom Penh: Cambodia Ministry of Youth, Education and Sports; UNICEF/Sida.
- Giordano, E. (2008). School clusters and teacher resource centres. Paris: UNESCO.
- Goddard, Y., Miller, R., Larsen, R., Goddard, G., Jacob, R., Madsen, J., & Schroeder, P. (2010). Connecting Principal Leadership, Teacher Collaboration, and Student Achievement. Paper presented at the Annual Meeting of the American Educational Research Association in Denver.
- Grant, C. (2010). *Distributed Teacher Leadership: Troubling the terrain*. Unpublished PhD thesis; University of KwaZulu-Natal, Pietermaritzburg.
- Gray, E.A. (2009). Doing Research in the Real World. Thousand Oaks, CA: Sage.

- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, 11(3), 255–274.
- Hairon, S., & Dimmock, C. (2012). Singapore Schools and Professional Learning Communities: Teacher Professional Development And School Leadership In Asian Hierarchical System. *Educational Review*. **64**(4):405-424.
- Hallinger, P. (2009). *Leadership for the 21stCentury Schools: From Instructional Leadership to Leadership for learning*. China: Hong Kong Institute of Learning.
- Hallinger, P. (2010). A review of three decades of Doctoral studies using the Principal Instructional Management Rating Scale: A lens on methodological progress in educational leadership. *Educational Administration Quarterly*. **47**(2), 271-306.
- Hallinger, P., & Heck, R. (2010). Leadership for Learning: Does collaboration make a difference in school improvement? *Educational Management Administration* & *Leadership*, **38**(6), 654–678.
- Hallinger, P & Lee, L. (2012), A Global Study of the Practice and Impact of Distributed Instructional Leadership in International Baccalaureate (IB) Schools, *Leadership and Policy in Schools*, 11(4), 477-495.
- Hammond, L., & Richardson, N. (2009). Teacher learning: What matters? *Educational Leadership*, **66**(5), 46-53.
- Hammond, L., Wei, R.C., Andrew, A., Richardson, N., & Orphans, S. (2009). Professional learning in the learning profession: *A status report on teacher development in the United States and abroad*. U.S.A: NSDC.
- Hannaway, J., & Carnoy, M. (1993). Decentralization and school improvement: Can We fulfil the promise? San Francisco: Jossey-Bass.
- Haralambos, M., Holborm, M., Chapman, S., & Moore, S. (2013). *Sociology: Themes and Perspectives*. London: Harper Collins Publishers Ltd.
- Harris, A. (2004). Distributed leadership and school improvement: Leading or misleading. *Educational management administration and leadership*, **32**(1),11-24.
- Harris, A. (2007). Distributed leadership: conceptual confusion and empirical reticence, *International Journal of Leadership in Education*, **10**(3), 1–11.

- Harris, A. (2008). *Distributed leadership in schools: Developing the leaders of tomorrow*. London: Routledge.
- Harris, A., & Goddall, J. (2007). *Engaging Parents In Raising Achievement; Do Parents Know They Matter*. Research Brief:DCSF-RBW004./www.dcsf.gov.uk/research/
- Harris, A., & Muijs, D. (2005). *Improving schools through teacher leadership*. Bershire: Open University Press.
- Harris, A., & Spillane, J (2008). Distributed Leadership Through The Looking Glass, British Educational Leadership, Management & Administration Society (BELMAS), 22(1), 31–34.
- Hayes, D, Mills, M. Christie, P., & Lingard, B. (2006). *Teachers and Schooling: Making a Difference*. Sydeney: Allen & Unwin.
- Hughes., Donnelly, C., Hewstone, M., Gallagher, T & Carlisle. K. (2010). School Partnerships And Reconciliation: An Evaluation Of School Collaboration In Northern Ireland.
- Huffman, B. (2011). Professional learning communities in the USA. *International Journal of Learning*, 17(12),321-336.
- Hunt, V. (2011). Learning from success stories: Leadership structures that support dual language programs over time in New York City. *International Journal of Bilingual Education*, **14**(2), 187-206.
- Heather, E. Price. (2012). Principal—Teacher Interactions: How Affective Relationships

 Shape Principal and Teacher Attitudes. *Educational Administration Quarterly*, **48**(1), 39-85.
- Hipp, K., & Huffman, J. (Eds.). (2010). Demystifying professional learning communities. Lanham, MD: Rowan & Littlefield.
- Hogg, M.A., & Vaughan, G.(2011). *Social Psychology*. England: Prentice Hall Pearson Education.
- Honig, M.I. (2012). District Central Office Leadership as Teaching: How Central Office Administrators Support Principals' Development as Instructional Leaders. *Educational Administration Quarterly*, **48**(4), 733-774.

- Hord, S. M. & Hirsh, S. A. (2008). Making the promise a reality. In Blankstein, P. Houston, & R. Cole (Eds.), *Sustaining professional learning communities*. Thousand Oaks, CA: Corwin.
- Hutchins, E. (1995). How a cockpit remembers its speed. *Cognitive Science*, **19**(3), 265–288.
- Ismail, A. (2011). Accelerating Cluster school Excellence within Guided autonomy Periphery. A Malaysian Case. University Sains Malaysia .www.icsei.net/icse.2011/Full Papers/0022.pdf
- James Sebastian & Elaine Allensworth (2012) .The Influence of Principal Leadership on Classroom Instruction and student learning: A Study of Mediated Pathways to Learning. *Educational Administration Quarterly*, **48**, 626-637.
- Jenkins, B. (2009) . What it takes to be an instructional leader. *Principal.* 88(3); 34-37.
- Jita, L.C. (2013). Flawed by Design? The organisation of Instructional Leadership for Science and Mathematics in South Africa. In Charles, A. Shoniregun and Galyna, A. Amkmayeva (Eds), *Proceedings of the Canadian International Conference on Education. Toronto: Infonomics Society*.
- Jita, L., & Mokhele, M. (2012). Institutionalizing teacher clusters in South Africa; Dilemmas and contradictions. *Perspectives in Education*, **30**(2):1-11.
- Jita, L.C., & Mokhele, M.L.(2013). The role of lead teachers in instructional leadership: A case study of environmental learning in South Africa. *Education As Change*, 17(1).S123–S135.
- Jita, L.C., & Mokhele, M.L. (2014). When Teachers Clusters work: selected experiences of South African teachers with the cluster approach to professional development. South African Journal of Education, 34(2), 1-15.
- Jita, L.C & Ndlalane, T.C. (2009). Teacher networks or clusters in South Africa: Opportunities and constraints for teacher development and change. *Perspectives in Education*, **27**(1),58-68.
- Jita, L.C., Makaye. J & Mapetere. K. (2014). Revisiting the Autonomy Control Debate In School Clusters: A case of the Masvingo District Better Schools Programme in Zimbabwe (BSPZ). A paper presented at the Sustainable Rural Ecologies Colloquium (SuRLEc) on 29-31 October at Qwaqwa, University of Free State, South Africa.

- Jones, R. (2010). *Instructional Leadership. Quadrant D Leadership Practices*. New York: International Centre for Leadership in Education, Inc.
- Jones, M., & Harris, A. (2010). Professional Learning Communities and System Improvement. South West Educational Development Laboratory. 13(2),172-181.
- Jones, J. (2009). The development of leadership capacity through collaboration in small schools. *School capacity and management* . **29**(2) 129,156.
- Johnson, R.B. & Onwuegbuzie, A.J. (2004). 'Mixed methods research: a research paradigm whose time has come' in *Educational researcher*, 33(7), 14-26.
- Johnston, C., & Caldwell, B. (2001). Leadership and Organizational Learning in the Quest for World Class Schools. *The International Journal of Education Management*. **14**(5),198-209.
- Joyce, B., & Showers, B. (2002). Student achievement through staff development (3rd ed.). Alexandria, VA: ASCD.
- Kemper, E., Stringfield. S., & Teddlie, C. (2003). Mixed methods sampling strategies in social science research. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed* methods in social & behavioral research. Thousand Oaks, CA: Sage.
- Killion, J., & Harrison, C. (2006). *Taking the lead: New roles for teachers and school based coaches*. Oxford, OH: National Staff Development Council.
- Kiranli,S.(2013). Teacher and School Administrators' Perceptions & Expectations on Teacher Leadership. *International Journal of Instruction*. **6**(1), 179-194.
- Kirsunoglu, A., & Tanriogen, A. (2009). The relationship between teachers' perceptions towards instructional leadership behaviours of their principals and teachers' attitudes towards change. *World Conference on Educational Sciences:* Elsevier.
- Klar, H.W. (2012). Fostering Distributed Instructional Leadership: A Socio-cultural Perspective of Leadership Development in Urban High School. *Leadership and Policy in Schools*, 11,365–390.
- Kombo, D.K., & Tromp, D.L.A. (2009). *Proposal and Thesis Writing: An Introduction*. Nairobi: Paulines Publications Africa, Makuyu.
- Labovitz, S., & Hagedorn, R. (2007). *Introduction to Social Research*. Michigan: McGraw-Hill.

- Lang, M., & Fox, L. (2003). Breaking with tradition: Providing effective professional development for instructional support personnel supporting students with severe disabilities. *Teacher Education and Special Education*, **26**(1), 17–26.
- Lee, M., Hallinger, P., & Walker, A. (2012). A Distributed Perspective on Instructional Leadership in International Baccalaureate (IB) Schools. *Educational Administration Quarterly published* online 17February.
- Leedy, P. D. (1997). *Practical research: planning and design*. Upper Saddle River, NJ: Prentice-Hall, Inc.
- Leedy, P., & J. Ormrod. (2005). *Practical research. Planning and design.* 8th edition. New Jersey: Merrill Prentice Hall.
- Leithwood, K. & Mascall, B. (2008). Collective leadership effects on student achievement', *Educational Administration Quarterly*, **44**(4), 529 561.
- Leithwood, L., Wahlstron, K., & Anderson, J. (2010). *Investigating the links to improved student learning*. University of Minnesota: The Wallace Foundation.
- Leigh, A. (2010). Estimating teacher effectiveness from two-year changes in students 'test scores'. *Economics of Education Review*. **29**, 480–488.
- Lieberman, A. & Miller, L. (Eds.) (2008). *Teachers in professional communities: Improving teaching and learning*. New York: Teachers College Press.
- Lieberman, A., & Mace, D.A. (2010). Making Practice Public; Teacher Learning in the 21stCentury. *Journal of teacher education*. *61* (1-2),77-88.
- Lima, J.A (2008). Department networks and distributed leadership in schools, *School Leadership & Management: Formerly School Organisation*, **28**(2), 159-187.
- Lisi, P & Davidsdoltir, S. (2010). Building Capacity for Mandated Self evaluation in Iceland Schools Through Collaborative Cultures and Professional Learning Communities. *Paper presented at the 9th European evaluation Society International Conference*, Prague Czech Republic.
- Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Beverly Hills, CA: Sage.
- Lineburg, P.N. (2010). *The Influence of the Instructional Leadership of Principals*on Change in Teachers' Instructional Practices. Doctor of Education Dissertation.

 Virginia Polytechnic Institute and State University.

- Lock, A. (2011). Clustering together to advance school improvement working together in peer support with an external colleague. *Spring National College for Leadership of schools and Children's Services (NAEC)*.
- Madungwe, L.S., Mavesera, S., Moyana, D. & Seremwe, M. (2000). *Baseline study on clusters*. Unpublished report. Harare: BSPZ.
- McLeskey, J., & Waldron, N. L. (2011). Educational programs for elementary students with learning disabilities. Can they be both effective and inclusive? *Learning Disabilities Practice*, **26**(1), 48-57.
- Mafuwane, B. M. (2011). *The contribution of instructional leadership on learner performance*. P.hD thesis. University of Pretoria, South Africa.
- Miller, R.J., Goddard, Y.L., Goddard, R., Larsen, R., & Jacob, R. (2010). "Instructional Leadership: A Pathway to Teacher Collaboration and Student Achievement", *Paper Presented at the University Council for Educational Administration Convention*.
- Makaye, J. (2011). Better Schools Programme (Zimbabwe) cluster: In pursuit of a better model to develop teacher professional infrastructures. Germany: Lambert Academic Publishing.
- May, H., Huff, J & Goldring, E. (2012). A longitudinal study of Principals' activities and student performance. *School Effectiveness and School Improvement.* **23**(4),417-439.
- Mangin, M. M. (2006). Teacher leadership and instructional improvement: Teachers' perspectives. In W. Hoy & C. Miskel (Eds.), *Contemporary issues in educational policy and school outcomes.* 5, 159-192). Greenwich, CT: Information Age.
- Mangin, M. (2007). Facilitating Elementary Principals' Support for Instructional Teacher Leadership. *Educational Administration Quarterly*, *34*, *319–357*.
- Maphosa, C; Mutekwe, E; Machingambi,S; Wadesango,N., & Ndofirepi, A.(2013). School Clusters in Zimbabwe: What Issues Do Clusters Tackle? *International Journal of Educational Science*, *5*(3),293-300.
- Maree, K. (Ed) (2007). First Steps in Research. Pretoria: Van Schaik.
- Marsh, C.J. (2009). Key Concepts for Understanding Curriculum. New York: Routledge.
- Marshall, K. (2008). The big rocks: priority management for principals. *Principal Leadership*, 8, 16–22.

- Marks, H.M. & Printy, S.M. (2003). Principal Leadership and School Performance: An Integration of Transformational and Instructional Leadership. *Educational Administration Quarterly*, **39**(3), 370-397.
- Marzano, R. J., & Waters, J.T. (2006). School district leadership that works: The effect of Superintendent Leadership on Student Achievement. A working paper: Mid-Continent Research for Education and Learning (McREL). Denver, CO.
- Matsumura, L.S. (2010). Implementing Literacy Coaching. The Role of School Social Resources. *Educational Evaluation & Policy Analysis*, **32**(2),249-279.
- Mason, J. (2002). Qualitative Researching (second edition). London: Sage.
- Mendelsohn, J. & Ward, V. (2007). *National survey: Clusters in Namibia: A review of progress over 11 years, and the way forward.* Windhoek, Namibia: Raison.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- McMillan, J.H & Schumacher, S. (2010). *Research In Education: A Conception Introduction*: New York: Happer Collins.
- Ministry of Education, Sport and Culture (MoESC). (2000). *The Better Schools Programme*(Zimbabwe): A manual on clusters. Harare: Ministry of Education, Sport & Culture.
- Mokhele, M.L. (2011). *Teachers' perspectives on continuing professional development: a case study of the Mpumalanga Secondary Science Initiative (MSSI) project.* Doctoral thesis. Available from: http://uir.unisa.ac.za/handle/10500/506.
- Morse, J. M. (1991). Approaches to qualitative-quantitative methodological triangulation. *Nursing Research*, *40*, 120–123.
- Mouza, C. (2006). Linking professional development to teacher learning and practice: A multi-case study analysis of urban teachers. *Journal of Educational Computing Research*, **34**(4), 405-440.
- Mphahlele, L. (2014). *Cluster System: An Innovation Network for Teacher Development*. Unpublished PhD Thesis, Tshwane University of Technology, South Africa.
- Muijs, D. (2008). Widening Opportunities? A case study of school- to- school collaboration in a rural district. *Improving Schools*, **11**.61-73.

- Mullins, N. C. (1971). The art of theory: Construction and use. New York: Harper & Row.
- Neumerski, C.M. (2012). Rethinking Instructional Leadership, a Review: What Do we Know about Principal, Teacher, and Coach Instructional Leadership, and Where should We go From Here? *Educational Administration Quarterly*, **49**(2), 310-347.
- Ndlalane, T.C. (2006). Teacher networks or clusters as opportunities for learning about science content and pedagogical content knowledge. Unpublished PhD thesis, University of Pretoria, South Africa.
- Nieto, S. (2009). From surviving to thriving. *Educational Leadership*, **66**(5), 8 -13.
- Nzimande, S. (2008). Sharing Information Resources: a study of school clusters from Rural kwaZulu-Natal. South Africa. *Libri*, *58*,234-245.
- Oakley, A.(2000). *Experiments in Knowing: Gender and Methods in The Social Sciences*. Cambridge: Polity Press.
- Onwuegbuzie, A & Teddlie, C.(2003). A framework for analyzing data in mixed methods research. In A.Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research*. Thousand Oaks, CA: Sage.
- Opie, C. (2004). *Doing Educational Research: A Guide to First Time Researchers*. Thousand Oaks, CA: Sage.
- Oppenheim, A. N. (1992). *Questionnaire Design, Interviewing and Attitude Measurement*. London: Pinter.
- Organization For Economic Co-Operation And Development (OECD), (2009). *Creating Effective Teaching and Learning Environments: First Results from TALIS*. OECD.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods (3rd ed.)*. Thousand Oaks, CA: Sage.
- Patton, M. Q. (2003). Qualitative evaluation checklist. Retrieved from http://www.wmich.edu/evalctr/checklist. qec. pdf.
- Pea, R. D. (1993). Practices of distributed intelligence and designs for education. In G. Salomon (Ed.), *Distributed cognition: Psychological and educational considerations*. New York: Cambridge University Press.

- Phillips, J. A. (2009). Manager-Administrator to Instructional Leader: Shift in the role of the school Principal. Faculty of Education; University of Malaya.
- Pomuti, H. (2009). An analysis of the relationship between cluster-based school management and teaching in Namibia. Unpublished PhD thesis, University of Pretoria, South Africa.
- Pomuti, H., & Weber. (2012). Decentralization and school management in Namibia. Hindawi.
- Printy, S. (2008). Leadership for teacher learning: A community of practice perspective. Educational Administration Quarterly, 44(2), 187–226.
- Prytula, M., B. Noonan & L. Hellsten .(2013). Towards Instructional Leadership: Principals' Perceptions of Large-Scale Assessment in schools. *Canadian Journal of Educational administration & Policy . Issue No.140*.
- Punch, K. F. (1998). *Introduction to social research: Quantitative and qualitative approaches*. London: Sage.
- Reeves, D. (2008). *Reframing teacher leadership to improve your school*. Alexandria, VA: ASCD.
- Richardson, L. (2000). Writing: A method of inquiry. In N. K. Denzin &Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.
- Robinson, V. M. J. (2006). Putting education back into educational leadership. *Leading* and Managing, 12(1), 62-9.
- Robinson, V. & Timperley, H. 2007. The leadership of the improvement of teaching and learning: Lessons from initiatives with positive outcomes for students. *Australian Journal of Education*, *51*(3),247-262.
- Rorrer, A.K., Skrla, L., & Scheurich, J.J. (2008). Districts as Institutional Actors in Education Reform. *Educational Administration Quarterly*, **44**(3), 307-358.
- Sailors, M., & Shanklin, N. L. (2010). Growing evidence to support coaching in literacy and Mathematics. *Elementary School Journal*, 111 (1), 1-6.
- Sebastian, J & Allensworth, E. (2012). The Influence of Principal Leadership on Classroom Instruction and Student Learning: A Study of Mediated Pathways to Learning. *Educational Administration Quarterly*, **48**(4), 626-663.

- Senge, P. (2006). *The Fifth Discipline: The Art and Practice of the Learning Organization*. Second Edition. New York: Doubleday.
- Sergiovanni, T. J., & Starratt, R. J. (2007). *Supervision: A redefinition* (8th Ed.). New York: McGraw Hill
- Sherer, J.Z. (2008). Power in Distributed Leadership: How Teacher Agency Influences Instructional Leadership Practice. Paper presented at the AERA Conference, Washington, DC, on March 27.
- Shin, J.; Slate, C., & Blackhoff, E. (2013). Principals perceptions of student achievement in reading in Korea, Mexico & the United States. Educational Leadership, School Autonomy, and Use of Test Results. *Educational Administration Quarterly*, **49**(3), 489-527.
- Sidhu, S.(2005). Methodology of research in education. New Delhi: Sterling Publishers.
- Silins, H. & Mulford, B. (2002). Schools As Learning Organizations: The Case for System, Teacher and Student Learning. *Journal of Education Management*.**40** (5), 425-446.
- Silins, H., & Mulford, B. (2010). Re-conceptualising school principalship that improves student outcomes. *Journal of Educational Leadership, Policy, and Practice*, **25**(2), 74–93.
- Spillane, J. P., Diamond, J. B., & Jita, L.C.(2003). Leadership and Instruction: The Distribution of Leadership for Instruction. *Journal of Curriculum Studies*, **35**(5), 533–43.
- Spillane, J. P., Halverson, R., & Diamond, J. B. (2004). Towards a theory of leadership practice: A distributed perspective. *Journal of Curriculum Studies*, **36**(1), 3–34.
- Spillane, J. P. (2005). Distributed leadership. *The Educational Forum.* 69,142-152.
- Spillane, J. P. (2006). Distributed leadership. San Francisco, CA: Jossey-Bass.
- Spillane, J. P& Diamond, J.B (Eds). (2007). *Distributed leadership in practice*. New York, NY: Teachers College Press.
- Spring (2005). What is instructional leadership and why is it important. USA: Educational Development Laboratory.

- Stanley, A.N. (2011). Professional Development within Collaborative Teacher Study Groups: Pitfalls and Promises. *Arts Education Policy review*, *112*, 71-78.
- Steyn, T. (2010). The perceptions of teaching staff from Nigerian independent schools of a South African professional development workshop. *South African Journal of Education*. **30,**539-553
- Stronge, J. H., Tucker, P. D., & Hindman, J. L. (2004). *Handbook for qualities of effective teachers*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Summons, P., & Bakkum. (2011) . Effective Schools Equity and Teacher Effectiveness: *A Review of Literature. Profesorado.* **15**(3), 1-8.
- Supovitz, J. (2008). Instructional influence in American high schools. In M. M. Mangin & S. R. Stoelinga (Eds.), *Effective teacher leadership*. New York, NY: Teachers College Press.
- Supovitz, J., & Tognatta, (2013). The Impact of Distributed Leadership on team decision Making. *Leadership and Policy in schools*, **12**, 101-123.
- Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches.* Thousand Oaks, CA: Sage.
- Tashakkori, A., & Teddlie, C. (Eds.). (2003). *Handbook of mixed methods in social & behavioral research*. Thousand Oaks, CA: Sage.
- Teddlie, C., & Tashakkori, A. (2009). Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences.

 Thousand Oaks, CA: Sage.
- Teddlie, C. & Yu, F (2007). Mixed Methods Sampling: A Typology With Examples. Journal of Mixed Methods Research . 1 (1),77-100.
- Timperley, H.S. (2005). Distributed Leadership. *Journal of Curriculum Studies* .34(4), 395-420.
- Trudie Steyn. (2010). The perception of teaching staff from Nigerian independent schools of a Southern Africa professional development workshop. *South African journal of Education*, **30**,539-553.
- Uirab, M.J. (2006). *Clustering as a model for effective management of schools in* Namibia. Unpublished M.Ed Thesis, North West University.

- UNICEF (2009). Child Friendly Schools Manual. New York: UNICEF.
- Vanderburg, M., & Stephens, D. (2010). The impact of literacy coaches: What teachers value and how teachers change. Elementary School Journal, 111(1), 141-163.
- Verger, A., Altinyelken, H & Koning, M. (2013). Edit Global Managerial Education reforms And Teachers: Emerging Policies, Controversies And Issues In Developing Contexts. *Educational International Research Institute*.
- Wahlstrom, K. L., & Louis, K. S. (2008). How teachers experience principal leadership: The roles of professional community, trust, efficacy, and shared responsibility. *Educational Administration Quarterly*, **44**(4), 458–495.
- Waldron, N.L., & James Mcleskey, J. (2010). Establishing a Collaborative School Culture Through Comprehensive School Reform. *Journal of Educational and Psychological Consultation*, 20,58–74.
- Waters, D.C. (2009). Case Study: Teacher Perceptions of Professional Learning

 Communities in an Elementary School Setting. PhD Thesis, Walden University.
- Wenger E., McDermott, R., & Snyder, W. (2002). *Cultivating communities of practice*. Boston, MA: Harvard Business School Press.
- Williams M.L.(2010). Teacher collaboration as professional development in a large, suburban high school. Unpublished PhD Thesis. University of Nebraska, Lincoln, Omaha, USA
- Willis, J. W. (2007). Foundations of qualitative research: Interpretive and critical approaches. Thousand Oaks, CA: Sage.
- Yin, R. K. (2003). Case study research: Design and methods (3rd ed.). Thousand Oaks, CA: Sage.
- York-Barr, J., & Duke, K. (2004). What do we know about teacher leadership? Findings from two decades of scholarship. *Review of Educational Research*, **74** (3), 255-316.
- Zammit, K. and University of Western Sydney, School of Education and Teaching Australia Australian Institute for Teaching and School Leadership. (2007). *Teaching and leading for quality Australian schools: a review and synthesis of research based knowledge*. Australia: Australian Institute for Teaching and School Leadership, Acton, A.C.T.

- Zbar, V., Kimber, R., & Marshall, G. (2009). Schools that achieve extraordinary success: how some disadvantaged Victorian schools 'punch above their weight'. Victoria: Centre for Strategic Direction.
- Zepeda, S. J. (2007). *The Principal as Instructional Leader: A Handbook for Supervisors*. NY: Larchmont.
- www.scrib.com/doc/4919032/symbolic-interaction-Theory-Theories-of-Family-Relations.Retrieved on 6/11/14

APPENDICES

APPENDIX A: Survey for cluster instructional leadership practices: All teachers and school heads

6494 Muredzi Crescent
Mucheke D
<u>Masvingo</u>
/2014

Survey to establish cluster instructional leadership practices

Dear Participant

Re: Request for permission to participate in a study on school clusters.

I hereby invite you to participate in my study on school clusters. My name is Jeriphanos Makaye, and I am presently studying for a PhD degree with the University of Free State. As part of my studies, I am required to conduct research on an aspect of interest and I am interested in School clusters as sites for instructional leadership. The title of my thesis is: School clusters as sites for instructional leadership: a case of the Better Schools Programme in Zimbabwe (BSPZ)

The purpose of my study is to explore the nature of instructional leadership practices in school clusters with a view to improve the quality and efficacy of teaching and learning in schools. The study will be confined to Masvingo district.

The study will involve teachers and heads completing questionnaires. You may also be selected to participate in follow up interviews that is not more than an hour long. The questionnaire completion is expected to last for no more than an hour. I will also observe cluster meetings and workshops at the discretion of conveners and participants.

As an educator I believe you have very valuable insights to contribute to this study. I undertake to observe confidentiality and protect you from physical, social and/or psychological harm. At no time will your name, school or cluster be revealed in the report of this study-pseudonyms or false names will be used . Your participation in the study is

voluntary and you may withdraw a	at any time you so wish.	Results of the study	will be used
for educational purposes only.			

If you need any further information or you experience any discomfort with the way the research may be conducted, feel free to contact me or my study supervisor (Prof L.C Jita).

Once more, I thank you for your kind assistance and cooperation in this study.

Yours Sincerely

Jeriphanos Makaye Supervisor

0773907706 Professor Loyiso Jita

<u>Jmakaye2000@yahoo.com</u> +27514017522/jitalc@ufs.ac.za

CONSENT FORM

I understand the nature and purpose of the study. I also understand that I have the opportunity to withdraw from the study at any time and that the information I give will be confidential and will not be disclosed for any other purposes other than the research for the present study. I also understand that I may be selected to participate in follow up interviews.

I therefore give	re my consent to participate		
Signature:		Date:	

SECTION A: BIOGRAPHICAL DATA

Please place an \mathbf{x} in the appropriate box.

1. What is your gender?

Male	
Female	

2. What is your age range in years?

21-30	
31-40	
41-50	
51-60	
61+	

3. Indicate your position?

School Head	
Cluster Chairperson	
Teacher	
Other (please specify)	

4. Highest Professional Qualification?

C.E/D.E	
B.A/B.Ed	
M.A/M.Ed/M.Phil	
PhD/D.Ed	
Other (please specify)	

5. How long have you been teaching?

1-5	
6-10	
11-15	
16-20	
21-25	
26-30	
31+	

6. How long have you been in this cluster? --- years.

SECTION B. Instructional leadership practices

Respond by putting an x in the appropriate box to show the extent to which the instructional leadership practice is fulfilled in your cluster. The meanings of the abbreviated responses are as follows: **S.A**-strongly agree; **A**-agree; **N**-neutral; **D**-disagree & **S.D**-strongly disagree.

Inst	ructional Leadership Performance Indicator	S.A	A	N	D	S.D
Def	ining cluster mission					
7.	The cluster has a clear vision on student learning?					
8.	The Cluster vision is formulated by cluster members in a participatory meeting(s)?					
9.	The Cluster has an achievable action plan?					
10.	All schools do have the cluster mission?					
11.	The Cluster mission provides bench marks for success?					
12.	Many of the participating Schools are committed to work towards the attainment of the cluster goals?					
	Managing instructional programme					
13.	Cluster action plan is aligned to district and ministry of education mission?					
14.	Action plan is stringently followed?					
15.	Workshops are held for teachers on teaching and learning?					
16.	Competent members are invited to facilitate at workshops?					
17.	Cluster engages in common tests?					
18.	Cluster tests results are analysed together by teachers?					
19.	Cluster tests results are analysed together by cluster leaders?					
20.	Feedback of analysed results is provided to teachers?					
21.	Feedback of analysed results is provided to Learners?					
22.	Feedback of analysed results is provided to Parents?					
23.	Feedback of analysed results is provided to School heads?					
24.	Resource teachers work with teachers on instructional issues?					
25.	Resource teachers demonstrate teaching skills to school teachers?					

26.	Teachers are provided with opportunities to teach across schools certain topic/s?			
27.	Clusters can source skills from within sister schools in the cluster?			
28.	Teachers sit together to engage in syllabus interpretation?			
29.	Teachers develop together and teach from common schemes?			
30.	Cluster heads supervise teachers during classroom teaching?			
31.	Teachers do peer supervision of each other's teaching?			
32.	Cluster monitors and evaluates its teaching activities?			
33.	Cluster monitors and evaluates its sporting activities?			
34.	Cluster monitors and evaluates its assessment activities?			
35.	Cluster committee holds review and annual general meetings?			
36.	Students often meet with other students on academic issues?			
37.	Schools share instructional resources?			
	Creating positive climate			
38.	Cluster provides incentives to schools?			
39.	Cluster provides incentives to individual teachers?			
40.	Cluster provides incentives to students?			
41.	Cluster rewards academic achievement by schools?			
42.	Cluster rewards academic achievement by teachers?			
43.	Cluster rewards academic achievement by pupils?			
44.	Teachers also take up (academic or curriculum) leadership positions in cluster?			
45.	The cluster engages effectively with the community?			
46.	Cluster networks effectively with other clusters?			
47.	Cluster networks effectively with other organizations with interest in education?			
48.	Cluster links effectively with the district personnel:-inspectors, DRT, etc?			
	Instructional artefacts& Resources			
49.	Cluster has its own lesson observation/supervision forms?			

50.	Cluster keeps a record of school (academic) achievement?			
51.	Cluster has its own test bank?			
52.	Cluster has its own recommended textbooks?			
53.	Cluster has its own newsletter or magazine?			
54.	Cluster has a constitution guiding instructional practices?			
55.	Cluster has its own functional library?			

Section C
56. Any other instructional practices you would like to bring to the fore?
57. Any other tools or documents that are used in the cluster to support effective teaching and student learning?
58. What impact does clustering have on the performance of students particularly at Grade 7examinations
59. Any suggestions you would like to make with regard to school cluster effectiveness?

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APPENDIX B: INTERVIEW PROTOCOL FOR CLASS TEACHERS

6494 Muredzi Crescent
Mucheke D
Masvingo
/2014
Dear Participant
Re: Request for permission to participate in interviews on school clusters.
I hereby invite you to participate in follow up interviews on school clusters. My name is Jeriphanos Makaye, and I am presently studying for a PhD degree with the University of Free State. As part of my studies, I am required to conduct research on an aspect of interest and I am interested in School clusters as sites for instructional leadership. The title of my thesis is: School clusters as sites for instructional leadership: a case of the Better Schools Programme in Zimbabwe (BSPZ)
The purpose of my study is to explore the nature of instructional leadership practices in school clusters with a view to improve the quality and efficacy of teaching and learning in schools. The study will be confined to Masvingo district.
The interview will involve a face to face dialogue with me on how instructional leadership happens in your cluster. The interview will cover inter alia how you perceive cluster activities; their challenges and your opinion on how your cluster can enhance effective student learning. The interview is expected to last for no more than an hour.
You have been identified on the basis of your in depth knowledge about cluster activities. I undertake to observe confidentiality and protect you from physical, social and/or psychological harm. At no time will your name, school or cluster be revealed in the report of this study-pseudonyms or false names will be used .You participation is voluntary and you will have the right to withdraw at any time you so wish. Results of the study shall be used for educational purposes only.
In the event that you need any further information or you experience any discomfort with the interviews do not hesitate to inform me or contact my supervisor (Prof L.C.Jita)
Once again, thank you for your assistance and cooperation.
Yours Sincerely

0773907706 Professor Loyiso Jita <u>jmakaye2000@yahoo.com</u> +27514017522/jitalc@ufs.ac.za

Jeriphanos Makaye

Supervisor

CONSENT FORM

I understand the nature and purpose of the study. I also understand that I have the opportunity to withdraw from the study at any time and that the information I give will be confidential and will not be disclosed for any other purposes other than the research for the present study.

I therefore give my consent to participate	
Signature:	_ Date:

- 1. Name and background. (Probe...How long you have been teaching).
- 2. Present work experience [Probe...your role in the cluster]. How long have you been in this role within the cluster? Probe: what are the challenges of playing this role? What fulfils you about this role?
- 3. How were you nominated/chosen to be in the leadership role within this cluster?
- 4. I wish to focus a little bit on your cluster activities.
 - (i). What instructional activities or practices do you engage in?
 - (ii). How do you come up with a cluster action plan?
 - (iii). Which activities dominate the cluster action plan? [Probe: why?]
- 5. Let's take one staff development meeting and talk about it: What did you do exactly in the meeting? (Describe some of the activities; did you enjoy that? Why?
- 6.Tell me more about interesting topics you have covered during cluster meetings and taken them back to your class.[Probe; how have you taken that to your class? What were the challenges? Describe the impact of it to student performance.
- 7. How are cluster tasks distributed? [Probe: Are tasks distributed among teachers?] Which tasks and why?
- 8. Let's talk now about your perceptions of the cluster activities. [What do you think of cluster activities so far? [Probe: i. What have you gained so far?/have the activities impacted positively on the grade seven school performance? ii. what are the two things you would say you like about school clusters? (Why?) iii. What are the two things you would say you do not necessarily like about clustering so far? (Why?)
- 9. How do you perceive your cluster leadership?
- 10. Do you feel different by being in the cluster? [Probe: how?]

- 11. Please can you explain the challenges faced by your cluster and give suggestions on how clusters can enhance effective student learning?
- 12. Our final question: Please what suggestions can you give to enhance support for effective teaching?

APPENDIX C: Interview Protocol for Cluster Resource Teachers

6494 Muredzi Crescent
Mucheke D
<u>Masvingo</u>
/2014

Dear Participant

Re: Request for permission to participate in interviews on school clusters.

I hereby invite you to participate in follow up interviews on school clusters. My name is Jeriphanos Makaye, and I am presently studying for a PhD degree with the University of Free State. As part of my studies, I am required to conduct research on an aspect of interest and I am interested in School clusters as sites for instructional leadership. The title of my thesis is: School clusters as sites for instructional leadership: a case of the Better Schools Programme in Zimbabwe (BSPZ)

The purpose of my study is to explore the nature of instructional leadership practices in school clusters with a view to improve the quality and efficacy of teaching and learning in schools. The study will be confined to Masvingo district.

The interview will involve a face to face dialogue with me on how instructional leadership happens in your cluster. The interview will cover inter alia how you perceive cluster activities; their challenges and your opinion on how your cluster can enhance effective student learning. The interview is expected to last for no more than an hour.

You have been identified on the basis of your in depth knowledge about cluster activities. I undertake to observe confidentiality and protect you from physical, social and/or psychological harm. At no time will your name, school or cluster be revealed in the report of this study-pseudonyms or false names will be used .You participation is voluntary and you will have the right to withdraw at any time you so wish. Results of the study shall be used for educational purposes only.

In the event that you need any further information or you experience any discomfort with the interviews do not hesitate to inform me or contact my supervisor (Prof L.C.Jita)

Once again, thank you for your assistance a	nd cooperation.
Yours Sincerely	
Jeriphanos Makaye	Supervisor
0773907706	Professor Loyiso Jita
jmakaye2000@yahoo.com	+27514017522/jitalc@ufs.ac.za
*CONSENT FORM	
• •	the study. I also understand that I have the any time and that the information I give will be

confidential and will not be disclosed for any other purposes other than the research for the

I therefore give my consent to participate

present study.

Date:

- 1. Name and background. (Probe...How long you have been teaching).
- 2. Present work experience [Probe...your role in the cluster]. How long have you been in this role within the cluster? Probe: what are the challenges of playing this role? What fulfils you about this role?
- 3. How is it like to be in Cluster X? Do you feel different by being in a cluster? [Probe-How?]
- 4. How were you nominated/chosen to be in the leadership role within this cluster?
- 5. I wish to focus a little bit on your cluster activities.
 - (i). What instructional activities or practices do you engage in?
 - (ii). How do you come up with a cluster action plan?
 - (iii). Which activities dominate the cluster action plan? [Probe: why?]
- 6. Let's take one staff development meeting and talk about it: What did you do exactly in the meeting? (Describe some of the activities; did you enjoy that? Why?

- 7.Tell me more about interesting topics you have covered during cluster meetings and taken them back to your class.[Probe; how have you taken that to your class? What were the challenges? Describe the impact of it to student performance.
- 8. How are cluster tasks distributed? [Probe: Are tasks distributed among teachers?] Which tasks and why?
- 9. Let's talk now about your perceptions of the cluster activities. [What do you think of cluster activities so far? [Probe: i.What have you gained so far?/have the activities impacted positively on the grade seven school performance? ii. what are the two things you would say you like about school clusters? (Why?)iii. What are the two things you would say you do not necessarily like about clustering so far? (Why?)
- 10. Please can you explain the challenges faced by your cluster and give suggestions on how clusters can enhance effective student learning?
- 11. Our final question: Please what suggestions can you give to enhance support for effective teaching?

APPENDIX D: Interview Protocol for Cluster Coordinators

6494 Muredzi Crescent
Mucheke D
<u>Masvingo</u>
/2014

Dear Participant

Re: Request for permission to participate in interviews on school clusters.

I hereby invite you to participate in follow up interviews on school clusters. My name is Jeriphanos Makaye, and I am presently studying for a PhD degree with the University of Free State. As part of my studies, I am required to conduct research on an aspect of interest and I am interested in School clusters as sites for instructional leadership. The title of my thesis is: School clusters as sites for instructional leadership: a case of the Better Schools Programme in Zimbabwe (BSPZ)

The purpose of my study is to explore the nature of instructional leadership practices in school clusters with a view to improve the quality and efficacy of teaching and learning in schools. The study will be confined to Masvingo district.

The interview will involve a face to face dialogue with me (the researcher) on how instructional leadership happens in your cluster. The interview will cover inter alia how you perceive cluster activities; their challenges and your opinion on how your cluster can enhance effective student learning. The interview is expected to last for no more than an hour.

You have been identified on the basis of your in depth knowledge about cluster activities. I undertake to observe confidentiality and protect you from physical, social and/or psychological harm. At no time will your name, school or cluster be revealed in the report of this study-pseudonyms or false names will be used .You participation is voluntary and you will have the right to withdraw at any time you so wish. Results of the study shall be used for educational purposes only.

In the event that you need any further inform the interviews do not hesitate to inform me or	
Once again, thank you for your assistance and	l cooperation.
Yours Sincerely	
Jeriphanos Makaye	Supervisor
0773907706	Professor Loyiso Jita
jmakaye2000@yahoo.com	+27514017522/jitalc@ufs.ac.za
* CONSENT FORM	
I understand the nature and purpose of the opportunity to withdraw from the study at an confidential and will not be disclosed for any present study.	y time and that the information I give will be
I therefore give my consent to participate	
Signature:	Date:
Name and background. (ProbeHow	long you have been teaching).

2. Present work experience[Probe...your role in the cluster]

3. Let's talk a little bit about your role and some of the activities that you lead within the cluster. Identify some of the key activities you have led during the current academic year.[Probe ...: why is activity XX important for the cluster? Do you think the cluster should be focusing on XX? Why/Why not? Describe for me how you go about doing (or implementing activity XX in the cluster? Is activity XX done solo or with others (distribution of task), if with others what is their role? If solo, why solo? What artefacts are used to carry out leadership activity XX? Why?

And how are the artefacts used during the activity? What difference do the artefacts make to the achievement of the desired results? How much time do you spend on leadership activity XX? YY? ZZ?

- 4. How is it like to be in Cluster X? Do you feel different by being in the cluster? [Probe: how?]
- 5. I wish to focus a little bit on your cluster activities.
 - (i) How do you come up with a cluster action plan?
 - (iii). Which activities dominate the cluster action plan? [Probe: why?]
- 6. Let's take one staff development meeting and talk about it: What did you do exactly in the meeting? (Describe some of the activities; did you enjoy that? How often do you have these meetings?
- 7. Tell me more about interesting topics you have covered during cluster meetings. [Probe; how have you ensured that participants take that to their classes/schools? Describe some routines or practices common to your cluster to foster effective instructional practices. How the routine is/was developed who else was/is involved, in what role etc.?
- 8. How are cluster tasks distributed? [Probe: who does what (xxx) activity? Are tasks distributed among teachers?]
- 9. Let's talk now about your perceptions of the cluster activities. [What do you think of cluster activities so far? [Probe: i.what have you gained so far? /have the activities impacted positively on the grade seven school performances? ii. What are the two things you would say you like about school clusters? (Why?) iii. What are the two things you would say you do not necessarily like about clustering so far? (Why?)
- **10.** Our final question: Please can you explain the challenges faced by your cluster and give suggestions on how clusters can enhance effective student learning?

APPENDIX E: Observation Protocol/Schedule

Observation processes:

Notes will be taken and then written up as a fuller version within 24 hours of the event.

These notes /observations will be informed by the following broad question:

How is instructional leadership distributed in clusters?

- 1. The following will be observed:
- a. Whose voices are being heard? Are there any being denied or challenged? Where and are there any silences?
- b. Who appear to be acting as a boundary keeper?
 - ❖ In terms of social interaction?
 - ❖ In terms of topic focus?
 - ❖ In terms of political activity and related decision-making processes? (authority differentials)
- c. What artefacts are used-if any? By whom and how?
- d. How much time is spent on an activity?
- 2. What is the general atmosphere in terms of interaction for learning?
- 3. What possibilities for more focused and selective observations have arisen that I could follow up for the next phase in relation to cluster instructional leadership practices?
- 4. How has my presence possibly affected the situation under observation?

APPENDIX F: Letter of Permission to carryout Research to the Ministry of Education Arts and Culture

6494 Muredzi Crescent

Mucheke D

Masvingo

03/02/2014

The Permanent Secretary

Ministry of education Arts & Culture

P.O Box 89

Causeway

Harare

Dear Sir/Madam

Re: Request for Permission to carry out educational research in Masvingo Province

I hereby apply for the permission to carry out my research in one of your districts. My name is Jeriphanos Makaye, and I am presently studying for a PhD degree with the University of Free State. As part of my studies, I am required to conduct research on an aspect of interest and I am interested in School clusters as sites for instructional leadership. The title of my thesis is: School clusters as sites for instructional leadership: a case of the Better Schools Programme in Zimbabwe (BSPZ)

The purpose of my study is to explore the nature of instructional leadership practices in school clusters with a view to improve the quality and efficacy of teaching and learning in schools. The study will be confined to Masvingo district.

The study will involve teachers and heads completing questionnaires. Interviews with selected teachers, cluster leaders and cluster coordinators will also be carried out. Both the interviews and questionnaire completion are expected to last for not more than an hour. I also expect to observe cluster meetings and workshops at the discretion of conveners and participants.

I undertake to observe confidentiality and protect participants from physical, social and/or psychological harm. No names of school and individuals shall be used. All participants shall voluntarily participate in the study and may withdraw at any time if they so wish. Results of the study shall be used for educational purposes only.

I assure you that no interruptions shall be made to the normal school programme and I will work within the guidance and permission of school heads and teachers. My contact details and those of my supervisor are provided in case you might need further information.

Yours Faithfully

Jeriphanos Makaye Supervisor

0773907706 Professor Loyiso Jita

<u>Jmakaye2000@yahoo.com</u> +27514017522/jitalc@ufs.ac.za

APPENDIX G: Letter From the Ministry Of Education, Sport, Arts & Culture Granting Permission For study

MINISTRY OF EDUCATION, SPORT,
ARTS & CULTURE (MSV. PROV.)
MASY'NGO PROV. EDU. DIRECTOR

All communications should be addressed to
"The Secretary for Primary and Secondary
Education
Telephone: 732006
Telegraphic address: "EDUCATION"
Fax:794505

BO. BOX 80. MASY NGO
REFERENCE: C/426/3

Ministry of Primary and
Secondary Education
P.O Box CY 121
Causeway
HARARE

23 January 2014

Jeriphanos Makaye 6494 Muredzi **MASVING**O

Re: PERMISSION TO CARRY OUT RESEARCH AT SELECTED SCHOOLS IN MASVINGO DISTRICT: MASVINGO PROVINCE

Reference is made to your application to carry out research at selected schools in Masvingo District, Masvingo on the title:

SCHOOL CLUSTERS AS SITES FOR INSTRUCTIONAL LEADERSHIP: A CASE OF THE BETTER SCHOOLS PROGRAMME ZIMBABWE (BSPZ) — MASVINGO DISTRICT

Permission is hereby granted. However, you are required to liaise with the Provincial Education Director Masvingo who is responsible for the schools which you want to involve in your research.

You are also required to provide a copy of your final report to the Secretary for Education, Sport, Arts and Culture.

Acting Director: Policy, Planning, Research and Development

For: SECRETARY FOR PRIMARY AND SECONDARY EDUCATION

APPENDIX H: Ethical clearance approval letter



Faculty of Education Room 12

Ethics Office WinkieDireko Building

Faculty of Education
University of the Free State

P.O. Box 339

Bloemfontein 9300

South Africa

T: +27(0)51 401 9922 F: +27(0)51 401 2010 www.ufs.ac.za BarclayA@ufs.ac.za 10 April 2014

ETHICAL CLEARANCE APPLICATION:

SCHOOL CLUSTERS AS SITES FOR INSTRUCTIONAL LEADERSHIP: A CASE OF THE BETTER SCHOOLS

PROGRAMME IN ZIMBABWE (BSPZ)

Dear Mr Makaye

With reference to your application for ethical clearance with the Faculty of Education, I am pleased to inform you on behalf of the Ethics Board of the faculty that you have been granted ethical clearance for your research.

Your ethical clearance number, to be used in all correspondence, is:

UFS-EDU-2014-005

This ethical clearance number is valid for research conducted for one year from issuance. Should you require more time to complete this research, please apply for an extension in writing.

We request that any changes that may take place during the course of your research project be submitted in writing to the ethics office to ensure we are kept up to date with your progress and any ethical implications that may arise.

Thank you for submitting this proposal for ethical clearance and we wish you every success with your research.

Yours sincerely,

Andrew Barclay
Faculty Ethics Officer



Appendix I: Cluster Ratings (Mean) of instructional leadership.

		Cluster 1	Cluster 2	Cluster 3	Cluster4	Overall
Defi	ning Cluster mission	Me	Me	Me	Me	Me
7	The cluster has a clear vision on student learning.	4.26	4.35	3.60	4.08	4.07
8	The Cluster vision is formulated by cluster members in a participatory meeting(s).	3.94	4.20	3.00	3.92	3.76
9	The Cluster has an achievable action plan.	4.00	4.08	3.40	3.92	3.85
10	All schools do have the cluster mission.	4.18	3.88	3.00	4.08	3.78
11	The Cluster mission provides bench marks for success.	4.15	4.08	3.53	3.92	3.92
12	Many of the participating Schools are committed to work towards the attainment of the cluster goals.	4.06	3.98	3.67	3.67	3.84
	Means	3.51	3.51	2.89	3.37	3.32
Mar	naging Instructional programme					
13	Cluster action plan is aligned to district and ministry of education mission.	4.44	4.53	3.80	4.50	4.32
14	Action plan is stringently followed.	3.76	3.80	2.93	3.58	3.52
15	Workshops are held for teachers on teaching and learning.	4.18	3.48	2.93	3.75	3.58
16	Competent members are invited to facilitate at workshops.	4.15	3.53	3.33	4.00	3.75
17	Cluster engages in common tests.	3.41	4.48	2.33	3.25	3.37
18	Cluster tests results are analysed together by teachers.	2.91	3.93	2.13	3.42	3.10
19	Cluster tests results are analysed together by cluster leaders.	2.85	3.83	2.27	3.42	3.09
20	Feedback of analysed results is provided to teachers.	2.59	3.38	2.33	3.50	2.95
21	Feedback of analysed results is provided to Learners.	2.47	3.08	2.20	3.17	2.73
22	Feedback of analysed results is provided to Parents.	2.61	3.03	2.27	3.17	2.77
23	Feedback of analysed results is provided to School heads.	2.97	4.05	2.53	3.58	3.28
24	Resource teachers work with teachers on instructional issues.	4.15	3.85	3.40	3.00	3.60
25	Resource teachers demonstrate teaching skills to school	3.29	3.33	2.40	3.25	3.07

	teachers.					
26	Teachers are provided with opportunities to teach across schools certain topic/s.	2.82	3.15	2.87	3.00	2.96
27	Clusters can source skills from within sister schools in the cluster.	3.79	3.43	3.20	3.25	3.42
28	Teachers sit together to engage in syllabus interpretation.	3.32	3.40	2.80	3.75	3.32
29	Teachers develop together and teach from common schemes.	2.97	3.23	2.67	2.83	2.92
30	Cluster heads supervise teachers during classroom teaching.	3.68	3.33	2.67	3.75	3.36
31	Teachers do peer supervision of each other's teaching.	3.44	2.93	2.73	3.92	3.25
32	Cluster monitors and evaluates its teaching activities.	3.32	3.23	2.80	3.75	3.27
33	Cluster monitors and evaluates its sporting activities.	3.68	3.90	4.33	4.00	3.98
34	Cluster monitors and evaluates its assessment activities.	3.59	4.00	2.93	3.50	3.51
35	Cluster committee holds review and annual general meetings.	3.85	4.30	3.27	4.08	3.88
36	Students often meet with other students on academic issues.	2.91	3.35	2.27	3.42	2.99
37	Schools share instructional resources.	3.62	3.88	3.13	4.42	3.76
	means	3.39	3.61	2.82	3.57	3.35
crea	ting positive climate					
38	Cluster provides incentives to schools.	1.62	2.38	1.80	2.33	2.03
39	Cluster provides incentives to individual teachers.	1.53	2.23	1.73	2.00	1.87
40	Cluster provides incentives to students.	1.50	1.85	2.47	1.83	1.91
41	Cluster rewards academic achievement by schools.	1.74	1.95	1.53	2.67	1.97
42	Cluster rewards academic achievement by teachers.	1.59	2.10	1.40	3.08	2.04
43	Cluster rewards academic achievement by pupils.	2.06	2.10	1.60	3.08	2.21
44	Teachers also take up (academic or curriculum) leadership positions in cluster.	4.32	3.20	2.40	4.08	3.50
45	The cluster engages effectively with the community.	3.94	3.63	3.33	4.25	3.79
46	Cluster networks effectively with other clusters.	3.71	3.33	2.80	4.17	3.50
47	Cluster networks effectively with other organizations with interest in education.	3.97	3.90	3.07	3.83	3.69

48	Cluster links effectively with the district personnel:-inspectors, DRT, etc.	4.21	4.30	3.47	4.25	4.06
	Mean	2.74	2.74	2.33	3.23	2.76
Insti	ructional artefacts					
49	Cluster has its own lesson observation/supervision forms.	2.50	2.50	1.87	3.25	2.53
50	Cluster keeps a record of school (academic) achievement.	2.85	2.98	2.20	3.83	2.97
51	Cluster has its own test bank.	2.50	3.50	2.00	2.92	2.73
52	Cluster has its own recommended textbooks.	1.79	2.44	1.93	2.17	2.08
53	Cluster has its own newsletter or magazine.	1.68	2.25	2.00	1.75	1.92
54	Cluster has a constitution guiding instructional practices.	2.44	3.28	2.07	3.08	2.72
55	Cluster has its own functional library.	1.56	2.00	1.87	1.92	1.84
Clus	Cluster means		2.71	1.99	2.70	2.40