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2019

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THE INFLUENCE OF INSTRUCTIONAL LEADERSHIP BEHAVIOURS OF PRINCIPALS ON TEACHERS' INSTRUCTIONAL PRACTICES IN RWANDA:

A CASE STUDY OF SELECTED SECONDARY SCHOOLS IN THE NYAMAGABE DISTRICT

Innocent Sibomana

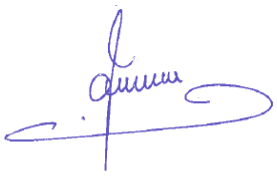
A thesis submitted to the Wits School of Education, Faculty of Humanities,
University of the Witwatersrand in fulfilment of the requirements for
the Degree of Doctor of Philosophy

Johannesburg

2019

DECLARATION

I declare that this thesis is my own unaided work. It is being submitted for the degree of Doctor of Philosophy at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at any other University.



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Student number: 416595

Ethical Clearance protocol number: 2015ECE010D

DEDICATION

First and foremost, this work is dedicated to my late parents, Leonard Kamondo and Faïna M.kabulinoti, my late elder brother Jean Nsengiyumva and my late elder sister Pascasie Icyitegetse for the inspiration they instilled in me since my childhood. This work is a fruit of their effort invested in my journey of schooling. I will always be grateful to you for your good legacy. In conclusion, I dedicate this work to my daughter Innocente Marie Ange Igihozo for her patience and encouragement I needed to complete it. Thank you my daughter.

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GLOSSARY

BA: Bachelor of Arts

BEd: Bachelor of Education

BS: Boarding Schools

BSc: Bachelor of Sciences

CBC: Competence-Based Curriculum

DFID: Department for International Development

DRC: Democratic Republic of Congo

EAC: East African Community

ELA: English Language and Arts

HEART: Health and Education Advice and Resource Team

HEC: Higher Education Council

HoDs: Heads of Departments

ICT: Information and Communication Technology

IL: Instructional Leadership

IPAR-RWANDA: Institute of Policy Analysis and Research-Rwanda

JICA: Japan International Cooperation Agency

KMO: Kaiser-Meyer Olkin

MDG: Millennium Development Goals

MINECOFIN: Ministry of Finance and Economic Planning

MINEDUC: Ministry of Education

Mn: Minimum

Mx: Maximum

NBS: Non-Boarding Schools

NGOs: Non-Government Organisations

NISR: National Institute of Statistics of Rwanda

OBE: Outcome-Based Education

OECD: Organisation of Economic Cooperation and Development

OLPC: One Laptop Per Child

p.: Page

PCA: Principal Component Analysis

PILB: Principal Instructional Leadership Behaviours

PILBQ: Principal Instructional Leadership Behaviour Questionnaire

PMC: Pearson Moment Correlation

PTA: Parent-Teacher Association

REB: Rwanda Education Board

SD: Standard Deviation

SPSS: Statistical Package for the Social Sciences

TIP: Teacher Instructional Practices

TIPQ: Teacher Instructional Practice Questionnaire

TPD: Teacher Professional Development

TSS: Technical Secondary Schools

TTC: Teacher Training Colleges

TVET: Technical and Vocational Education and Training

Umwalimu Sacco: Savings and Credit Cooperative for public and private school teachers in Rwanda

UNESCO: United Nations Educational, Scientific and Cultural Organisation

USA: United States of America

VTC: Vocational Training Centre

VVOB: Vlaamse Vereniging voor Ontwikkelingssamewerking en Technische Bijstand (Flemish Cooperation)

9YBE: Nine Year Basic Education

12 YBE: Twelve Year Basic Education

CHAPTER 1: BACKGROUND AND CONTEXT OF THE STUDY

"*There is no such thing as a high-performing school without a great principal. It is impossible. You simply can't overstate their importance in driving student achievement, in attracting and retaining great talent to the school*" (U. S. Secretary of Education Arne Duncan as cited in Sebastian, Ellenswoth, & Stevens, 2014, p.2).

1.1 Introduction

There is a high degree of consensus that school principal leadership is critical to the academic life of both teachers and students in a school. Isaiah and Isaiah (2014, p.112) argue that principals, as school leaders, hold a position which has a great potential for maintaining and improving the quality of instruction in schools. Isaiah and Isaiah (ibid.) further recommend principal leadership as the one that sets the tone of school and the climate of learning, the level of professionalism and morale of teachers, and the degree of concern for what students may or may not become. In the same way, Lydiah and Nasongo (2009, p.85) emphasise that schools do not become greater because of the magnificent infrastructures or abundance of resources. Rather, it is because of the magnificent efforts of principals involved in academic activities, providing adequate teaching and learning facilities, the strategic direction, and practical guidance that promote effective learning. This shows that the principal is a leading figure in a school and plays a big role in building and shaping the school as an attractive learning place where teachers and students feel supported and committed to teaching and learning.

While researchers agree on the role of principal leadership in influencing school and classroom conditions, this area of study is still under researched in Rwanda and little is known about how school principals work with teachers in increasing their teaching capacity to improve student learning and achievement. This study explores instructional leadership behaviours that principals enact and how these behaviours influence instructional practices of teachers in secondary schools of the Nyamagabe district, in Rwanda.

1.2 Context for the study topic

This study looks at instructional leadership of school principals and how it influences instructional practices of teachers. The relevance of instructional leadership continues to attract much attention in educational research (Bush, 2013, p.6; Harris & Jones, 2017, p.2008; Kalman & Arslan 2016, p.509). As Bendikson, Robinson, and Hattie (2012, p.3) report, a lot of emphasis in the area instructional leadership is currently placed on the need for principals to be instructional leaders because of the impact such approach would have on student outcomes than other types of leadership (Bush, 2013, p.6; Robinson, Lloyd & Rowe, 2008, p.658). Previous studies recognise the role that school principals, as instructional leaders, play in shaping teaching and learning that produces improvement in student learning and achievement. In doing so, Dinham (2013, p. 233), Alam and Ahmad (2017, p.385) and Robinson (2007, p.15) emphasise that instructional leadership of school principals makes a significant difference in students outcomes through the focus on teachers and the quality of instruction that schools provide to students. This suggests that the primary role of school principals is to support and guide teachers so that they can be equipped with skills and resources needed to successfully implement curriculum in classroom. As students' success depends greatly on the teacher competence, the teacher competence in turn relies largely on the ability of principals to support and influence teachers' teaching approaches. For this reason, principals need to ensure that, at all cost, teachers remain professionally and pedagogically competent and that they employ the best practices for the sake of improved learning in the classroom (Coldren & Spillane, 2007, p.375; Oplatka, 2017, p.519).

Instructional leadership of principals is critically important and cannot be overlooked in the process of bringing positive change in the areas of teaching and learning. It is noteworthy that the principal alone cannot lead the school to all desired learning outcomes. To be successful, the principal requires cooperation from other stakeholders, especially teachers as they are at the centre of teaching and learning activities in a school.

Teachers possess expertise and critical information about their students and how they learn more than any other person. In addition, what students learn depends on the teachers' performance, which, according to Enueme and Egwunyenga (2008, p.13) is a product of many factors, including their commitment to duty, professional growth, prevailing culture, and teacher innovativeness. Given the direct influence teachers have on student learning, principals need to build strong cooperation and collaboration with teachers, take them into

their confidence, and encourage and facilitate their initiatives leading to improved learning in the classroom (Niqab, Sharma, Wei & Maulod, 2014, p.81). Being visibly present, listening to and discussing instructional matters with teachers and participating in the learning process by the principal can potentially enhance this cooperation and collaboration and can assist teachers in accomplishing their tasks.

In line with the role of principal leadership in promoting teaching and learning, the Government of Rwanda has recognised the impact of quality school leadership in student learning and achievement. The government through the Ministry of Education (MINEDUC) emphasises the need for principals to enhance leadership competences so that student learning and achievement can improve in the classroom (Peeraer, Zult, & Mugenzi, 2014, p.72).

Different projects related to principal professional development have been initiated and principals have started undergoing training which is geared towards enabling them to lead schools efficiently and effectively. Against this backdrop, a study of this nature is of paramount importance. It has the potential to contribute in helping school principals to become more aware of their own leadership behaviours that successfully affect the work of teachers in their schools.

1.3 Operational definitions of key terms

In order to eliminate any misunderstanding or confusion, this section defines and clarifies the key terms used throughout the study.

Instructional leadership: Instructional leadership which is also leadership for learning focuses on the core business of schooling, namely, teaching and learning. It is defined by Mestry (2013, p.120) as "those actions that principals take, or delegate to others, to promote growth in students' learning". These actions include setting school-wide goals, providing resources needed for learning to occur, supervising and evaluating teachers, coordinating staff development programmes, and creating collegial and convivial relationships with and among teachers (ibid.).

Instructional leadership behaviours used in this study refer to all activities and actions that principals do in their schools in relation to facilitation, guidance, supervision and monitoring of teachers' activities of instructional practices.

School principal: The term school principal is often used interchangeably with head teacher or school head. In this study, school principal (who is also head teacher or school head) refers to a person serving as a primary administrative leader in charge of day-to-day operation of a secondary school. School principal is an instructional leader whose responsibility is to empower and facilitate teachers to grow professionally in an interactive and collaborative environment (Niqab et al., 2014, p.81).

Teacher instructional practices: Teacher instructional practices refer to all activities implemented towards ensuring students' acquisition of knowledge, skills, and attitudes. Instructional practices in this study are not only what happens in the classroom. They also include professional activities in which teachers are involved including the ways they interact with one another to improve teaching. Cooperative and collaborative activities such as exchanging instructional materials, planning and preparing lessons, meeting to discuss instructional issues, and collective learning activities are also part of teacher instructional practices (Isac et al., 2015, pp.23-24; OECD, 2013, p.35).

Instruction: Instruction refers to those curriculum-related, professionally informed-decisions that teachers professionally enact to enhance learning opportunities of students. Effective instruction is interactive and is designed to accommodate all student learning needs and styles through a variety of teaching practices (Saskatchewan Education, 1991, p.2).

Student: The term 'students' in this study refer to secondary school enrolled children as opposed to 'pupils' in primary schools in the context of Rwandan education. However, as 'student' may also mean 'learner' in other educational systems (e.g. South Africa), the two terms will be used interchangeably throughout the work.

The researcher: It should be noted that the term, 'the researcher' was chosen to be used throughout the thesis in place of the 1st person singular 'I'.

1.4 Background to the problem

It is important to note that the role of principals as instructional leaders is challenging as they always have to make sure that teachers are motivated and supported to do their best work. Abdul Aziz, Fooi, Asimiran and Hassan (2015, p.15), Alam and Ahmad (2017, p.392), and Bodnarchuk (2016, p.7) point out that principals, as instructional leaders, play a critical role in guiding and supporting teachers in their instruction. Such principals focus most of their instructional actions on the direct involvement in enhancing the quality of teacher

instructional practice (e.g. classroom observation and feedback) or indirect interaction with teachers by creating working conditions favourable for teachers to collaborate and team up dynamically for instructional improvement (Lunenburg 2010, p.2; Sebastian, Allensworth, &Huang, 2016, p.78). The improvement of the instructional practice of teachers is made easier and more successful when emphasis is placed on collaborative relationships with teachers and among teachers themselves (Kalman & Arslan, 2016, p.523; Niqab et al., 2014, p.77).

Principal-teacher relationships were reported to have a positive impact on instruction and student learning in a school. Klump and Barton (2007, p.4) describe the relationships of principals and teachers as symbiotic and state that instructional leadership binds principals more closely to teachers and to the everyday activities of classrooms. Park and Ham (2014, p.454) and Niqab et al. (2014, p.77) also emphasise that relationships between principals and teachers are vital in school because they allow both sides to share knowledge, skills and decision-making on teaching and learning. Principals are then required to forge such relationships so that the quality of teaching is enhanced in schools. In doing this, however, principals need to take cognisance of the role teachers themselves play in influencing the learning of their colleagues. According to Grant, Garner, Kajee, Moddley and Samaroo (2010, p.411) and Park and Ham (2014, p.451), teachers receive guidance and influence not only from their principals but also from other teachers formally and/or informally, individually and/or collectively. This observation emphasises the need for principals to build and sustain a collaborative atmosphere in which teachers interact, work together, and share information about effective teaching and learning.

From previous empirical studies, it has been established that instructional leadership of school principals improves student learning achievement. Robinson et al. (2008, p.659-664), for example, have provided different instructional dimensions (functions) that are vitally important for the promotion of students' learning and achievements. They have revealed that school leaders affect student learning by means of setting school vision and goals to pursue, providing appropriate resources both human and material, planning and observing instruction, fostering teacher learning, and creating an orderly and supportive learning environment.

While these behaviours have been reported to have a positive impact on student learning, principal leadership behaviours that influence instructional practices of teachers have not been defined. Blasé and Blasé, (1999, p.353; 2000, p.13) and Louis, Leithwood, Wahlstrom,

and Anderson (2010, p.315) indicate that studies that connect principal leadership and instructional practices are very few. According to Blasé and Blasé (1999), "empirical studies have generated only scant descriptions of the behaviours of effective instructional leaders and their impact on teachers and classroom instruction" (p.352). Against this background, this study intends to establish the relationship between principals' instructional leadership behaviours and teachers' instructional practices in secondary schools within the context of the Rwandan educational system.

1.5 Rwanda educational context

Before describing the education system in Rwanda, the researcher presents a brief introduction to the country.

1.5.1 Geographical location of Rwanda

Rwanda also known as the 'Land of a Thousand Hills' is a landlocked country located in east central Africa. It is bordered by the Democratic Republic of Congo (DRC) to the west, Uganda to the north, Tanzania to the east, and Burundi to the south (Walker-Keleher, 2006, p.36). It is a small country which covers a total area of 26,338 square kilometres with 10.5 million of people and the highest population density which is more than 450 persons per square kilometre of arable land (NISR, 2012).



Figure 1. 1: Map of Africa locating Rwanda.

Source: https://www.maps of the world.net/maps of africa/

The Rwandan economy depends primarily on subsistence agriculture and the country is ranked among the poorest countries in the World with more than 61% of the population living on less than US$ 1.25 per day and 45% living below the country's national poverty datum line (Williams, Abbott, & Mupenzi, 2015, p.934). Unlike other African countries that are rich in minerals and oil, Rwanda has very few natural resources to exploit and a small, non-competitive industrial sector (Republic of Rwanda, 2014). The most valuable resource that the country relies on is its people where by more than 40 percent is under the age of fourteen (NISR, 2014, p.27).

With less saleable natural resources, the government of Rwanda has embarked on the development of human capital for sustainable economic development. The government was committed to transforming the country from being largely agrarian to a knowledge-based economy and education was considered as a critical lynchpin to achieve this objective. The overall aim of education is to give all young Rwandans the necessary skills, knowledge, and values to be good citizens and more importantly to respond to the labour market needs within and outside the country (MINEDUC, 2008).

1.5.2 Historical context of education in Rwanda

Rwanda has had a varied history of education from pre-colonial times up to the 1994 genocide[1]. Each period had a particular kind of education, depending on the political interests of the regime in power (Obura, 2000, p.34). Rwanda is a former colony of Belgium and gained its independence in 1962.

Before the arrival of Europeans, education in Rwanda was informal and occurred in the family home. Rwandan values, traditions and language were transmitted from one generation to the other through storytelling, singing, dancing and poetry. Besides family education, there existed other non-formal schools known as 'amatorero' (evening vigils) geared towards providing the youth with civic, physical, military and rhetoric skills useful to actively participate in the implementation of national programmes. Before colonialism, education in Rwanda was based on gender roles. Girls learnt household management skills from their mothers while boys were involved in physical and military training for the country defence.

[1] The 1994 genocide also known as the genocide against the Tutsi is the genocide that took place in Rwanda between April and July 1994. It took place in the context of ethnic conflict and more than one million of the Tutsi were slaughtered by Hutu militia groups.

Formal education in Rwanda was introduced by the first missionaries within the colonial system (Uworwabayeho, Rubagiza, & Iyamuremye, 2007, p.59; Walker-Keleher, 2006, p.37). As was the case in much of the rest of colonial Africa, education in Rwanda during the colonial era was mainly managed by missionaries whose purpose was to prepare young men for a life in the church in line with their long-term goal of creating a Christian African community (Walker-Keleher, 2006, p.37). In addition to the evangelisation mission, colonial education was to train administrators of the colonial power. The country had to wait for the foundation of the first secondary school in 1900 by Roman Catholic Missionaries. This school was mostly attended by children of indigenous chiefs who were to be prepared to serve under colonial rule. Other subsidised missionary schools including the first secondary school for girls opened in 1937 increased during the colonial era as the principal venue for education (Uworwabayeho et al., 2007, p.59).

The colonial education system was, however, criticised for not adapting education to the needs of indigenous people. It was characterised by mistrust of traditional values, knowledge and literature and there was no effort to incorporate the Rwandan traditional experience in this education system (Walker-Keleher, 2006, p.37). Additionally, girls who were already victims of the socio-cultural context in which they were considered as 'homemakers' were not given opportunities to learn in the colonial education system. Formal education for girls started almost forty years after the first boys had been to school. In general, schools were scarce and education was not compulsory for fear of creating elite that would dominate in ways the colonial authorities could not control (Weinstein, Freedman, & Hughson, 2007, p.56)

At the time of independence in the 1960s, all schools were brought under the supervision of a national ministry of education with on-going support of the missionary schools (Weinstein et al., 2007, p.56). The ministry of education was also in charge of devising laws securing the general regulations of education (MINEDUC, 2003, p.4). After independence, education underwent several adjustments and reforms. The major changes involved shifting from French to Kinyarwanda as a medium of instruction in primary education and in increasing the length of primary education from six to eight years between 1978 and 1979 (Uworwabayeho et al., 2007, p.59). About ten years later, reform revision in 1991/1992 reverted to six years of primary school completion but the medium of instruction remained Kinyarwanda in primary schools and French in secondary and tertiary education.

Despite all attempts to strengthen the educational system, post-independence education remained a discriminatory practice against Rwandans. The transition from primary to secondary and then to tertiary education was based more on ethnic, gender, and regional criteria than on individual performance and merit (MINEDUC, 2003, p.4; Rubagiza, Umutoni, & Kaleeba, 2016, p.204). Moreover, the education system failed to promote national unity since periodic and intense conflicts continued to dominate the lives of Rwandans and the result was the horrific genocide of Tutsi and moderate Hutu in 1994 (Mugisha, 2010, p.20; Weinstein et al., 2007, p.55).

The education system was destroyed by the infamous 1994 genocide. Schools were looted and destroyed and teachers who symbolised the elite and educated in Rwanda were targeted during the genocide. Some of the teachers were perpetrators of the genocide and turned against other teachers, neighbours and students. Some students did the same and the country went through the unimaginable terror and shock which led to the total erosion of faith in the education system (Walker-Keleher, 2006, p.40).

Following the ending of the 1994 genocide, the Government of Unity and Reconciliation was established in Rwanda. This government engaged in rebuilding the country and an increased emphasis was placed on the role of education in promoting national unity and reconciliation. To overcome the legacy of colonial and post-colonial divisionism, the government of Rwanda made efforts to provide a system of education that builds social justice, promotes democracy and equality, and which is free of any discrimination (Rubagiza et al., 2016, p.204). Values of unity, respect for human rights, patriotism and hard work, which have been eroded by the ethnic divisionism over several years, had to be recreated among Rwandans.

The purpose of the post independence education system was also to boost economic development. Like many other countries which went through conflicts and wars, education was regarded as the key priority and one of the most important activities for the reconstruction and development of the country (Russo, 2000, p.21). Within the context of Rwanda after the 1994 genocide, the educational system was to provide human resources useful for socio-economic development of the country (MINEDUC, 2008, p.1). It aspired to develop a knowledge-based and technology led-economy to attain sustainable development (MINEDUC, 2007, p.6). To achieve this, the Government of Rwanda developed a national science, technology and innovation policy, and the teaching of science and technology became a priority in schools (MINECOFIN, 2007, p.37; MINEDUC, 2006, p.10).

1.5.3 Overview of the current education system in Rwanda

The historical developments that Rwanda went through made education a particularly important part of its short-and long-term development strategy. The Rwandan government was committed to achieving Millennium Development Goals (MDGs) and the emphasis in education was placed on providing opportunity for all children to complete a full course of primary schooling and eliminating gender disparity in primary and secondary schooling (IPAR, 2012; Nichol, 2013).

To ensure that education was available and accessible to all Rwandan people, the Ministry of Education, after the 1994 genocide, was committed to particularly achieving nine and twelve year basic education in the line with the Dakar Framework for Action on Educational for All (UNESCO, 2007, p.22).

In 2009, the Government of Rwanda implemented a free nine year basic education programme (9YBE) which comprised six year primary school curriculum (P1-P6) and the first three years of secondary school curriculum (S1-S3) (Nichol, 2013, p.2). The Introduction of the nine year basic education came with the cabinet decision in 2008 to replace French as the medium instruction by introducing English in all public schools with only Kinyarwanda in the first three years of primary schools (Lackamp, 2016, p.99; Pearson, 2014, p.41). Three years later, in 2012, the Government of Rwanda launched the free twelve year basic education programme which, in addition to 9YBE, includes the final three years of secondary school. The purpose of 12YBE was to provide all Rwandans who reached the end of 9YBE with further 3 years of second education. The purpose of these changes was also to raise the general level of literacy and equip young Rwandans with potential knowledge and skills to reduce poverty and improve future economic growth (IPAR, 2012, p.25).

With the introduction and implementation of the nine and twelve year policy in Rwanda, the number of secondary schools increased from 689 in 2008 to 1466 in 2012 while the number of students rose from 288,036 to 534,712. The student transition rate from primary to secondary also moved from 55% in 2008 to 95.9% in 2012 (MINEDUC, 2013, pp.30-35).

However, expanded access to education has not come without challenges. Some of the challenges included unqualified teachers, shortage of teaching and learning materials, lack of teacher support and management, high rate of student drop out, and teachers' low level of proficiency in the English language; the medium of instruction (JICA, 2012, p.34; Rubagiza

et al., 2016, pp.204-205). Despite these challenges the government of Rwanda was committed to continuing to address these problems to ensure optimum balance between increasing access to and improving quality of education across all schools. One of the government's strategic objectives is to build the capacity of school principals (Kambanda, 2013, p.6).

1.5.4 Educational leadership policy in Rwanda

In Rwanda, primary and secondary schools are managed by principals who are responsible for the day-to-day implementation of national education policies. Ministry of Education, Districts and Sectors are responsible for supervising activities of principals and supporting them in promoting access and providing high quality education in their respective schools (JICA, 2012, p.40; MINEDUC, 2008, pp.5-7). Based on the role of school principals in effective teaching and learning, the Ministry of Education is committed to ensuring that every school has a well-qualified school leader in place to help all students benefit from the best possible education. Consequently, the Government of Rwanda, through the Ministry of Education (MINEDUC), signed a bilateral project with a Belgian non-government organisation; Vlaamse Vereniging voor Ontwikkelingssamewerking en Technische Bijstantand /VVOB) in 2003, to improve school leadership and management in primary and secondary schools (MINEDUCA, 2003). This project, also known as the 'MINEDUC School Management Programme', was initiated to address the problems of ineffective school management affecting school performance in Rwanda. Its main objective was to enhance the school management and leadership capacity of school principals and other administrative staff notably deputy principals, accountants, discipline masters, bursars, and secretaries. Until 2012, within the school boards of 1118 Rwandan schools, 75% of the staff was trained in school management and ICT all over the country (Kambanda, 2013).

In line with the goal of improving the primary and secondary school principals' leadership competencies, MINEDUC has recently established the school leadership and management unit under the department of Rwanda Education Board (REB). This unit organises, stimulates and maintains learning network with districts and sectors to develop and retain quality school leadership and management within schools. To do so, five school leadership standards have been defined to describe essential knowledge, skills and attitudes that school leaders must demonstrate if quality leadership and management is to be provided in a school. These professional standards include, 1) setting strategic direction, 2) leading learning, 3) leading

teaching, 4) managing the school as an organisation, and 5) fostering community and parental involvement (Rwanda Education Board, 2014, p.4). These standards provide a starting point for school principals to close the learning achievement gap considering the influence of school leadership on student learning.

To promote high quality education and school leadership in particular, MINEDUC, in collaboration with the UK Department for International Development (DFID), has funded and launched 26 Innovation for Education projects in 2013. One of these projects called '*Coaching School Leadership to Improve Learning Outcomes*' was designed and implemented by the VVOB in Rwanda. The main objective of the project was to improve primary and secondary students' learning outcomes by enhancing the quality of school leadership. The rationale behind this project is that central to educational innovation and change and improving learning, is the capacity of the principal to lead the school in the related change processes (Peeraer, Zult, & Mugenzi, 2014, p.71). Sector educational officers (SEOs) and principals from 32 sectors out of a total of 416 sectors in the country were first trained and prepared to progressively coach their colleagues from other sectors. Eight dimensions of successful leadership identified in the research of Day et al. (2009) were part of the training programme to help school principals become more involved in the teaching and learning process.

According to Day et al. (2009, p.26), successful school leaders: 1) define their vision to raise expectations, 2) reshape the conditions for teaching and learning, 3) structure parts of the organisations and redesign leadership roles and responsibilities, 4) enrich the curriculum, 5) enhance teacher quality, 6) enhance the quality of teaching and learning, 7) build collaboration internally, and 8) build strong relationships outside the school community. Understanding and applying these dimensions is expected to have a positive impact on school leaders with the hope of achieving the desired leaning outcomes.

Generally, educational leadership in Rwanda is still at the infant stage. However, the Rwandan government is committed to improving the quality of education through enhancing the quality of school leadership. The government is cognisant of the important role that school principals play in shaping classroom learning and teaching conditions and is committed to helping them in creating such conditions.

1.5.5 Overall structure of the Rwandan educational system

The overall structure of the Rwandan education system has changed from time to time. Before 2009, this system was divided into five phases: (i) pre-primary, (ii) primary, (iii) lower secondary, (iv) upper secondary and (v) post 19 including higher education (IPAR, 2012, p.15). With the introduction of nine and then twelve years basic education, the formal education system in Rwanda is today organised around four major phases briefly described as follows:

Pre-primary education: This phase is still small and offers a cycle of three years for children between the ages of 3 and 6;

9 years basic education (9YBE): 9 YBE is now becoming a more coherent single phase (primary and lower secondary together) which in theory is for 7-15 year olds, although in practice it is common to find over age students at this level. In theory again it is compulsory for all children to complete 9YBE, at the end of which they will have a choice to take up post 9YBE learning.

Upper secondary of 12 years basic education (12YBE): From 2012, all students who reach the end of 9 YBE at the age of 15 are entitled to further three years of education. This further study can either be in a General Secondary (GS) School, which is academic; a Teacher Training College (TTC), or a Technical and Vocational Education and Training (TVET). TVET is made up of Technical Secondary Schools (TSSs) and Vocational Training Centres (VTCs).

Post 19 education: For students who complete upper secondary education in GS, TTCs, and TSSs and who wish to continue to university, there are both public and private higher education institutions (HEIs) which offer courses of study of variable duration (MINEDUC, 2013, p.17; World Bank, 2011, pp.56-57). All public HEIs are self-governing and independent, though the Ministry of education provides oversight to ensure quality control and curriculum standards through its Higher Education Council (HEC). Private institutions are fully privately funded but they are regulated by the State and are required to receive accreditation from the HEC (MINEDUC 2013, p.17; Nichol, 2013, p.3). Table 1.1 below summarises the key phases of the Rwandan education system.

Table 1. 1: The four key phases of the Rwandan education system.

Phase	Pre-Primary	9 Years Basic Education									12 years Basic Education			Post-19 education
Age	3-6	7	8	9	10	11	12	13	14	15	16	17	18	19+
Year		P1	P2	P3	P4	P5	P6	S1	S2	S3	S4	S5	S6	
	PP													
		GS	GS	GS	GS	GS	GS	GS	GS	GS				
		P	P	P	P	P	P							
											GenS	GenS	GenS	
											TSS	TSS	TSS	
								VTC	VTC	VTC	VTC	VTC	VTC	
								IP	IP	IP	IP	IP	IP	IP
														HEIs
														CoE
														CoT

KEY

PP = pre-primary schools
GS = Group Scoliares, or 9YBE schools catering for pupils from years 1-9
P = Primary schools catering for pupils from year 1-6 (the old "primary school")
VTC = Vocational Training Centres, which currently cater for year 7-9 pupils as well as 12YBE pupils
TSS = Technical Secondary Schools
GenS = General Secondary School
TTC = Teacher Training Colleges
HEI = Higher Education Institutes
CoE = Colleges of Education
CoT = Colleges of Technology
IP = Integrated Polytechnics

Source: IPAR-Rwanda (2012, p.15)

1.5.6 Language of instruction in the Rwandan educational system

According the Constitution of Rwanda, there are three official languages: Kinyarwanda (mother tongue), French and English (Republic of Rwanda, 2003, p.5). Before 2009, a trilingual policy was adopted and there was a choice of medium of instruction based on linguistic background and experience of both teachers and students (JICA, 2012, p.33).

In general, French was used as the medium of instruction until 2009 and from then the Government of Rwanda decided to adopt English as the language of tuition throughout the education system. The main goal of this reform was to help Rwanda integrate into the East African Community (EAC) and the Commonwealth from which the country is the member since 2007 and 2009, respectively (HEART, 2013, p.10; JICA, 2012, p.33).

The shift from French to English as the medium of instruction was also motivated by the fact that English language is an important language for international relations, trade and socio-economic development and is a gateway to the global knowledge economy. Since 2011, Kinyarwanda became a language of instruction only for the first three years of primary

education, with English taught as a subject. From the primary four (P4) English was adopted as a medium of instruction across the curriculum at all education levels (Pearson, 2014, p.41).

Although the Rwandan government chose a path to transform the country from Francophone into Anglophone, the majority teachers as well as school leaders were educated in French and their levels of English language proficiency are still low. For example, a baseline survey conducted in 2009 revealed that 85% of primary teachers and 66% of secondary teachers only had beginner, elementary or pre-intermediate levels of English (JICA, 2012, p.34). Again, the results of the British Council baseline survey conducted in 2012 with a sample of 577 primary and secondary teachers showed that the vast majority of teachers surveyed (93.5%) had only a basic level of English language proficiency (Upperquartile, 2014, p.25). This included just under 40% who were considered 'beginners' and who were only able to interact in a simple way with other competent users. Only 3% of teachers reached an intermediate level and no teachers demonstrated effective operational proficiency in English (ibid.). The majority of teachers both in primary and secondary schools were found to have relatively low levels of English language skills and were struggling especially with spoken English (Upperquartile, 2014, p.25).

Given the well-established link between teachers' and students' language proficiency in the medium of instruction and the quality of student learning and achievement (Lackamp, 2016, p.112; Nel & Müller, 2010, p.644), the baseline studies above showed that teachers in Rwanda were not yet ready to use English as a medium of instruction as the majority of them had insufficient proficiency in this language. It evident from these baseline studies that the government of Rwanda must establish consistent and powerful training programmes in English that aim at increasing the proficiency levels of teachers and school leaders for effective communication and transmission of the curriculum content to the students in classroom.

1.5.7 Nyamagabe district school context

The country of Rwanda is divided into five provinces which in turn are subdivided into 30 districts including the Nyamagabe district. The choice of this district over the other 29 districts was mainly motivated by the fact that it was accessible by the researcher. As a former district employee, the researcher had first-hand knowledge of the district and this knowledge enabled him to carry out research in the part of the country he knew best.

Located in the southern part of the country, Nyamagabe district is one of the eight districts which form the southern province. It is bordered by the district of Karongi and Ruhango in the north, Nyanza and Huye in the east, Nyaruguru in the south and Rusizi and Nyamasheke in the west. Covering an area of 1,009 square kilometres, the Nyamagabe district is subdivided into 17 administrative sectors, 92 cells and 536 villages with the total population of 342,112 of which 53% are female and 47% are male (Nyamagabe district, 2013, p.7) .



Figure 1. 2: Map of Rwanda locating the Nyamagabe district.

Source: https://www.statistics.gov.rw/publication/rwanda administrative map

The Nyamagabe District is a rural district and has 55 nursery schools, 103 primary schools, 51 secondary schools, and five vocational training centres (ibid., p.17). Among 51 secondary schools located in the district, only three are private while five and 43 schools are public and subsidised schools (government aided schools), respectively. The majority of these schools (78%) are day-schools and are close to the the children homes.

Among 51 secondary schools only 11 are boarding schools and are expected to accommodate students excelling at national examinations (primary and lower secondary level leavers) from all over the country. Except nursery and private schools, all other schools are fully funded by the Government which also provides teaching and learning materials, teachers' salaries and construction and renovation fees.

The day-to-day management of the school is in the hands of the school principal who works closely with teacher-parent association (PTA). Like the rest of the country, all schools in the Nyamagabe district are supervised by sector and district education officers and the general inspectorate from the Ministry of Education.

The formal education sector in the Nyamagabe district is made up of four phases; pre-primary, 9 YEB, 12 YBE, and technical and vocational Education. However, this sector is confronted by serious challenges including a high drop out in primary and secondary schools, insufficient teaching and learning support materials, overcrowded classrooms, and a shortage of qualified and competent male and female teachers in secondary schools (Nyamagabe District, 2013, p.37). Although these challenges were endemic at the national level, they were more noticeable in schools of the Nyamagabe district, which partly motivated the researcher to conduct this study in the District.

1.6 Statement of the problem

Across the world and in Africa, in particular, many developing countries face the challenge of enhancing accessibility to quality education for the children (World Bank, 2011, p.4). Hanushek and Welch (2006) compared the quality of education in both developing and developed countries and concluded that learners in most developing countries learn less than their counterparts in the developed countries. Research carried out in less economically developed countries generally revealed that the crucial factor behind the poor academic performance in the schools is the poor leadership of principals (Hoadley, Christie & Ward, 2009; Isaiah & Isaiah, 2014; Jita, 2010; Kabeta, Manchishi, & Akakandelwa, 2013; Naidoo & Petersen, 2015; Oplatka, 2004; Taole, 2013; Wanzare, 2012).

In many schools the barrier between office and classroom is quite strong and principals distance themselves from their teachers and believe that anything to do with teaching and learning is the responsibility of teachers and/or heads of departments (Hoadley et al., 2009, p.382; Taole, 2013, p.78). Most of the principals tend to be more manager and administrator-oriented rather than working with teachers; supervising them, and advising each other about techniques and strategies useful to enhance high quality of instruction in their schools. In such a working environment, it is difficult for principals to be aware of what is going on in classrooms and appreciate some of the problems teachers and students encounter in order to address them (Manaseh, 2016, p. 41; Taole, 2013, p.78).

Researchers agree that principal's leadership is critical to academic success of schools (Alam & Ahmad, 2017, 392; Hallinger & Lee, 2013, p.306; Leithwood & Riehl, 2003, p.64). Hallinger and Lee (2013, p.306), for example, say that good schools have good principals. They further consider the principal as a pivotal figure in the school, the one who mostly affects the quality of teacher performance and student achievement. Also, available evidence has shown that instructional leadership displayed by school principals plays a key role in shaping school learning conditions that correlate with the achievement of students (Jita, 2010; Lydiah & Nasongo, 2009). Principals, as instructional leaders, influence student learning achievement by making sure that teachers are committed to teaching and that they are supported and equipped with all the required skills and resources to implement the desired change in the classroom (Abdul Aziz et al., 2015, p.15; Alam & Ahmad, 2017, p.385).

There is research evidence that school principal leadership has a substantial and significant influence on student learning and achievement (Colden & Spillane, 2007; Lydiah & Nasongo (2009; Quinn, 2002; Robinson et al., 2008). However, researchers continue calling for more studies on the connection between school leaders' behaviours and instructional practices of teachers as little is known about the relationship between the two areas (Blasé & Blasé, 2000, p.131; Louis et al., 2010, p.315). The fact that the teacher is the most influential factor to student learning (Dinham, 2013, p.226) and that the bond between the principal and teachers is vital in increasing student performance (Ail, Taib, Aida, Salleh & Omar, 2015, p.1849), it would be beneficial to have a better understanding of instructional leadership of principals and explore the influence this type of leadership has on the instructional practice of teachers in a school.

In Rwanda, there are very few studies on school leadership and none of these have a particular focus on instructional leadership of secondary school principals. The only study is by Kambanda (2013, p.259) and it revealed that secondary school principals in Rwanda encouraged instructional leadership practices; routinely discussed teaching and learning and advised teachers and students. However, in some cases, principals were more administrative than pedagogical or instructional in leadership and sometimes invisible and inaccessible to teachers, students and other school members. Though this study was conducted in Rwanda on school leadership, it did not sufficiently explore the issue of principals' involvement in the teaching and learning process because its purpose was on how principals advocate, nurture and sustain a school culture (ibid, p.18). This contextual gap therefore calls for a study to

explore instructional leadership of secondary school principals and establish its link with teaching practices of teachers.

Again, the Upperquartile (2014, p.42) report on school performance in Rwanda discussed the performance of students in secondary schools. According to this report, the years of 2012 and 2013 were marked by poor student performance at the secondary school levels and one of the factors behind this failure was the poor support and guidance school leaders provided to teachers and students. The school leaders remained more focused on reducing student repetition rate and preventing dropout than improving teachers' performance and student learning.

Therefore, considering the role of school principals in enhancing the quality of teaching and learning and taking into account the Government's effort to improve leadership capacity of principals in Rwanda, it was important to carry out this research and identify instructional leadership behaviours secondary school principals model which are most likely to influence instructional practices of teachers for subsequent student learning improvement. From the findings, recommendations can be made to enhance instructional leadership for quality teaching and learning in schools investigated.

1.7 Purpose and objectives of the study

The main aim of this study was to identify instructional leadership behaviours enacted by school principals and investigate the extent to which these behaviours influence teachers' instructional practices in secondary schools in Rwanda. The assumption is that the teacher as the most impactful factor to student learning needs support and guidance from the principal in order to carry out teaching effectively. It is also important for school principals to be aware of their own behaviours that develop the expertise of teachers in their teaching and that generate high quality learning in the classroom. In order to explore these issues, the study sought to address the follow objectives:

To ascertain instructional leadership behaviours enacted by principals in secondary schools in the Nyamagabe district;

To identify instructional practices performed by teachers in secondary schools in the Nyamagabe district;

To find out the relationship between instructional leadership behaviours of principals and teachers' instructional practices in secondary schools in the Nyamagabe district;

To find out the difference between boarding and non-boarding secondary school principals in enacting instructional leadership behaviours in the Nyamagabe district;

To find out perceptions of principals and teachers towards instructional leadership (behaviours) of the principals in secondary schools in the Nyamagabe district;

To identify challenges that impede instructional leadership of the principals in secondary schools in the Nyamagabe district.

1.8 Research questions and null hypotheses

Given the stated problem and the research objectives, the study was guided by the following main research question:

How do principals in their day-to-day leadership practices develop teacher' professional practices in schools?

The main research question above is supported by the following quantitative sub questions (from question 1 to question 4) and qualitative sub questions (question 5 and 6).

1. *What instructional leadership behaviours do secondary school principals in the Nyamagabe district enact?*

It is stated in the literature that school principals, especially those who act as instructional leaders, play a critical role in shaping learning and teaching conditions where teachers feel supported and committed to teaching and students to learning. Such principals invest in teachers with all the required skills and resources needed to make learning more successful. In addressing this question, the study is intended to identify instructional leadership behaviours enacted by school principals with the purpose of guiding and supporting teachers in their teaching. In dealing with this question, data were collected from teachers who ranked their principals' involvement in instructional activities by rating how frequently they did them.

2. *What instructional practices do secondary school teachers in the Nyamagabe district perform?*

In addressing this question, the study sought to identify instructional practices performed by teachers for the improvement of student learning. The study assumed that there were both collaborative and classroom practices that teachers were expected to carry out to enable effective learning to take place. Selected teachers were asked to rate themselves on how frequently they performed those practices.

3. *What is the relationship between instructional leadership behaviours of principals and teachers' instructional practices in secondary schools in the Nyamagabe district?*

With instructional behaviours enacted by school principals and instructional practices carried out by teachers, this question was designed to establish whether there was a link between these two variables. In other words, the rationale for question three was to assess the influence instructional leadership behaviours of school principals had on teachers' instructional practices and how much variation in these practices can be attributed to the variation in instructional leadership behaviours of school principals. The null hypothesis (H_o) to be tested using this question is that there is no statistically significant relationship between school principals' instructional leadership behaviours and teachers' instructional practices (r=0).

4. *What is the difference between boarding and non-boarding secondary school principals in enacting instructional leadership behaviours in the Nyamagabe district?*

In Rwanda, secondary schools both public and subsidised schools are grouped into two major categories; boarding and non-boarding schools. Very often, non-boarding schools (day schools) have been criticised by parents for not providing quality teaching and learning in comparison to boarding school schools. Based on the role of school principals in the provision of quality teaching and learning, this question was developed to assess whether there was a significant difference between boarding and non-boarding school principals in implementing instructional leadership. Using this question, the null hypothesis (H_o) to be tested is that there is no statistically significant differences between boarding and non-boarding school principals with regard to the enactment of instructional leadership ($\mu_1=\mu_2$).

5. How do principals and teachers perceive instructional leadership behaviours of the principal in secondary schools in the Nyamagabe district?

This question was concerned with establishing both principals' and teachers' perceptions of the principal instructional leadership in investigated schools. As the first four questions were designed to collect quantitative data with a large sample, this question was developed to collect qualitative information useful to elaborate on quantitative data. Issues and concerns raised in the quantitative data were dealt with using information collected from semi-structured interviews held with two principals and six teachers in two case study schools.

6. What are the challenges that impede instructional leadership of the principal in secondary schools in the Nyamagabe district?

This study was conducted in two sequential phases, namely, quantitative and qualitative phases. After quantitative data revealed that school principals enacted various instructional leadership behaviours but at the moderate level, this question was designed to seek views of principals and teachers about the challenges that impede instructional leadership of principals in schools. Two principals and six teachers' views were considered in addressing this question.

1.9 Synopsis of the research design and methodology employed

Evidence from empirical studies has demonstrated that qualitative (case) studies and quantitative studies in the area of instructional leadership have often been carried out in isolation and in parallel ways (Antoniou & Lu, 2018, p.636; Hallinger, 2010, p.288). To have a better understanding of the instructional leadership of principals and its influence on instructional practices of teachers in the Nyamagabe district, the researcher adopted a mixed methods approach to offset weaknesses of one approach against strengths of another (McMillan & Schumacher, 2010, p.395; Nudzor, 2009, p.120; Plan Clark & Ivankova, 2016, p.84).

The study employed an explanatory sequential mixed methods design in which, according to Plan Clark and Ivankova (2016, p.122), the quantitative phase precedes qualitative strand. The quantitative phase, which included 48 secondary schools in the district, was first conducted to determine the nature of principal instructional leadership and teacher instructional practices and to establish the relationship between these two variables. The

survey was employed in the quantitative phase and survey questionnaires were developed and distributed among 269 teachers selected purposively from 48 secondary schools (the reason for purposeful sampling in quantitative phase is given in chapter 5). The data from the survey was processed using the SPSS software (version 23) and was analysed and presented using descriptive and inferential statistical techniques

The subsequent qualitative phase, on the other hand, was used to elaborate on quantitative numerical data gathered in the first strand of the study. More specifically, the qualitative phase provided the perceptions of principals and teachers towards instructional leadership of principals in two specific school settings. Interview questions focused on instructional leadership strategies that school principals utilise to support and guide teachers in their teaching. Challenges that school principals face in respect to instructional leadership were also commented on and outlined in this second phase. Data collected from interviews were analysed using the thematic analysis approach and were transcribed, coded, and grouped into meaningful themes.

Both quantitative and qualitative results were merged at the interpretation level (in chapter 8) to provide a complete and meaningful picture of principals' instructional leadership in the schools investigated.

1.10 Ethical considerations

Oates, Kwiatkowski and Coulthard (2010, p.5) define research ethics as "the moral principles guiding research from its inception through the completion and publication of results". As this research involves human participants, it was necessary for the researcher to adhere to ethical principles and establish good relationship with the participants, to clarify the conditions under which the research will be carried out, and, more importantly, to protect the participants from any physical or mental harm. To do so, ethical issues such as confidentiality, anonymity, informed consent, and the right to withdraw were seriously taken into consideration during the research process.

1.11 Theoretical framework

The theoretical framework underpinning data analysis in this study is a combination of different theories describing how leaders influence followers within an organisation. Theories such as shared instructional leadership (Marks & Printy, 2003), transformational leadership (Bass & Avolio, 1994), transactional leadership (Burns, 1978) and distributed leadership

(Gronn, 2000; Spillane, 2005) were chosen and discussed in the study. Using a multi-theoretical approach, the study is expected to broaden and deeper our understanding of how school principals and teachers mutually engage in creating conducive conditions and performance activities that facilitate teachers to grow professionally and improve their teaching performance with the ultimate goal of enhancing student learning and achievement.

1.12 Conceptual framework

The conceptual framework which informs this study has been developed based on Webber's (1996) and Lineburg's (2010) models which describe the role of the principal as an instructional leader. Webber (1996) and Lineburg (2010) have listed different instructional leadership behaviours (dimensions) of school leaders that influence the work of teachers as well as student learning. The researcher has selected essential behaviours that fit the Rwandan context. The key principal instructional behaviours that guided this study were: 1) defining and communicating school goals, 2) planning and coordinating curriculum, 3) supervising instruction, 4) promoting teacher professional development, and 5) providing resources.

This conceptual framework has also been developed in line with Robinson's (2007, p.15) view that instructional leadership makes a significant difference in student outcomes through the focus on teachers and the quality of instruction. Emphasis was placed on the particular behaviours as they can help principals to focus on teaching and learning and identify the appropriate support that teachers need to improve their professional practices and carry out their teaching activities effectively.

1.13 Justification of the study

Instructional leadership in the context of Rwanda is under-researched area of study. Previous studies have been focused on principal-student relationship and not on principal-teacher relationship. For example, Blasé and Blasé, (2000, p.131), Gumus, Balut and Bellibas (2013, p.6), and Louis et al. (2010, p.315) indicate that many studies have looked at how principal leadership affects student learning achievement but very little information is available about the connection between leadership and the teachers instructional practices. This is the gap in knowledge that this study seeks to address.

It is common in Rwanda to account for poor student academic performance in terms of the teachers' incompetence in instruction and teaching and not to the poor leadership of school

leaders. As a Rwandan , this mindset motivated the researcher to carry out this particular study to find out if teachers receive appropriate and adequate support from their principals to be able to perform the task of teaching effectively.

Therefore, this study was informed by the working experience of the researcher in the education sector. Being an inspector of schools and then director of education at the district level, the researcher believed that school principals' leadership is the key strategy to school improvement. This first-hand experience instilled in him a desire to contribute to the existing debate on school principals' leadership by identifying the practice of instructional leadership and its effect on teachers' professional practices in schools.

1.14 Contribution of the study

Majority of previous studies on instructional leadership have established the relationship between principal instructional leadership and student learning and achievement while little is known about the principal-teacher relationship in schools (Blase & Blase, 1999; Louis et al., 2010). Against this backdrop, this study aims to pursue an alternative way of looking at both areas and see how the instructional leadership of school principals is a type of leadership that can also contribute to the performance of teachers in schools. A strong association was found between these two areas in this study and this indicates that instructional leadership of principals is a critical factor not only to student learning and achievement but also to quality teaching of teachers. These results are very important in the sense that they are expected to help in building useful models that will contribute to the development of theory and practice in terms of instructional leadership of the principal and its influence on teachers' instructional practices since there seems to be limited research in this area.

1.15 Significance of the study

This study is expected to be of interest to different educational stakeholders, especially concerning instructional leadership of school principals and its effect on teachers' instructional practices.

First, the quality of principal leadership in schools is critical to achieving improved student outcomes via working with teachers (Alam & Ahmad, 2017, p.385; Barret & Breyer, 2014, p.7). This suggests that quality teaching and learning cannot be easily achieved unless educational stakeholders are aware of leadership factors that bring about positive change in the way teachers teach. Through the examination of principals' instructional leadership

behaviours that influence the teaching performance of teachers, principals and policy-makers can use the findings of this research to join forces and reinforce instructional leadership for quality teaching and learning in schools.

Secondly, the bond between the principal and teachers was found to be crucial in improving instruction and student performance in classroom (Ail et al., 2015, p.1849; Sebastian et al., 2016, p.92). The findings of this study have the potential for strengthening the relationship between teachers and principals by raising awareness about relevant instructional leadership behaviours of principals that mostly affect instructional practices of teachers in schools. Evidence from literature has demonstrated that majority of school principals in developing countries devote little time to curriculum and put more emphasis on managerial and administrative work (Oplatka, 2004; Hoadley et al., 2009). The findings of this study may inform principals on how to remove barriers between offices and classrooms and actively engage together with teachers in behaviours that enhance teaching and learning in their schools.

Lastly, it was found in the study that there are still challenges that prevent school principals from being effective instructional leaders. The findings of this study may inform policy-makers, principals, teachers and other educational partners to jointly evaluate what works in schools and make improvements in the area of instructional leadership implementation. These improvements will help principals to enhance their leadership capacities which, in turn, can assist teachers to become more professional and competent in the classroom.

1.16 Literature Review

Boote and Beile (2005, p.3) define a literature review as "a systematic and critical examination of the research that has been conducted in a particular field of the study". Its purpose is to provide a researcher with background information about a research topic, to help him/her establish importance of the topic, and identify a gap within existing research that needs to be addressed (Randolph, 2009, p.2; McMillan & Schumacher, 2010, p.73).

For this study, the literature review was divided into three distinct but complementary chapters. The first chapter (chapter 2) discusses theories that focus on how leaders interact with their followers and influence their work. The second chapter (chapter 3) presents and discusses the key concepts related to the study and the key functions of principals as instructional leaders expected to make improvements in teachers' instructional practices. The

third chapter (chapter 4) is dedicated to an examination of empirical studies conducted in both developing and developed countries in the area of instructional leadership. The purpose of this chapter was to locate the topic in related empirical research and identify the gap that the research intended to address. Taken together, these chapters helped to situate the research topic in the context of what has been covered in the area of instructional leadership and what still needs to be learnt and accomplished. The chapters also served as an important tool to determine the methodology used and analyse and discuss the findings in terms of confirming, comparing, extending, and/or contradicting what is already known.

1.17 Delimitations of the study

Due to time and financial constraints, this study was confined to public and subsidised secondary schools located in one district among the 30 districts of the country. Data was collected from teachers and principals to identify instructional leadership behaviours enacted by school principals and establish the link between these behaviours and teachers' instructional practices.

1.18 Structure of the thesis

This thesis is comprised of nine chapters. Chapter 1 which is an introductory chapter provides a brief overview of the study. Chapter 2 presents and discusses the theoretical framework underpinning the study. In chapter 3, the researcher discusses the key concepts related to the study and provides the conceptual framework guiding the study. Chapter 4 is dedicated to examining empirical studies conducted in both developed and developing countries in the area of instructional leadership to become more familiar with what has been done and accomplished and identify the research gap to address. In chapter 5, the researcher introduces and outlines the research design and methodology employed to facilitate investigation of the research questions. Chapters 6 and 7 present quantitative and qualitative results gathered in two sequential phases of the study. Chapter 8 merges and discusses the results in order to answer the research questions. In chapter 9 which concludes the thesis, the researcher provides a reflective summary of the whole thesis and a summary of the findings in relation to the research questions. The same chapter also considers the contributions and implications of the study and draws attention to areas that may require further exploration.

1.19 Chapter overview

This chapter provides a brief overview of the study by explaining the nature of the problem and by demonstrating the necessity of conducting this research in Rwanda. In so doing, the chapter starts with a context for the study topic, a background to the problem, and discusses briefly the Rwandan educational system and how it is linked to the objectives of this study. The same chapter outlines research objectives and questions that guide the study and defines and clarifies the key terms used throughout the thesis.

The chapter further introduces a brief overview of the research design and methodology used in this study. It also provides a summary of the theoretical and conceptual framework considered as a roadmap to learn and understand how school principals help and facilitate teachers to enhance instruction in classroom. Justification, significance, and contribution of the study together with a summary of the literature review were provided in this chapter. Lastly, chapter 1 provides a structure of the thesis in which each chapter's focus is briefly described.

The next chapter is dedicated to discussing the theories that are relevant to this study.

CHAPTER 2: THEORETICAL FRAMEWORK

2.1 Introduction

A theoretical framework is like a map or a travel plan that guides a person to move from one place to another especially when the destination is not well known. This map helps to identify everything needed prior to start and successfully end the journey. In research, a theoretical frame work is a key guide because it provides information and perspectives useful to conduct research. Grant and Osanloo (2014, p.13) and Imenda (2014, p.189) define theoretical framework as "a structure that guides research by relying on a formal theory constructed by using an established, coherent explanation of certain phenomena and relationships". Here, the theoretical framework consists of the selected theories that undergird a researcher's thinking with regards to how s/he understands and plans the research using interrelated concepts and definitions that are relevant to the topic under investigation.

2.2 Different theories guiding the study

This chapter discusses various theories that are relevant to the understanding how school principals enact instructional leadership behaviours through dynamic interaction with teachers and how such behaviours influence instructional practices of teachers in school and in the classroom. In addition to instructional leadership, which is the main theory of this study, transformational, transactional, and distributed leadership are discussed in this chapter. The objective is not to compare these theories in terms of their contribution to teachers' instructional practices. Rather, the purpose is to concurrently use them and provide a holistic theoretical framework for the interpretation of principals' instructional leadership behaviours and their influence on teachers' instructional practices.

Emmanouil, Osia and Paraskevi Ioanna (2014, p.35), Goddard et al. (2010, p.338) and Shatzer, Caldarella, Hallam and Brown (2014, p.446) suggest that instructional and transformational leadership are two theories that have received the most attention and support in the literature. Both types of leadership have been recommended as models of leadership for school principals who want to help teachers to grow professionally and play an important part in improving student learning.

Transactional and distributed leadership theories are also important as they underscore the principal's behaviours that encourage mutual relationships and a culture of sharing energy, commitment, and contribution of teachers and the principal toward effective teaching and learning within the framework of mission, vision and values of a school (Odumeru & Ogbonna, 2013, p.359). The contribution of each of these theories to the analysis of data in this study is discussed in the sections that follow.

2.2 1 Instructional leadership

This model emerged in the early 1960s and became a dominant theory of leadership during the 1980s when school principals started to be more involved in curriculum and instruction (Lashway, 2004, p.1). In the 1980s, the role of principals accepted as a programme manager before shifted towards that of an instructional leader or academic leader (Kaya & Göçen, 2013, p.59). This transition was largely influenced by research which found out that effective schools had principals who stressed the importance of leadership in aiding school performance (Jenkins, 2009, p.34; Duze, 2012, p.113).

The principal has a pivotal role in the school and is the one who mostly affects the quality of teachers' performance and students' achievement (Hallinger & Lee, 2013, p.306). With the emergence of instructional leadership, students' achievement was put at the centre of the principal's role. Principals' tasks and responsibilities were reshaped and instructional leadership was defined as a school administrator who provided direct assistance to teachers, planned and organised curriculum and instruction for effective student learning. Vision, goals, and mission became strongly situated in the vocabulary of principals who wished to succeed in the evolving environment of school reform (Hallinger, 2005, p.4).

Instructional leadership has traditionally been conceived as relating to one single leader in a school; the principal (Bush, 2013, p.6; Hallinger, 2003, p.330). Instructional leadership viewed the principal as the primary source of educational expertise, power and authority in schools. Accordingly, the performance of a school is expected to improve if and only if the principal is considerably engaged with supervising classroom instruction, monitoring student progress, coordinating the school curriculum, promoting a climate of learning, and creating a working environment through top-down and directive management approach (Hallinger, 2003, p.331; Kwan, 2016, p.111; Marks & Printy, 2003, p.373).

Several studies have been conducted on the role of instructional leadership in student performance and the most frequently used instructional model was developed by Hallinger and Murphy (1985, p.221). This model suggested three dimensions of the instructional leadership construct: defining school mission, managing instructional programme, and promoting school learning climate. These dimensions, which were further split into ten leadership functions, were built on a hierarchical and procedural notion in the school. School goals and policies were formulated by principals with which teachers were expected to strictly comply (Kwan, 2016, p.112).

Traditional instructional leadership did not acknowledge that there were multiple sources of leadership in schools. It focused too much on the principal as the centre of expertise, power and authority and considered him/her as the only individual to generate leadership that influenced both teachers' and students' performance (Bush, 2013, p.6; Van de Merwe & Schenck, 2014, p.3).

As the time moved on, instructional leadership, which was hierarchical, paternalistic, and which depended on docile followers, was criticised for being the sole preserve of the school principal. Commenting on the traditional view of instructional leadership, Grant (2005) and Lambert (2002) in Bush (2013, p.7) say that the principal does not have the capacity to serve as the lone instructional leader or school leader for the entire school without the substantial participation of other teachers. The ideas of Grant (2005) and Lambert (2002) in Bush (2013) reflect the need for school principals to engage in leadership all those who make the school a learning community, especially teachers. In such a new leadership approach, both principals and teachers are expected to discover new and innovative ways to partner with one another as instructional leaders and continuously improve teaching effectiveness for every student in every classroom.

The criticism against the perception of the school principal as the centre of expertise has led some researchers to think of the new concept of instructional leadership. For example, Marks and Printy (2003, p.374) and Robinson et al. (2008, p.665) advocate instructional leadership which emphasises active collaboration of the principal and teachers on curriculum and instruction. This approach is appropriately known as 'shared instructional leadership'. According to Marks and Printy (2003), this model involves the principal who seeks out the ideas, insights and expertise of teachers around instructional matters. Both teachers and the principal share the responsibility for staff development, curricular development, supervision

of instructional tasks and the principal ceases to be the sole instructional leader but the 'leader of instructional leaders' (Marks & Printy, 2003, p.374).

Recent research has shown that schools which demonstrate academic improvement are more likely to have principals who share instructional responsibilities with teachers and other school members (Alam & Ahmed, 2017, p.392; Jita, 2010, p.853; Marks & Printy, 2006, p.126; Mestry, 2017, p.264; Naicker, Chikoko & Mthiyane, 2013, p.147). Sharing instructional leadership means sharing power and influence among a set of individuals rather than centralising it in the hands of a single individual who acts in the clear role as a dominant superior (Hughes & Pickeral, 2013, p.2; Muturi, 2014, p.2).

In schools, shared instructional leadership acknowledges that principals empower teachers and both contribute to the central activities of schooling; teaching and learning. Principals, together with teachers, forge a partnership which encourages a sense of collaboration between teachers and principals and among teachers themselves. Principals share leadership responsibilities with teachers and accept and support actions initiated by these teachers. This can be effective if principals recognise that the leadership role is constructed through shared actions and interactions in investigating and seeking solutions to what can enhance teachers' practices and student learning (Duze, 2012, p.114).

The term shared instructional leadership characterises the collegial practice of working together towards a shared purpose, that of improving the quality of teacher performance and student learning achievement. Lunenburg (2010, p.1) asserts that the principal influences what teachers do in school through helping them to clarify instructional goals and work collaboratively to improve teaching and learning to meet these goals. The critical principal's activity in shared instructional leadership is then to lead teachers in creating school goals and objectives, in making teachers aware of their responsibilities, and in providing them with resources to facilitate the achievement of established goals (Emmanouil et al., 2014, p.35; Tshering & Sawangmek, 2016, p.227). Teachers' effectiveness in this process is enhanced when both sides work together rather than working individually on their own agenda. The principal's responsibility is, therefore, to create working conditions which allow for productive and creative relationships with and among teachers in regard to student learning.

Shared instructional leadership comes from principals who empower teachers to innovate and initiate actions that contribute to effective teaching and improved student achievement. One of the effective strategies to empower teachers is to encourage them to work in teams (Alam

& Ahmad, 2017, p.385; Printy & Marks, 2006, p.127). Lunenburg (2010, p.2) and Salleh, (2016, p.20) point out that effective principals recognise that teachers have to work together in teams as opposed to working individually in the classrooms. High performing teams may accomplish different goals including clarifying what students need to learn and achieve, designing curriculum, sharing instructional strategies and teaching and learning resources, and analysing student results to come up with new ideas about learning improvement.

Goddard, Goddard, and Tschannen-Moran (2007, p.891) also advocate collaborative teams as an effective approach for teachers to improve their practices. Collaborative team practice helps teachers and school leaders to continuously learn from one another, develop new teaching strategies, and share experience and knowledge useful to promote student learning. When working in teams teachers see the relationships among various content areas, develop new means of supporting one another, and reinforce in their classes what their colleagues teach in other classes (Alam & Ahmad, 2017, p.393; Muijs & Harris 2006, p.970).

Hanna (2010, p.9) suggests that instructional leadership is leadership that is shared with teachers through coaching, reflection, study teams and problem solving. Similarly, Kaster (2010, p.9) and Mestry (2013, p.120) define instructional leadership as the ability of the principal 'to lead learning communities' in which colleagues meet on a continuous basis to discuss their work, solve problems, reflect on teaching and learning practises and take responsibility for student learning. Effective principals make the voice of teachers more central to the dialogue on teaching and learning and encourage teachers to critically reflect on their practices with their peers (Murphy & Louis, 1994, p.33). Goddard et al. (2007, p.882) and Wahlstrom and Louis (2008, p.463) note that when teachers work together and converse on the quality of student learning, they adopt new and innovative pedagogical practices that enhance student learning opportunities. This can be achieved, for example, through planning instruction together, visiting one another's class, and formally and informally discussing and talking about instructional issues in a school.

In brief, the principal who acts as an effective instructional leader always bears ultimate responsibility for the quality of teacher teaching and student learning in the school. A successful instructional leader is one who works with teachers and establishes conditions under which teachers interact and debate their work for purposes of sharing ideas on models of the best practices. Teachers in schools possess invaluable expertise and critical information about their students and how they learn. Principals need to tap into this expertise by involving

them in every academic life of school and maximizing their potential for quality teaching and learning.

Printy's (2008, p.7) and Supovitz, May, and Sirinides (2010, p.35) argue that effective and successful instructional leadership is built on the relationships that principals have with their teachers. These relationships are symbiotic and bind principals more closely to the teachers and to everyday activities in classrooms. Likewise, Printy (2008) observes that when teachers and principals interact around instructional matters and when they pull in the same direction, good things happen for students in classroom.

2.2. 2 Transformational leadership

It is not often the case that the principal who enacts instructional leadership behaviours avoids displaying some degree of transformational leadership because both styles of leadership deal with empowering teachers to teach well. Transformational leadership is one of the current and most popular leadership approaches that have gained widespread attention in leadership literature to motivate and empower the followers in the organisation (Goddard et al., 2010, p.339; Gkolia, Belias, & Koustelios, 2014, p.70; Kwan, 2016, p.113).

Transformational leaders display a set of values, skills, and ideals, and possess the ability to foster capacity and personal commitment, transforming followers and increasing their motivation, performance and ability to help one another in their organisation (Goddard et al., 2010, p.338; Stewart, 2006, p.9). Transformational approach is built on a relationship of mutual stimulation and elevation that converts followers into their leaders, and who together, identify and define the desired outcomes and the methods of reaching those outcomes (McCleskey, 2014, p.120). As Gkolia et al. (2014, p.70) comment, the most important part of transformational leadership is not the leader, but the relation between the leader and the followers. This relation brings together all organisational members and helps them to engage one another in fostering capacity development, motivation and morality which in turn result in extra effort and greater productivity (Leithwood & Jantzi, 2006; Odumeru & Ogbonna 2013, p.356).

Transformational leadership emerged from the work of James MacGregor Burns (1978) whose background was in the fields of management and the military and was further developed by Bernard M. Bass and Bruce Avolio (1985) and later by Leithwood and his Colleagues (Leithwood, 1992; Leithwood & Jantzi, 1999; Leithwood, Jantzi & Steinbach,

1999) in the field of education (Stewart, 2006, pp.14-15). Burns (1978, p.20) argues that transformational leadership occurs when leaders and followers unite to pursue of higher-order common goals and when one or more persons engage with others in a way that both leaders and followers raise one another to high levels of motivation and morality.

The transformational leaders approach emphasises the reciprocal relationship as the basis of mutual influence rather than power and authority. A transformational leader enhances the motivation, morale and performance of the followers in different ways; being their role model, inspiring and making followers interested, challenging followers to greater ownership for their work, and understanding the strengths and weaknesses of followers so that leaders can align followers with tasks that enhance their performance (Odumeru & Ogbonna, 2013, p.356).

Transformational leadership is about facilitating the redefinition of a people's mission and vision, the renewal of their commitment, and the restructuring of their systems for goal accomplishment. According to McCleskey (2014, p.120), transformational leaders behave in certain ways in order to raise the level of consciousness and commitment from their followers about desired outcomes. That is, effective transformational leaders develop trust and respect from those they lead and try to gain their confidence through their words, conversations, insights and initiatives. The feelings of trust, admiration, royalty, dignity and respect associated with transformational leaders motivate followers to do more in their work and to attain unexpected outcomes. Based on the definition of transformational leadership and the impact it has on the followers, Bass and Avolio (1994) have identified four leadership factors that characterise the behaviours of a transformational leader:

Idealised influence: transformational leaders are role models and are respected and admired by their followers. Followers identify with leaders and they want to emulate them. Leaders have a clear vision and a sense of purpose. They display conviction, emphasise trust and commitment, and are willing to take risks.

Inspirational motivation: Transformational leaders behave in ways that motivate others, generate a sense of team spirit, enthusiasm, passion and challenge people. Such leaders clearly communicate expectations and demonstrate a commitment to goals and a shared and attractive vision.

Intellectual stimulation: Transformational leaders actively solicit new ideas and new ways of doing things. They stimulate others to be creative and creativity and innovation are required and encouraged in a supportive climate. In this leadership style, leaders never publicly criticise individual member's mistakes. This principle is particularly important in the early stage of assessing the need for change.

Individualised consideration: Transformational leaders pay attention to the needs and potential for developing others. Coaching and mentoring followers and discussing with them the important issues are parts of this characteristic. Transformational leaders establish a climate where individual differences are respected. They delegate tasks and monitor if followers need additional direction or support and communication is emphasised as a way of sharing information and providing continuous feedback. Interactions with followers are greatly encouraged and the leaders are aware of individual concerns through one-to-one relationships (Kolzow, 2014, p.44; MckCleskey, 2014, p.120; Stewart, 2006, p.12).

Considering the definition of each component, it is worth noting that all the components are essential and interdependent when it comes to transforming an organisation and empowering the followers to accomplish organisational goals. They all create an additive effect for leaders who combine them to help the followers to reach performance beyond expectations (Balyer, 2012, p.583; Kolzow, 2014, p.52).

Although transformational leadership was initially developed from non-educational fields, this approach became popular in the late 1980s and early 1990s as a reaction to the top-down school policy and the idea of the directive instructional leadership (Goddard et al., 2010, p.339; Hallinger, 2003, p.335). It was developed to to increase the focus on school restructuring and stimulate changes among school leaders (Leithwood & Jantzi, 2005). The idea of restructuring schools was that principals could transform their schools into new and improved organisations where emphasis should be placed on collaborative problem-solving and teacher capacity building. Transformational leadership emerged in the field of educational as a response to a model of single and heroic leader who was the only primary source of educational expertise, power and authority, and who as a single individual influenced the work of both teachers and students in schools (Kwan, 2016, p.112; Valentine & Prater, 2011, p.8).

The development of transformational leadership in education was emphasised in the work of Leithwood and his colleagues (Stewart, 2006, pp.14-15). Leithwood and his colleagues (ibid.)

maintain that one of the main tasks of school leaders is to help create a working environment in which teachers collaborate and identify with the school's mission. The central purpose of transformational leadership is the enhancement of individual and collective problem-solving capacities in school. These capacities are exercised in the process of identifying goals to pursue and practices to be used in their achievement (Balyer, 2012, p.252; Goddard et al., 2010, p.340).

The principal, as effective transformational leader, must have confidence in his/her teachers' ability to find their own solutions to the problems they face. Drawing on the work of Bass (1985) and based on their own empirical evidence, Leithwood (2000) outlined seven dimensions which describe transformational leadership. These included "building school vision and establishing school goals, providing intellectual stimulation, offering individualised support, modelling best practices and important organisational values, demonstrating high performance expectation, creating a productive school culture, and developing structures to foster participation in school decisions" (p.14). This framework was later consolidated into three broad categories of leadership practices, namely, setting direction, developing people, and redesigning the organisation to emphasise the principal's ability to share leadership with teachers and provide support with personal vision.

In school, a transformational leadership approach engages school principal, teachers and other stakeholders in the achievement of the pursued academic goals. Today the principal alone cannot provide leadership that influences the work of teachers and students. As Hallinger (2003, p.337) and Printy and Marks (2003, p.374) recommend, leadership has to be shared; coming from teachers as well as the principal if innovations and changes are to take place. In school settings, the principal acts as a change agent and one of his or her primary roles is to set up a collective vision and inspire and motivate teachers to work towards this vision. Idealised influence and inspirational motivation are usually connected to the principal's ability to formulate and articulate a shared vision (Givens, 2008, p.9). Having a shared vision, motivating and supporting teachers to collectively achieve it increases team members' creativity which, in turn, leads towards innovativeness in teaching practices (Hsiao & Chan, 2011, p.621).

Transformational leadership builds the teachers' commitment to the school vision, goals and objectives. Hanna (2010, p.37) says that transformational leaders empower the staff to achieve the goals of the organisation. Givens (2008, p.11) adds that transformational leaders exhibit

behaviour that empowers followers and intensifies their motivation and capacity. Followers are empowered not only by the vision formed by the transformational leader, but also by support and guidance the leader provides regarding their capacity to achieve it.

The empowerment of teachers by the school principal involves the creation of a learning community in which teacher professional development is encouraged and where teachers reflect on their practices, collaborate and develop collectively. Teacher professional growth begins with the school principal becoming a head learner and ensuring that all teachers adopt the learning habit. Fullan (2014, p.5) argues that leading teachers' learning means being proactively involved with teachers such that principals and teachers alike are learning. In such situations, the principal is able to assist teachers and easily identifies the developmental strategies required by each teacher as well as the teacher learning process. The school becomes a learning community where teachers share knowledge and commitment, foster collective learning of new practices and develop their own leadership skills useful to participate in school wide improvement (Goddard et al., 2007, p.882).

Transformational leadership seeks to generate second-order effects (Hallinger, 2003, p.338; Valentine & Prater, 2010, p.23). In the school setting the principal creates the conditions under which teachers are committed and self-motivated to collaboratively work towards accomplishing the school mission. S/he is responsible for maintaining a collaborative culture characterised by mutual trust and respect. This fosters a conducive climate in which teachers engage in continuous learning and in which they routinely share their learning with their colleagues.

The school principal, as a transformational leader, encourages teachers to frequently talk, observe one another, critique and plan together for successful teaching and learning. Traditionally, the classroom has been the domain of individual teachers working in isolation (MetLife Survey of the American Teachers, 2009). Therefore, sharing skills and knowledge breaks out this isolation, empowers teachers, and encourages collaboration and good relationships. Such a working climate stimulates energy, motivation and willingness for teachers to strive for high levels of achievement.

Leithwood and Jantzi (1991) identify a number of strategies that can be used by school leaders to assist teachers in building a collaborative culture. These strategies include the involvement of teachers in collaborative goal setting, the provision of time for joint plan, and the sharing of power and responsibilities within the school. Leithwood and Sammons (2006,

p.40), however, caution that for a collaborative culture to be effective it must be coupled with complementary school structures that allow such collaboration to happen and flourish.

Strong transformational leaders tend to use transactional leadership, especially contingent reward (Shatzer et al., 2014, p.448). Bass (2008) says that contingent rewards are present in the context of transformational leadership and include both psychological and material support. Transformational leadership goes beyond basic needs and places emphasis on psychological and material rewards. In school settings, for example, principal's positive feedback or verbal praises to teachers form the basis for teachers' motivation and improvement of their practices. The principal, as a transformational leader, goes beyond monitoring the performance of his or her teachers and puts emphasis on being proactive, establishing long term-goals, facilitating change, seeking continuous improvement, giving teachers opportunities to learn, and recognising the progress or achievement made by the teachers (Valentine & Prater, 2011, pp.10-11).

The transformational leadership approach was found to be useful for educational organisations in many studies (Bogler, 2005; Leithwood & Jantzi, 2006; Robinsons et al., 2008; Marks & Printy, 2003). Evidence from these studies revealed that transformational leadership by the school principal had a direct effect on school conditions including improvement in school environment, teacher-staff relationship, teacher commitment, teacher self-efficacy and teacher motivation. The results from previous studies also showed that transformational leadership displayed a weaker and indirect effect on student academic achievement because it lacks a focus on curriculum and instruction (Goddard et al., 2010, p.341; Hallinger, 2003, p.339). For instance, Marks and Printy (2003, pp.392-393), in their study in USA, found that transformational leadership was a necessary but insufficient condition to transforming school in the absence of instructional leadership. As a result, they suggest a combination of the two approaches to generate potential for school principals who want to improve the effectiveness of teachers as well as the quality of teaching and learning.

Transformational leadership has key elements that can be added to instructional leadership of the principal who wishes to empower and motivate teachers towards individual and collective learning. Idealised influence, individual consideration, inspirational motivation, and intellectual stimulation can thus support instructional leadership behaviours of the principal to improve the effectiveness of teachers, their teaching practices, and the quality of learning in school.

2.2.3 Transactional leadership

Transactional leadership theory also known as managerial leadership theory focuses on the role of supervision, organisation, and individual performance (Odumeru & Ogbonna, 2013, p.358). Transactional leadership identifies leaders as being directive, sometimes dominating, action-oriented and usually interested in looking for their own interests. The central idea of transactional leadership is that followers perform their best when a chain of command is definite and clear, and when reward or punishment is contingent upon performance (Kolzow, 2014, p.42). In other words, transactional leadership occurs when leaders reward or discipline their followers, depending on the adequacy of behaviour or performance these followers display (Chaudhry & Javed 2012, p.259; Jandaghi & Farjami, 2009, p.358). Transactional leadership posits that followers are not self-motivated and require structure, instruction, and monitoring in order to complete the tasks correctly and on time.

Like transformational leadership, transactional leadership was first introduced by a political scientist James McGregor Burns (1978) and refined later by many researchers including Bernard M. Bass (1985) and Bernard M. Bass and Bruce Avolio (1994) in 1980s and 1990s. According to Burns (1978, p.19), transactional leadership is a kind of leadership that is based on transactions between a leader and followers in a way that mutual personal tendencies are met. For transactional leaders, everything is observed from what persons are gaining and the relationship between a leader and followers is profit-oriented and is based on exchanging one thing to another. The definition of transactional leadership by Burns (1978) is similar to that of Avolio and Bass (2004) who describe transactional leadership as the setting up and defining of agreements or contracts to achieve specific work objectives, discovering individual capacities, and specifying the compensations and rewards that can be expected upon successful completion of the tasks.

Transactional leadership here is a bargaining process where leaders and followers exchange needs and services through the contract or agreement that binds both sides. In such a situation, leaders grant their followers incentives and recognitions in lieu of their commitment, good performance and loyalty (Ali & Shaikah, 2013, p.43; Jandaghi & Farjami, 2009, p.361).

Unlike transformational leadership which emphasises change through motivation, inspiration and commitment among followers, transactional leaders are not interested in looking to change the future of the organisation. Instead, they want to maintain the status quo and the

development of individuals and innovative aspects of their followers are not quite emphasised. As Avci (2012, p.2760) and Sadeghi and Pihie (2012, p.188) contend, transactional leadership deals with maintaining the current situation and motivate people to do the work for immediate needs. Transactional leaders only pay attention to followers' work by providing a very clear direction, clarifying their responsibilities, performance criteria, and the tasks that must be completed. They also provide followers with all necessary materials and monitor the process to ensure that followers do meet acceptable performance levels. Odumeru and Ogbonna (2013, p.358) maintain that transactional leaders are effective in getting specific tasks completed by managing each portion individually.

Transactional leaders help the followers to identify what must be done to accomplish the desired outcomes. According to Chaudhry and Javed (2012, p.259), transactional leaders display three behaviours associated with basic managerial competences necessary to maintain the organisation. These behaviours include contingent reward, management-by-exception (active and passive) and laissez-faire leadership as discussed below.

Contingent reward: This is a constructive form of transactional leadership in which a leader clarifies expectations and offers recognition when goals are achieved (Chaudhry & Javed, 2012, p.259, Nazim & Mohmood, 2016, p.19). In this process, leaders focus on reward also known as contingent positive reinforcement or in some cases punishment classified as contingent negative reinforcement. In contingent reward transactional leaders set organisational goals, clarify desired outcomes, and use incentives for motivation in exchange with rewards and recognition for the task accomplishment (Sadeghi & Pihie, 2012, p.188). Rewards are connected to the followers' needs and are given only when individuals complete their tasks on time, ahead of time, or when working at good pace towards the task completion. Leaders may award money, verbal praises or a letter of appreciation for the work well done (Jamal, 2014, p.1270). Contrary to reward, punishment may also be applied. In this case, punishment, like suspension, is given when performance quality or quantity falls below production. This is when goals and tasks take longer to be achieved than expected or are not met at all (Kolzow, 2014, p.42; Nazim & Mahmood, 2016, p.19).

Management-by-exception: This behaviour includes active and passive routes. Active management-by-exception suggests that the leader continually looks at the follower's performance and checks whether the follower deviates from the performance standards in order to take corrective actions (Avci, 2015, p.2760; Odumeru & Ogbonna, 2013, p.358). In

school settings, principals who apply active management-by-exception set standards, carefully monitor teachers' performance and make modifications and provide corrections before serious problems arise in the classroom. On the one hand, these corrections are useful to teachers when they contain constructive feedback that encourages them to improve their practices. On the other hand, when the feedback is for disapproving, warning or punishing, it can be counter-productive.

Passive management-by-exception implies waiting passively for deviances, mistakes, and errors to occur and then take corrective actions (Avci, 2015, p.2760). Principals are motivated to take actions or measures only when problems occur in their schools. They usually fail to intervene until issues become serious and more often than not, situations implode (Bass & Avolio, 2004; Cemaloglu, Sezgin, & Kilinç, 2012, p.55). Sadeghi and Pihie (2012, p.188) argue that leaders of this nature often display avoidant behaviours. They avoid making decisions, responding to situations and problems, describing agreements, and explaining expectations and standards to be achieved. One can say that this transactional leadership behaviour is ineffective, especially in the case schools that have novice or inexperienced teachers who continuously need instructional guidance to perform their duty. It is also similar to laissez-faire style defined as absence of effective leadership (Hanna, 2010).

Laissez-faire leadership: This is a leadership style where principals or other organisation leaders avoid attempting to influence their followers and shirk supervisory duties (Chaudhry & Javed, 2012, p.259). School principals who exhibit this behaviour are usually absent when issues arise and quite often delegate responsibility. Laissez-faire leaders give up responsibility, delay decisions, give no feedback, and make a little effort to help followers satisfy their needs. Followers are free to work in their own way and are also responsible for their own decisions (Chaudhry & Javed, 2012, p.259). As there is no relationship or interaction between leaders and their followers, it is difficult to believe that this leadership style is productive in schools unless teachers are experts and well motivated to perform their tasks on their own preferred ways. The fact that laissez-faire leaders tend to let things drift, Tosonuglu and Ekmekci (2016, p.90) describe this style of leadership as the absence of effective leadership rather than an example of transactional leadership.

Although some transactional leadership behaviours are ineffective in some situations (where significant innovation and change are needed) transactional leadership is important to maintain organisation. Jamal (2014, p.1270) observes transactional leadership as an important

and central element in the preservation of organisation, in filling an agenda, and in putting things into actions. In school settings, transactional leadership may motivate teachers to improve their teaching practices through the guidance, monitoring, constructive feedback, and rewards provided by the school principal. Wu and Shiu (2009) in their study conducted in Taiwanese schools found out that transactional leadership had a strong positive relationship with teachers' motivation. In this study, it was reported that rewards that were given to teachers were necessary to maintain their motivation. It was also reported that constructive feedback provided by school leaders empowered teachers and encouraged them to take more challenging tasks that enabled them to excel beyond their capabilities.

However, transactional leadership practices alone cannot enable the organisation to reach its full potential. For example, transactional leaders who exhibit management-by-exception passive or laissez-faire leadership style are ineffective when it comes to empowering, motivating and supporting followers to meet expectations. Transactional leadership seems to be effective only when combined with transformational approaches. Hence, Avolio and Bass (2004) argue that the addition of transformational leadership to transactional leadership leads to extra efforts which, in turn, increase the followers' performance. Interacting with followers and rewarding them for their best performance can both enhance motivation and effort to successfully accomplish organisational goals. Avolio and Bass (ibid.) also caution that transformational leadership is not a substitute of transactional leadership; rather they complement each other to achieve the goals of leaders, associates, groups or organisations. This shows that both transformational and transactional leadership behaviours are important and may be displayed by the same school principal depending on the situation, task or group's needs.

Though some transactional leadership components may not contribute to the effectiveness of teachers, others may be effective for the principal who enacts instructional leadership behaviours and who wants to improve teachers' performance. Applying, for instance, contingent reward (contingent positive reinforcement) the principal and teachers can set school goals, clarify what is expected to be achieved, and the kind of support needed to achieve it. Active management-by-exception can also enhance teachers' practices in the sense that it deals with monitoring the performance of teachers and providing support and guidance to successfully complete the assigned tasks. Therefore, some transactional leadership components can complement instructional leadership of the principal in improving the quality of teachers' teaching in addition to transformational leadership.

2.2.4 Distributed leadership

The distributed leadership approach contributes to the teaching quality of teachers and student learning in a school (Day et al., 2009; Devos, 2009; Hardy et al., 2012). This style of leadership occurs when school principals recognise that everybody in formal and informal positions has the potential to lead and when they create conditions in which teachers work together and share knowledge and expertise, resulting in the improvement of their practices and student learning (Avila de Lima, 2008, pp.161-162). In this type of leadership, working towards the same goal with continuous communication and interaction is more emphasised than individual effort (Harris & Spillane, 2008, p.31; Salahuddin, 2011, p.25). Distributed leadership is constituted through the interaction of school leaders, teachers and the situation where the leadership practice is shared among the school community members instead of residing in one person at the top (Naicker & Mestry, 2011, p.101).

Bolden (2011, p.252) states that distributed leadership dates back to 1250 B.C, making it "one of the most ancient leadership notions recommended for fulfilling organisational goals through the people". Gronn (2000) cites Gibb (1954) as the first author to explicitly refer to distributed leadership and proposes that "leadership is probably best conceived as a group quality, as a set of functions which must be carried by the group" (Gronn, 2000, p.324).

Despite this early interest in the concept, the idea of distributed leadership, as Gronn (2000) suggests, was dormant until its resurrection in 1980s when numerous researchers started utilising a variety of theories such as distributed cognition, activity theory, and social learning theory as key concepts within distributed leadership (Bolden, 2011, p.253).

From 1980s onwards, theory on leadership has faced a major paradigm shift from the traditional view of leadership as centred in individual role and responsibility to alternative leadership theories which place the focus on multiple sources of leadership (Harris, 2008, p.176). Distributed leadership is one of these theoretical lenses that claim that leadership resides in many people rather than being the exclusive domain of one individual. Here the idea of distributed leadership in schools is to move away from hierarchical structures of leadership wherein one individual (i.e. the principal) provides the leadership and visions for a school to activities and interactions distributed across multiple people and situations (Grenda & Hackmann, 2014, p.55). In this context, the school no longer views the principal as the only gatekeeper or controller of change and decision-making but as a leader who promotes interactions among all those who contribute to the life of a school.

Bolden (2011, p.251) further argues that the most popular interpretation of distributed leadership theory was provided by Peter Gronn (2000) and James Spillane (2005). Gronn (2000, p.324) sees distributed leadership as an emergent property of a group or a net work of interacting individuals. Leadership becomes a form of concerted action which is about the additional dynamic and which occurs when people work together. Similarly, Spillane (2005, p.144) consider distributed leadership as an alternative way of thinking about leadership practice in a different way. According to Spillane (ibid.), leadership practice involves more than one person and includes the important interactions between leaders, followers, and their situation. Leaders, followers, and the situation in interaction are the key elements that constitute leadership practice and they are inseparable and inevitable in school settings.

In schools, like other organisations, distributed leadership involves individuals at multiple levels who are believed to constantly interact, resulting in shared patterns of communication, learning and action. According to Menon (2013, p.214), distributed leadership in this framework emerges as a shared practice by extended groupings seeking to address organisational issues and problems. It is a product of debate, dialogue, and discussion that result in action rather than a set of leadership tasks or responsibilities that someone may be given (Harris, 2005, p.9).

A distributed perspective moves away from concentrating on those in formal leadership positions to consider those leadership practices that occur daily through informal interaction and collaboration (Grenda & Hackmann, 2014, p.55). Grant et al. (2010, p.403) also comment that distributed leadership is not located in the position of the principal, but is stretched over a range of people who work at different levels of a school. This concurs with what Spillane et al. (2007, p.108) calls ‘leader-plus aspect’. Leader-plus aspect acknowledges that leadership work involves multiple individuals and is not restricted to those at the top of organisational hierarchy. In the distributed leadership framework formal leaders take responsibility for leadership routines and functions but provide opportunity for informal leaders to also take responsibility for a broad range of functions. However, the ‘leader-plus aspect’ would be insufficient on its own if it is not complemented with the ‘practice aspect’ which moves from looking at the actions of leaders to emphasising the interaction between leaders, followers, and their situations (Spillane et al., 2007). Taken together, both aspects of leadership offer an analytical framework for examining the day-to-day practice of leadership rather than dwelling upon leaders, leadership structures, functions, and roles (Bolden, 2011, p.252).

Distributed leadership should also not be equated with delegation and other related concepts like shared, democratic, dispersed, and team leaderships. In this regard, Bolden (2011, p.257) and Spillane (2005, p.149) contend that there is a very important distinction between distributed leadership and the routine delegation of leadership tasks. While delegation deals with dividing or giving others tasks or responsibilities, distributed leadership implies actions and interactions of individuals engaged in problem-solving or developmental work (Angelle, 2010, p.3). In delegation, power and authority remain in the hands of top leaders and once tasks are delegated, they are performed by individuals without necessarily interacting one another for a collective action (Spillane, 2005). On the other side, in distributed perspective, decisions about who leads and who follows are dictated by the nature of the task or problem situation, not necessarily by those in formal leadership positions (Timperley, 2005, p.396).

Distributed leadership is also not equated with shared, democratic and dispersed leadership. Although these concepts may have similarities with distributed leadership, they are not the same. From the distributed leadership perspective, leadership can be stretched over leaders in school, but it is not necessarily democratic (Spillane, 2005, p.49). Distributed leadership is utilised differently to these concepts. It signifies a shift in focus from the attributes and behaviours of individual leader to a more systematic perspective whereby leadership is conceived as a collective social process, emerging through the interaction of multiple actors (Bolden, 2011, p.253; Williams, 2011, p.191).

Distributed leadership includes multiple individuals performing activities in interactive way and in a certain situation. This style of leadership is also possible in schools as it is exercised in other organisations. Based on their symbolic and positional authority, principals can facilitate distributed leadership in schools through creating and nurturing a suitable school climate and promoting school conditions important for teachers to work together, share good practice and learn together in teams (Harris & Spillane, 2008). To maximise teacher leadership capacity principals can, for example, encourage teachers to develop and share their expertise and solve some learning and teaching problems without necessarily seeking the intervention of school leaders at the top.

Principals and other school leaders can also avoid overly controlling the behaviours of teachers and actively encourage and value their innovative ideas to facilitate distributed leadership in the school (Harris, 2008, p.184). In brief, providing time, space, and opportunities for teachers to work together, learn one another and participate in decision-

making are all activities of the principal empowering teachers to engage in leadership roles that can secure better quality teaching to be increased (Salahuddin, 2011, p.26).

The research evidence highlights that without the support of the principal distributed leadership is unlikely to succeed in schools. According to Naiker and Mestry (2013, p.4), the principal is an important factor because s/he is the one who creates a suitable school climate and conditions favourable for the redistribution of power and authority and the building of trust relationships in a school. This shows that the principal occupies a critical position to harness the collective capacity of teachers and influence the success of distributed leadership and its impact on teaching and learning. However, this is not an easy task or something that the principal can do overnight. For the majority of principals trained in top-down approach to leading schools, for example, the distribution of leadership is likely to necessitate a relinquishing of some control to enable others to assume new power (Copland, 2003, p.378, Harris, 2012, p.15). It also requires principals to change their understanding of leadership and have a different conception of the school, one that moves away from the bureaucratic to the collaborative approach. This change can take a long time to be implemented because it also requires teachers to accept and embrace new leadership roles in addition to their routine work of teaching. Within distributed leadership, teachers need to view their roles from a school wide range rather than from a classroom perspective.

To employ a distributed perspective requires the school principal to identify and organise people according to their skills, roles and knowledge and work towards a common goal to improve teaching and learning. What is more important, in addition, is to develop a relationship of trust with teachers and encourage leadership and autonomy throughout the school.

Harris (2005, p.18) argues that for distributed leadership to take place, school principals need to provide leadership that motivates people to take on challenging tasks and responsibilities. Harris (2005) argues that distributed leadership is achieved when principals provide: a) empowerment and encouragement of teachers to become leaders and opportunities for teachers to develop their leadership skills, b) time to be set aside for teachers' leadership work, including time for professional development and collaborative work, planning together, building teacher networks and visiting classrooms, and c) opportunities for continuous professional development that focus on aspects specific to the leadership role, such as leading groups and workshops, collaborative work, mentoring, teaching adults and action research

(p.18). These activities are important and can serve to break out teacher isolation and help them to individually and collectively influence their colleagues' professional practices both inside and outside classroom.

Empirical studies on distributed leadership practices have shown a significant and positive effect on teacher engagement, effectiveness, organisational commitment and student achievement. For example, Day et al. (2009, p.17) showed that distributed leadership was positively correlated to the conditions within the school including teacher morale that impacted positively on students' behaviours and their learning outcomes. Other studies like that of Hulpia and Devos (2009), Hardy et al. (2012), and Obadara (2013) have also demonstrated that distributed leadership impacts positively on teacher commitment, student learning, achievement of school goals, and the promotion of good school climate.

Distributed leadership fosters teachers' professional commitment, their morale and student learning. However, like other leadership approaches, distributed leadership is not without limitations. Harris and Spillane (2008, p.32) say that different meanings used to refer to distributed leadership result in conceptual confusion. While some authors use distributed leadership as synonym of shared, collaborative, facilitative and democratic leadership leaderships (Bennett, Wise, Woods & Harvey, 2003, p.4) others see this leadership style as a leadership approach that cannot be used interchangeably with these related concepts (Collinson, 2008, p.29; Harris & Spillane, 2008, p.32). Due to the lack of conceptual clarity, it is difficult to understand how distributed leadership in its true form can be achieved.

Distributed leadership also poses critical challenges related to its practical implementation. Harris (2004) and MacBeath (2005) argue that distributed leadership is premised on trust, interactions, and it implies a mutual acceptance of one another's leadership potential. To be successful, distributed leadership calls for formal leaders to relinquish some authority and powers, and favour consultation and consensus over command and control. This is not easy and can pose a serious problem to top-down leadership models still dominating many organisations including schools.

Many formal leaders including school principals may refrain from distributing leadership fearing that they may lose power and authority in front of their subordinates including teachers. As a result, teaching and learning can be affected because all decisions are taken by leaders at the top. In addition, when distributed leadership is not executed properly or when

exclusively implemented in a top-down approach, it can be interpreted as misguided delegation, or even as coercion (Hatcher, 2005).

Spillane (2005, p.45) suggests that distributed leadership perspective is envisaged on a ready and willing group of followers waiting to assume leadership responsibilities. This is not always relevant to school settings as some schools may not have staff members who are capable or competent to take on added leadership responsibilities. In addition, teachers may be unwilling to assume leadership responsibilities as they are busy with their routine work. Teachers may develop the fear of being ostracised by their teaching colleagues for assuming quasi-administrative responsibilities that align them more closely with the school administration (Grenda & Hackmann, 2014, p.56). This may lead to inappropriate distribution of leadership and thus, the reinforcement of single, heroic and top-centred leadership in schools.

Despite the above limitations, however, distributed leadership remains an important leadership approach which is effective in school improvement processes (Hallinger & Heck, 2009). Distributed leadership concepts such as mission, vision and goals, teacher empowerment, sharing responsibilities, and collaborative culture promote the establishment of mutual relationships and interactions between school principals and teachers which, in turn, contribute to the effectiveness of teachers and the quality of learning in classrooms (Hulpia & Devos, 2009; Obadara 2013). Therefore, some aspects of distributed leadership can help the principal to gain insights useful to implement instructional leadership that influences instructional practices of teachers in a school.

Overall, this chapter discusses instructional, transformational, transactional, and distributed leadership styles as different theories that the researcher found relevant to the improvement of teaching practices and student learning. As the main purpose of the present study is to investigate the extent to which school principals enact instructional leadership behaviours and how these behaviours influence teachers' instructional practices, the discussion of the theoretical perspectives above provides lenses through which one can understand how school principals work with teachers and engage them in various activities and responsibilities for personal and collective accomplishment of teaching tasks.

Each of these theories presents its own characteristics, but linked together, form a good foundation for the school principal who needs to successfully exercise instructional

leadership and empower teachers to significantly contribute to the quality of learning through the improvement of their teaching practices.

Several researchers suggest that there is no single theory that is more effective and that can be applied to every situation in schools (Bamburg & Andrews, 1991; Hallinger & Heck, 1996; Valentine & Prater, 2010, p.8). In addition, Sharma (2012, p.17) and Wieczorek and Monard (2018, p.4) state that rethinking on principalship today requires the strategic linking of instructional leadership to other theories such as transformational leadership, distributed leadership and shared leadership because empirical results across a number of studies have revealed that effective instructional leadership subsumes features of other theories. It is in this regard that the measure of principals' instructional leadership behaviours in the present study draws also on concepts embedded within transformational leadership, transactional leadership, and distributed leadership as they make a coherent way of understanding how school principals work with teachers and keep a focus on teaching and learning in schools.

To determine the theories that inform better the present study, instructional leadership is chosen as the core driving theory of the study as it directly focuses on teachers' practices and student learning (Bush, 2013, p.6; Tshering & Sawangmek, 2016, p.228). According to Marks and Printy (2003, p.377), instructional leadership emphasises the technical core of instruction, curriculum and assessment, the provision of direction and affects the day-to-day activities of teachers and students in the school. Also, Dinham (2013, p.226) says that the most important factor affecting student learning is the teachers and that the principal as instructional leader plays a critical role in influencing how teachers learn and improve their instructional practices. Instructional leadership helps in accounting for how principals affect the quality of teachers' performance which, in turn, impacts on student achievement.

As discussed by Gaziel (2007, p.18), the principal, as an instructional leader, demonstrates various instructional leadership behaviours including formulating shared school goals, allocating resources, supervising teachers' performance, setting and communicating expectations, providing teacher professional development, and promoting a positive learning environment. All these tenets of instructional leadership inform this study because the main objective is to assess whether they are present in schools and the extent to which they have an influence on instructional practices of teachers. The study looks also at the way these tenets are implemented in both boarding and non-boarding schools through the perceptions of teachers and principals and challenges that inhibit their effective implementation.

Transformational leadership is emphasised as the second and most appropriate theory that, together with instructional leadership tenets, can guide better the present study. Transformational leadership is chosen because it provides a well developed set of concepts that create favorable conditions for instructional leadership to develop in schools. The choice of transformational leadership to guide the present study is in line with Marks and Printy's (2003, p.377) view that transformational and instructional leadership may cohere in practice and both reflect the influence of the principal and the shared leadership actions of the principal and teachers.

Goddard et al. (2010, p.341) also emphasise that transformational and instructional leadership are interdependent, and each type of leadership is insufficient on its own. Thus, transformational leadership dimensions such as idealised influence and inspiration motivation (setting school direction and generating a sense of team spirit), intellectual stimulation (maintaining a collaborative culture), and individualised consideration (fostering teacher professional development), linked together with instructional leadership tenets, provide a strong working theory for a better understanding of the processes in which teachers' practices may be influenced by the principal in the school.

The choice of transactional leadership in this study is based on the fact that it is a leadership theory that fosters interaction between leaders and followers, that is, school principals and teachers in school settings. Transactional leadership alone may be ineffective in leading schools to a successful improvement as it focuses on the basic needs of the staff. However, when combined with transformational leadership and instructional leadership can produce greater outcomes in terms of teaching and learning improvement. Contingent positive reinforcement and active management-by-exception are two transactional leadership dimensions chosen to guide the present study in the sense that they allow school principals and teachers to mutually clarify teachers' responsibilities and tasks to complete, monitor these tasks to ensure their effective accomplishment and reward for the best performances.

Lastly, it was found necessary to include distributed leadership in the study as it helps teachers to individually and collectively influence one another and improve their professional practices both in the classroom and outside of it (Grant et al., 2010, p.411). Distributed leadership dimensions such as creating a mutual purpose, planning together, visiting classrooms, leading groups and workshops, sharing responsibility, and fostering professional growth (Harris, 2005, p.18) are assessed in this study as important distributed leadership

elements that together, with instructional leadership tenets, can contribute to understanding how principals work with teachers and influence their teaching practices. Therefore, the combination of these theories is important in investigating how school principals interact and work with teachers where a greater emphasis is placed on collective responsibilities and collegial activities rather than individual task accomplishment. Interaction, discussion, dialogue and team work are critical parts of this process. Figure 2.1 below illustrates the theoretical framework that guides this study.

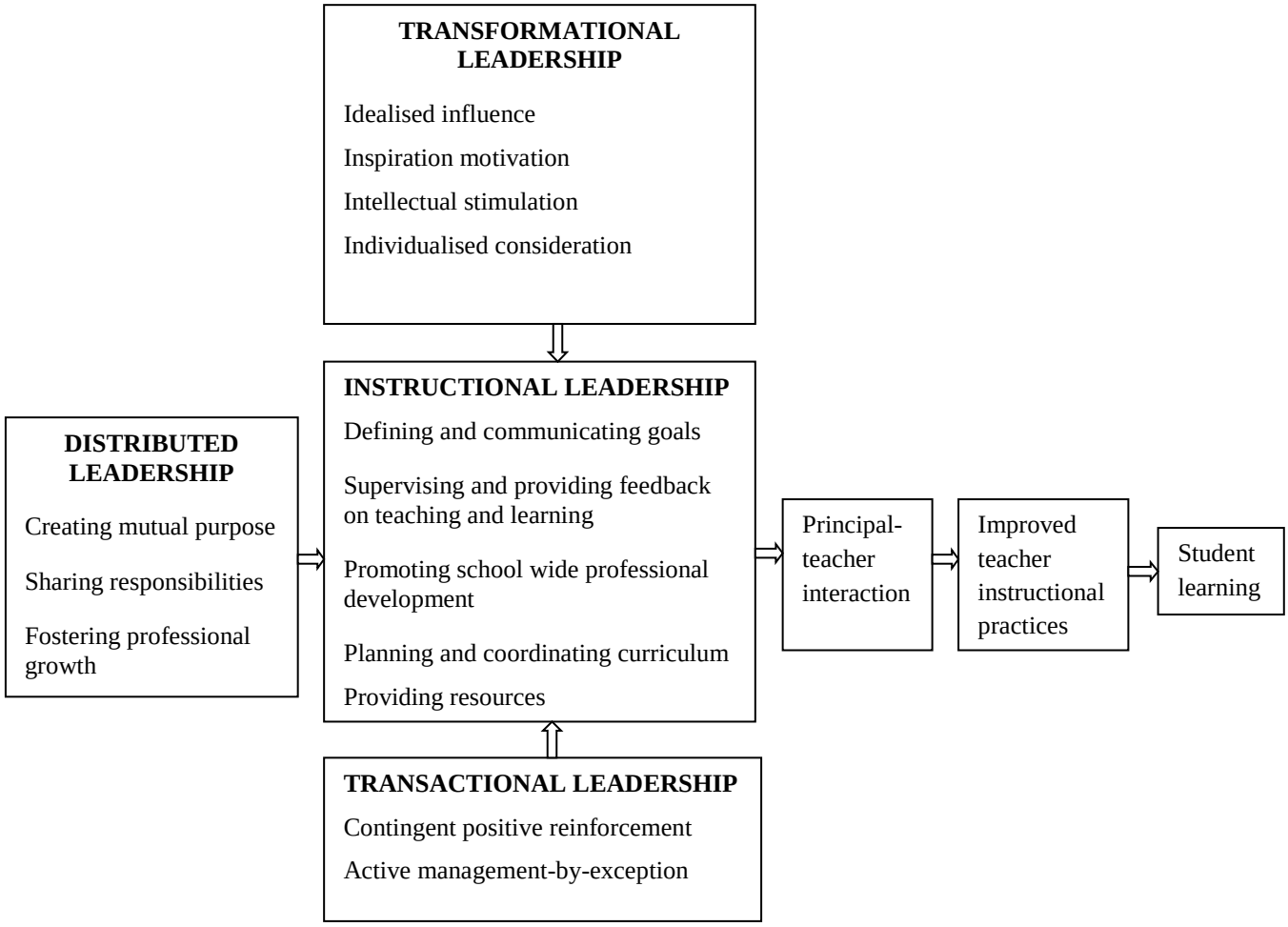

Figure 2. 1: Theoretical framework underpinning the study.

2.3 Chapter overview

This chapter presents instructional leadership theory together with some theoretical insights drawn from transformational, transactional, and distributed leadership to fully explore school principals' instructional leadership and examine its influence on teachers' instructional practices. The use of analytical insights of these theories broadens the perspective by which we can better understand the way school principals enact instructional leadership behaviours

and the extent to which these behaviours exert influence on instructional practices of teachers in schools.

The next chapter is focused on discussing instructional leadership and other related concepts in more detail.

CHAPTER 3: THE CONCEPTS RELATED TO INSTRUCTIONAL LEADERSHIP

3.1 Introduction

In order to clearly understand the notion of principals' instructional leadership behaviours and how these behaviours influence instructional practices of teachers, it is appropriate to define and discuss various concepts related to this study. It is in this regard that this chapter starts with discussing the concept of leadership, leadership and management, the principal as an instructional leader and instructional practices of teachers.

This chapter further discusses the main concepts that inform this study as they were highlighted throughout the theoretical framework underpinning this study. These concepts are: a) defining and communicating school goals, b) planning and coordinating curriculum, c) supervising instruction, d) promoting teacher professional development, and e) providing resources. Drawing on instructional, transformational, transactional and distributed leadership, the meanings of these concepts are discussed as well as their link with the teachers' instructional practices.

3.2 The concept of leadership

Leithwood and Riehl (2003, p.3) and Murphy et al. (2007, p.179) argue that leadership of a school is a central ingredient and often a key stone for school success in terms of quality education and student achievement. Melchar and Bosco (2010, p.74) and Obiwuru et al. (2014, p.101) also see leadership as one of the key driving forces for improving organisation's performance.

Leadership remains a relatively mysterious concept because many scholars define it in different ways and do not agree on the real and common definition. Naile and Selesho (2014, p.176) and Kolzow (2014, p.9) indicate that there are many definitions of leadership and that there is no clear understanding of what distinguishes leaders from non-leaders. Bolden (2004, p.4) and Nyamboga et al. (2014, p.200) add that leadership definition is arbitrary and subjective because everyone defines it according to his/her own experience and learning and the context in which s/he observes the world.

Bolden (2004) posits that some people view leadership as the consequence of a set of traits or characteristics possessed by 'leaders'. Others view leadership as a social process that emerges from group relationships. This example shows that people have different opinions about the meaning of leadership. However, some scholars have attempted to establish the working definition of leadership.

For example, Naile and Selesho (2014, p.176) and Nyamboga et al. (2014, p.200) see leadership as the ability to inspire confidence and support among followers who are expected to achieve organisational goals. This definition emphasises that the task of a leader is to build confidence among followers in order to achieve organisational goals. In addition, the leader focuses on communicating the organisational mission and vision, what followers are expected to do, and convincing them to channel all organisational activities towards attaining the set goals.

Similarly, Northouse (2004, p.3) defines leadership as "a process whereby an individual influences a group of individuals to achieve a common goal". According to Northouse (ibid.), leadership comprises four key components essential in this process. These include: (a) a process, (b) an influence, (c) a context and (4) an attainment of goals. Leadership here depends on a process of influence in which members of an organisation are inspired to work towards group goals in a particular working environment.

Bush and Glover (2003, p.8) state that leadership in school settings implies social influence, values and vision of a school. They describe leadership as a process of influence which leads to the achievement of desired purposes. Successful leaders develop a vision for their schools based on their personal and professional values. The main task of school leaders is to articulate this vision at every opportunity and at the same time influence their staff and other stakeholders to share and achieve it. School philosophy, structure, and activities are channelled towards the achievement of the shared vision.

The above definitions encompass several and important features of leadership such as, leader, follower, vision, influence, communication and situation. However, they tend to locate one person (a leader) as the only source of leadership and followers as docile recipients. Yukl, (2013, p.3) came up with a collective concept of leadership. He defines leadership as "a social influence process whereby intentional influence is exerted by one person (or group) over the people (or group) to structure activities and relationships in a group or organisation". This definition acknowledges that the process of leadership should not be described in terms

of behaviour of an individual at the top or in formal position and authority, but in terms of collaborative relationships based on mutual influence, collective actions and shared values in an organisation. In this process, the influence is typically reciprocal rather than unidirectional and is exercised through relationships between and among individuals, groups and the settings in which they find themselves (Atkinson, 2013, p.3; Kolzow, 2014, p.12).

Nevertheless, most definitions of leadership reflect the assumption that it involves providing direction and exercising influence. By providing direction, leadership means showing the way from where we are now to a desired place or destination. Effective leaders are those who persuasively challenge organisation members to collectively and collaboratively accomplish their tasks for the organisation success. Such leaders mostly define what the future of organisation should look like, align people with that vision, and inspire them to make it happen (Abbas & Asghar, 2010, p.10; Kolzow, 2014, p.99).

In an organisation with a shared and common purpose, activities of its members are likely to improve because this purpose clarifies what to be accomplished and more importantly why to accomplish it. In school settings, a shared purpose between principals and teachers guides the allocation of time, energy, and resources and drives school towards its performance through the strategic planning (Bush, 2010, p.5; Lunenburg, 2010, p.2). Thus, effective principals create a shared vision, mission and goals and involve and consult teachers in their development and implementation. This increases teachers' morale and commitment needed to accomplish their teaching duties (Naile & Selesho, 2014, p.181).

In addition to the provision of direction, another central element of leadership is social influence that occurs between the leader and followers and/or among leaders themselves. Leadership as influence entails a process in which leaders in both formal and non-formal positions move organisation members toward the shared goals (Bush, 2010, p.4; Yukl, 2013, p.7). Once a clear direction and shared purpose are established, leaders do make followers feel and think positively and work towards the completion of this purpose.

Kolzow (2014, p.100) and Sharma and Jain (2013, p.310) posit that influence in leadership mostly occurs when communication, whether formal or informal, verbal or non-verbal is effective. This enhances relationships and encourages commitment of followers in the accomplishment of organisational objectives. Kolzow (2014, p, 100) and Winston and Patterson (2006, p.15) add that the communication becomes useful when it is not only about sharing information but also sharing the meaning. To have a sense of vision and direction is

then effective when leaders are able to communicate the value and meaning of this vision to others and inspire them to buy into it.

Principals in schools influence the work of teachers by having a shared purpose and communicating effectively this purpose to coordinate and direct teachers interactions and activities toward its achievement. Leithwood, Day, Sammons, Harris and Hopkins (2006) suggest that effective school leaders create a compelling sense of purpose by developing a shared vision, helping to build a consensus about school goals, and demonstrating high expectations for colleagues' work. Likewise, Kin, Kareem, Nordin and Khuan (2018, p.438) say that establishing a clear vision and communicating a sense of direction for the schools is a critical task for school leaders. They further add that changes tend to happen when school leaders possess a well-defined vision and direction that stimulate staff confidence and commitment to perform well in schools. Talking with teachers and providing them with a clear direction both help to identify discrepancies between actual and desired practices and what to be done to fill this gap. Collaboration and interaction between principals and teachers and among teachers themselves are important for school leaders who wish to influence and inspire teachers to produce change in instruction and accomplish effectively the task of teaching (Sebastian et al., 2016, p.92; Wahlstrom & Louis, 2008, p.463).

Leadership is not only limited to social influence and providing a direction. Supporting the followers and investing in their professional development are also important roles for effective leaders. Mission, vision, and goals in schools cannot be achieved unless school leaders equip and provide teachers with all the necessary resources to successfully complete the assigned tasks. Esia-Donkoh (2014, p.69) and Winston and Patterson (2006, p.9) consider the provision of resources to followers as an important role of leaders because without sufficient resources, it is difficult or impossible to complete the work of school, that is, teaching and learning. In schools, it should be emphasised that without appropriate equipment, tools and material teachers will be affected and this can hinder their instructional practices and student learning. To make teachers more successful, principals have to ensure that teachers are allocated resources such as time, money, and materials needed to accomplish the school's goals.

Besides providing the required resources, leaders have to focus on staff development to strengthen practices and bring about positive changes in schools. Kalman and Arslan (2016, p.525) note that effective leaders (i.e. principals in schools) are those who ensure that their

colleagues have time for professional development activities. They further add that professional development secures and maintains positive relationships between staff as it encourages collaboration and sharing of ideas. Winston and Patterson (2006, p.9) conclude that professional development improves the success of the followers in completing the tasks and increases the person's efficacy and self-esteem. One of the fundamental roles of principals and other school leaders should be that of creating the working conditions which enable teachers to develop and grow professionally and achieve school goals more efficiently (Dinham, 2013, p.226).

Overall, based on key the elements of leadership discussed above, leadership can be looked at as the work of mobilising and influencing others to articulate and achieve shared goals. This working definition entails having a clear direction and shared purpose, establishing effective strategies for pursuing this purpose, and influencing others to commit themselves towards the same purpose.

The allocation of resources and provision of learning opportunities for followers to remain updated in their knowledge and skills are also necessary factors to strengthen the commitment and improve the success of followers in completing their tasks of the organisation. Since the success of school leaders lies in their capacity to support teachers and improve the quality of their practices (Elmore, 2008, p.42), the key components of leadership discussed above can serve as the basis for principals who wish to enact instructional leadership behaviours and influence the teaching practices of their teachers in schools.

3.3 The concepts of leadership and management

This section reflects on the relationship between leadership and management. This discussion is important as both concepts have common characteristics and that both skills are essential for school principals who want to enact instructional leadership behaviours and influence the practices of teachers in schools.

When researchers distinguish leadership from management, they tend to define leadership as dealing with change and management as maintaining efficiently and effectively the current situation of an organisation. For instance, Bush and Glover (2003, p.9) postulate that leadership deals with influencing others' actions in achieving desirable ends. Bush and Glover (ibid.) further stress that leaders are the people who shape the goals, motivation, and actions of others and more frequently initiate the change in order to reach the existing and

new goals. On the other hand, Bush and Glover (ibid.) understand management as maintaining efficiently and effectively current organisational arrangement. The overall function of management is toward maintenance rather than change.

Davidoff and Lazarus (1997, p.32), Toor and Ofori, (2008, p.64), and Popovici (2012, p.132) posit that leadership is concerned with providing vision and direction in a school whereas management is ensuring that school goals are achieved. The purpose of leadership is to provide guidance and motivation while the management purpose is to accomplish tasks within the setting of effective work. In other words, leaders influence and motivate while managers facilitate and implement.

Bolden (2004, p.6) and Lunenburg and Lunenburg (2013, p.3) argue that some scholars present leadership and management as the two concepts which are opposed to one another and others even consider the former as more important than the latter (managers do things right, while leaders do the right things). Unlike this unequal weight attributed to leadership and management, there are other scholars who emphasise that both concepts though they are distinct are important and need to be given equal prominence if schools are to operate efficiently and achieve their objectives. For example, Sterling and Davidoff (2003, p.13) say that management and leadership are two sides of the same coin and complement each other. Leaders create the vision of an organisation and managers implement this vision to effectively and efficiently arrive at the good results. Similarly, Toor and Ofori (2008), emphasising on how leadership and management complement each other, add that management is efficiency in climbing the ladder of success and leadership determines whether the ladder is leaning against the right wall (p.67).

Bolden (2004) underscores the importance of both leadership and management and asserts that neither leadership nor management can work without the other. Leaders are there to ensure that systems and structures remain in place that offer workers a sense of security and balance, without which it would be hard to maintain motivation, commitment and trust. He concludes that management and leadership go hand in hand to deliver success for an organisation and that both skills are indeed needed.

In school settings, Grant et al. (2010, p.403) and Lunenburg and Lunenburg (2013, p.3) view leadership and management as ‘complementary components’. They emphasise that management is important in addition to leadership and school success requires the combination of both concepts. This is because there are some managerial tasks that the

principal needs to perform for school improvement. These include planning, organising, ensuring that resources are aligned with instructional goals, supporting the professional growth of teachers, and cultivating relationships between the school and the community. These tasks are performed to complement those of school leaders which include providing direction and inspiring and motivating teachers and other school members to achieve school vision and mission. Thus, a clear vision is essential for school leaders to establish the direction of change but it is also equally important to ensure that innovations are implemented efficiently and that school functions are carried out effectively (Atkinson, 2013, p.7).

Empirical evidence indicates that both leadership and management are essential for school leaders who want to achieve academic goals. For instance, a study conducted in Zimbabwe in Bulawayo Government Secondary Schools on whether school heads should be leaders, managers, or both, Hadebe (2013, p.83) concluded that both managerial and leadership skills were essential for heads of schools to work with teachers and drive a school to academic success. In addition to the creation of school mission, vision and goals and motivate and inspire teachers to adhere to this vision, this study revealed that managerial skills were needed to facilitate effective control of resources and duties among staff members. Monitoring and supervising teachers were essential managerial roles of school heads in additional to their leadership responsibilities.

Bush (2007, p.393) further stresses that leadership and management need to be equally weighed. Clarifying the link between management and leadership through the considerations of South African schools, Bush (ibid.) says that principals emphasised on basic management to make the organisational functional, rather than focusing, only, on the visionary approach. This consisted of ensuring regular and timely attendance by learners and teachers, maintaining order and discipline in schools and classrooms, and providing adequate resources to enable teaching and learning to take place. When schools function adequately, Bush adds that leaders can progress to developing vision, and outlining clear aims and policies, with confidence that systems are in place to facilitate and secure their achievement. Management can thus be considered as a prerequisite to leadership and it is very difficult for principals to manage without leading or lead without managing. Both concepts are necessary to make sure that the school runs properly and that effective teaching learning takes place.

It is worth noting that both management and leadership complement each other and are important for this study because instructional leadership of the principal includes aspects of both concepts. Principals who successfully enact instructional leadership articulate vision and goals and inspire teachers to work towards their achievement. These principals also ensure that instructional programmes are efficiently and effectively implemented through the supervision and evaluation of learning and teaching activities. The principals further ensure that all teachers have opportunities for professional growth and that all resources needed are available and that they are efficiently utilised to facilitate effective teaching and learning. In this study, aspects of both concepts are measured as well as their link with teachers' instructional practices.

3.4 The principal as instructional leader

Instructional leadership has been defined in different ways. For example, Mestry (2013, p.120) defines instructional leadership as "those actions that a principal takes, or delegates to others to promote growth in students' learning". The principal who is an instructional leader ensures that instructional quality is the top priority of the school. Such a principal works collaboratively with teachers and makes a school a learning place in relation to shared goals, teacher collaboration, teacher learning opportunities, teacher commitment and student learning (Emmanouil et al., 2014, p.35; Lunenburg, 2010, p.1). Mestry (2013, p.120) describes a instructional leader as a leader who always: a) spends most of the time dealing with curricular, b) strives for excellence in teaching and learning c) ensures that instructional improvement is strongly reinforced in the classrooms, d) has sufficient teaching experience and a good understanding of the instructional challenges faced by teachers, e) has enough knowledge and experience with effective teaching, and f) encourages best practices in teaching and motivates teachers to use them in classrooms. The principal who displays these characteristics prioritises instructional activities and focuses on specific actions that aim to assist teachers in their professional growth and students in their learning.

Marks and Printy (2003, p.373) note that instructional leadership encompasses everything a principal does to support the achievement of students and the ability of teachers to teach. The principal, as an instructional leader, empowers teachers and invests in them with resources and instructional support. This suggests that instructional leadership occurs when the principal provides direction, resources, and support teachers to improve their professional practices. The principal also creates opportunities to learn with teachers, discuss their work,

solve teaching and learning problems together, and take responsibility for what students learn (Jenkins, 2009, p.36; Mestry et al., 2013, p.52; Muturi, 2014, p.8).

The role of the principal, as an instructional leader, is one of the areas in education that have been widely researched and that continue to be researched today. Many researchers agree that the principal, as an instructional leader, plays a major role in affecting the quality of individual teachers, the height of student achievement, and the degree of efficiency in school functioning (Hallinger & Lee, 2013, p.306; Marks & Printy, 2006, p.6; Osman & Mukuna, 2013, p.43). Leithwood and Riehl (2003) also said "scratch the surface of an excellent school and you are likely to find excellent principal. Peer into a failing school and you will find a weak leadership" (p.64). This view emphasises that the success of any school depends largely on the leadership qualities of the principal which provides teachers with opportunities to grow professionally and students to maximise their learning. Principals who possess good instructional leadership qualities show concerns for what teachers and students do and are visible walking around the school to observe how teaching and learning is taking place and ready to intervene and support teachers in their teaching activities (Kabeta et al., 2015, p.1878).

Principals who exercise instructional leadership display frequent and direct link to teachers and are always committed to improving instructional practices so that teachers can deliver quality teaching of the curriculum. These principals provide direction and support to teachers and help them to identify, select, and develop programmes and materials that help students to meet their needs in relation to school goals and mission. Such principals are also responsible for ensuring that teachers have time, resources, and professional development opportunities and that there is high quality learning that results in changes in practice and that makes students learn more (Graczewski, Knudson, & Holtzman 2009, p.73; Kin et al., 2018, p.439).

Moreover, the principal demonstrates an emphasis on instructional leadership through building and maintaining a spirit of collegiality. Collegial relationship, according to Nawab (2011, p.182), allows teachers to work closely, learn alongside their colleagues and openly discuss and refine their practices to conduct effective teaching and learning. Lunenburg (2010, p.1) argues that the role of the principal, as an instructional leader, is to help teachers to maintain a focus on why the school exists, and that is to help all students learn. This requires principals to engage teachers in school initiatives and concerns and create conditions for them to interact including structures and policies that formalise the ways in which they

meet and work together (Marks & Printy, 2006, p.126). Research reveals that providing the opportunities to teachers to interact and share knowledge is a leadership strategy that enhances teacher performance and motivation (Muijis & Harris, 2006). Marks and Printy (2006, p.128) found out that high performing schools have always had principals who facilitate regular interaction between teachers and their colleagues, discuss instruction, and share their experience. From this interaction, teachers establish the purpose of their work together, develop clarity of what is valued and establish ways of working together. The collaborative approach engages teachers in reflecting on their own teaching through analysing instruction and developing plans for strengthening their practices (Harris & Jones, 2017, p.332). The central role of the principal, as an instructional leader, is thus to stimulate teachers' innovative practices by creating opportunities to interact and learn from one another (Louis et al., 2010, p.317; Alma & Ahmad, 2017, p.393).

The principal actively promotes effective practices in the teaching and learning process and recognises instructional priorities rather than administrative tasks (Geleta, 2015, p.3). Jenkins (2009, p.36) cautions that if principals are to take the role of instructional leader seriously, they need to free themselves from bureaucratic tasks and focus their efforts toward improving teaching and learning. This suggests that principals need to devote a significant amount of time to academic programmes and focus more on curriculum and instruction.

Principals, as instructional leaders, according to Tshering and Sawangmek (2016, p.227), focus on core activities of the school, that is, teaching and learning in the classroom. Teaching and learning involves all beliefs, decisions, strategies, and tactics which principals utilise to ensure instructional effectiveness in each classroom. Instructional leadership occurs when the principal establishes school conditions necessary to build pedagogical capacity, expands opportunities for innovation, supplies and allocates resources, gives instructional direction and support to teachers and enables them to assume individual and collective responsibilities for instructional improvement (Ng et al., 2015, p.392.). The principal, who is a good instructional leader, paves the way for effective teaching and learning and ensures that there is at all times a supportive and conducive teaching and learning environment in the school.

One of the factors that contribute to a conducive teaching and learning environment is empowering teachers to play an active role in teaching and learning. In doing so, the principal needs first to abandon the traditional position of authority and includes teachers in assuming

some leadership responsibilities so that they can have significant input and contribution into decision making concerning instruction (Tedla, 2012, p.848). McEwan (2003) cited in Geleta (2015, p.3) identifies many instructional leadership roles of the principal including establishing clear instructional goals, being resourceful for teachers, creating a school culture and climate conducive to learning, communicating the vision and mission of the school, setting high expectations for teachers and developing teacher-leaders. In fact, all these roles cannot be performed by a single person; the principal. Instead, s/he has to trust teachers, take them into her/his confidence, and distribute some of the tasks to be collaboratively performed by the teachers. Nawab (2011, p.182) and Hughes and Pickeral (2013, p.3) observe that empowering teachers to work and collaborate on instructional issues makes them aware of their responsibilities and the important roles each of them plays in the work. In such a situation teachers are likely to implement and sustain change with confidence and fidelity to quality practice (Muijis & Harris, 2006, p.970). Empowering and developing teachers is thus one of the instructional leadership strategies of the principal that contributes enormously to teacher capacity building which, in turn, influences positively teacher instructional practices in schools.

3.5 Teachers' instructional practices

A teacher is viewed by many scholars as the most influential factor that determines student achievement. As Dinham (2013, p.225) and Goff, Mavrogordato and Goldring (2012, p.2) stipulate, teacher quality is one of the most important school level predictor of student achievement. The importance of the quality of teacher was also stressed by Barber and Mourshed (2007) who said that the quality of an education system cannot exceed the quality of its teachers. This shows that teachers are one of the key elements in improving schools and what they do in classroom matters a lot. Since teachers affect student learning more than any other factor, it is imperative to continue improving their instructional practices so that these practices become more beneficial to student learning and academic achievement.

According to Isac et al. (2015, p.11), instructional practices refer to the activities teachers carry out in the classroom that influence student academic performance. Westbrook et al. (2013) see instructional practices as specific actions and discourse that take place within a lesson and that physically enact the approach and strategy. According to Westbrook et al. (ibid., p.7), teacher instructional practices comprise: a) teacher spoken discourse, b) visual

representation, c) the act of providing students with tasks, d) a variety of social interactions, and e) teacher's monitoring of student work.

Apparently, the above definitions of instructional practice focus only on activities that the teacher performs inside the classroom. The researcher's opinion is that teacher instructional practices should also include those activities that are carried out outside classroom in collaboration with peers and others but which contribute to the improvement of learning in the classroom. These activities include planning and preparing instructional materials, sharing insights from teaching experience, discussing individual student learning problems, and visiting one another's classes for learning and feedback purpose (Isac et al, 2015, p.25; OECD, 2013, p.35).

Instructional practices can thus be summarised as all inside and outside teacher's activities implemented towards ensuring student acquisition of knowledge, skills and attitudes in the teaching and learning process. These practices include actual classroom teaching and collaborative activities all designed to improve teaching and learning. Since the main purpose of this study is to investigate how instructional leadership of principals influence instructional practices of teachers, both teacher collaborative and classroom practices will be examined.

Many scholars in their research have shown that teacher positive instructional practices produce positive student outcomes. For instance, Westwood (1996, p.67) described effective teachers as those who: a) use strategies which maximise student time on task, b) encourage active participation, c) ensure that students understand the work and that they can perform at higher levels of success, and d) create a positive and supportive classroom environment.

Similarly, Danielson (2007) outlines practices that have been identified to have a positive impact on student learning. These practices include a) planning and preparation, b) classroom environment, c) instruction and d) professional responsibility. Furthermore, in her summary of 40 years of research on effective instruction, Rosenshine (2012, p.12) outlines ten teacher practices that were found to correlate with higher student outcomes. These include: 1) beginning a lesson with a short review of previous learning, 2) presenting new material in small steps with student practice after each step, 3) asking a large number of questions and checking the responses of all students, 4) providing models, 5) guiding student practice, 6) checking for student understanding, 7) obtaining a high success rate, 8) providing scaffolds

for difficult tasks, 9) requiring and monitoring independent practice, and 10) engaging students in weekly and monthly review.

From these observations it is clear that effective teachers are those who place students at the centre of the whole learning process and promote their ownership in this process. Good teaches also create positive relationships in classroom and encourage active learning for the purpose of helping students to achieve academic performance at higher level (Fernandez-Rio, 2016, p.3; Webb et al., 2009, p.50). Teachers who adopt a student-centred approach empower and assist students to learn on their own independently and see themselves as guides and facilitators of learning than transmitters of information to inexpert or passive learners.

Effective teaching practices that place the student at the centre of the learning process start with planning instruction. In this activity, effective teachers identify learning goals/objectives, overall themes and activities through which the learning goals will be achieved (Barge, 2013; Kerry & Wilding 2004). Teachers also select various instructional strategies that engage students in their learning and the main teaching aids to support the achievement of the learning objectives (Barge, 2013, p.1; Danielson, 2015, p.3; Kerry & Wilding, 2004). According to Danielson (2007), effective teachers, in addition to the understanding of the content, have to ensure that all elements of instruction that is, learning activities, materials, and strategies are appropriate for students and that they are aligned with classroom instructional goals. Assessments and assessment techniques must also be imbedded in the content while planning to ensure that learning goals are successfully achieved.

Good instructional planning in school requires administrative support. School principals need to provide teachers with the time they need to plan together instruction in subject or grade teams and actively take part in this planning process. In contrast to the historical and traditional culture of teaching where the classroom has been the domain of an individual teacher working autonomously (in isolation), teaching is today a social and collaborative practice in which teachers interact and share teaching skills and knowledge (Marks & Printy, 2006, p.126).

The MetLife Survey of American Teacher (2009, p.12) reiterates that, “quality teaching is not an individual accomplishment, it is the result of a collective effort in which teachers pool their knowledge and skill to produce high level of student learning than any of them can achieve on their own”. This view emphasises the need for teachers to jointly plan

instructional activities and collectively share information about curriculum implementation. It is also an opportunity for the school principal and other school leaders to intervene and learn together with teachers about effective practices that are likely to boost student learning and achievement in classroom.

In addition to instructional planning, teacher instructional practices include the implementation process of the teachers' written lesson plans. Considered as the heart of teaching, this activity encompasses the primary rationale for schools, which is to enhance student learning (Danielson, 2007). Effective instruction delivery takes place in the classroom when it involves reciprocal and dynamic interactions between teachers and students (Ansari &Malk, 2013, p.67). Clear presentations and explanations of the material by teachers and the involvement of students in their own learning are parts of good instruction delivery. Teachers and students enjoy the process of teaching and learning when they share knowledge through the creation of a reflective classroom. In such an environment, both students and teachers become; learners discovering together the world of the subject (Gurney, 2007, p.95).

Involvement of students in their learning is coupled with encouraging cooperative learning in classroom. According to Barge, (2013, p.1), Rosenshine (2010, p.25) and Westbrook et al. (2013, p.54), effective teachers encourage students to learn with and from their peers and create learning opportunities in which students interact with one another to learn something or complete a task. Here, the development of thinking and reasoning process is stressed more than acquisition of specific knowledge. Rosenshine (2010, p.25) further argues that co-operative learning offers an opportunity for students to get feedback from their peers about correct and incorrect responses, which promotes both engagement and learning. The task of a teacher in the classroom is then to ensure that cooperative learning is maintained through, for example, team building, positive independence, group interaction, and structured activities. The teacher has also to make sure that students are committed to learning both collectively and individually.

Effective teaching is that which gives ample opportunities to students to develop their skills. To do so, teachers are required to vary instructional strategies which will assist students in maintaining interest, interacting with content, and eventually achieving learning goals. Teachers need to understand that teaching is not of generic practices and that they do not have to always use the same set of practices for every lesson (Felder & Brent, 2005). Rather,

they have to develop and utilise a range of instructional strategies that are suited to a particular context and then continue to adjust them in accordance with the learning progress.

Ansari and Malik (2013, p.62) state that good teachers are not restricted to the few practices in classroom. Rather, they should have a pool of techniques from which they easily shift from one approach to another when the present approach does not appear to be effective. Felder and Brent (2005, p.57) conclude that there is no single teaching approach that is consistently effective in all situations and for all students. A teaching approach is only effective when it is selected at the appropriate time and on a specific group of learners. Research shows that teachers who use effective and varying strategies in classrooms typically have a more student-centred classroom where students are actively engaged in building upon existing knowledge (Barge, 2013, p.1).

Effective teachers utilise questioning on behalf of both the teacher and students as key components in daily instruction. Cullingford (1995, p.150) says that it is possible to give a wonderful lecture from which people might learn, but sustained teaching lies in the ability to analyse how such people are learning, what they are achieving and the gap to be filled. Effective teaching practices entail assessing what concepts students have learnt, what knowledge they have acquired and skills they have displayed (Barge, 2013, p.1). Teachers who use multiple levels of questioning stimulate student thinking, monitor student learning and are aware when students are not thoughtfully engaged in the activities of learning at hand. When inattention is observed in a classroom, it may be addressed immediately. Teachers may use information they receive during questioning to explain more clearly the material or re-teach it when it is considered necessary. It is also an opportunity to measure the degree of attaining the learning objectives and to take actions against the further instruction (Danielson, 2007; Kerry & Wilding, 2004).

Instruction delivery cannot be effective unless the classroom learning environment becomes conducive and supportive to all students. One of the tasks of the teacher in the classroom is to create a classroom environment that cultivates a culture for learning, the environment in which students feel secure, and have greater confidence and happiness in being in class. Although the classroom environment is not directly related to the content areas, it promotes a comfortable and respectful atmosphere that disposes students more favourably towards learning (Kerry & Wilding, 2004).

Danielson (2007) and Gurney (2007, p.95) argue that an effective classroom environment allows students the time to learn, make their own decisions, and take risks without the aftermath of ridicule or shame. Danielson further adds that teachers who excel in creating a favourable learning environment make learning fun, meaningful and relevant for all their students. Such teachers demonstrate a genuine concern for their students and treat them fairly recognising both their strengths and weaknesses. Students, in turn, start appreciating their teachers and committing themselves to hard work of learning with a great sense of pride and willingness. In brief, effective learning environment turns the learning process into something that is more rewarding and attractive than expulsive.

Teacher collaborative practices contribute to effective teaching and learning. These activities are implemented outside the classroom but serve the purpose of improving teaching and learning in addition to those in the classroom with students. According to Cosenza (2015, p.93) and OECD (2013, p. 35), teachers succeed in classrooms when they engage in some types of collaborative activities with their colleagues across grade level or within subject areas. In this process, teachers share their success, their strategies, and provide support to struggling teachers.

Marks and Printy (2006, p.126) further add that schools with high quality teaching and learning are those which provide opportunities to teachers to learn and share what is necessary for quality teaching. Schools in which teacher learning is supported, teachers observe each other and provide feedback, share teaching and learning resources, lesson plans and assessment practices. They (teachers) also discuss the development of individual students, teach each other in teams, and examine and discuss student work (Mestry et al., 2013, p.52; Muijis & Harris, 2006, p.968).

Research has shown that teacher collaborative practices play a significant role in the implementation of effective classroom practices in many countries including Ghana, Bangladesh, Benin, India, and Egypt (Westbrook et al., 2013, p.62). In these studies, student attainment and greater attendance were reported because of teacher collaborative practices in schools. It can then be concluded that classroom and collaborative practices complement each other and both boost student learning as effective teacher instructional practices.

Teaching involves a set of many instructional practices that promote student learning in the classroom. However, teachers need to have a clear understanding of when, why and how each of these practices can be effective to facilitate students' acquisition of knowledge and skills.

Both inside and outside classroom teacher practices complement each other to make student learning more productive. In order for student learning to be successful there is a need for school leaders to fully engage in curriculum plan and implementation and put a strong emphasis on academic success. For creative, relevant and challenging learning and teaching to take place, the intervention of the school principal is necessary to support and provide teachers with the opportunity to share their expertise and insights about effective teaching practice. When they work together, both teachers and principal develop a shared understanding of what quality teaching must look like in the school and effective teaching practices to apply for its achievement. The purpose of this study is thus to find out how secondary school principals in Rwanda work with teachers and influence these practices for improved student learning. The next section discusses the major concepts and ideas shaping the conceptual frame for this study.

3.6 Conceptual framework underpinning the study

A conceptual framework, according to Maxwell (2005, p.33), is "a system of concepts, assumptions, expectations, beliefs, and theories that supports and informs a particular research". Grant and Osanloo (2014, p.17) add that the conceptual framework lays out the key factors, constructs, or variables and presumes relationships among them. It is a structure of what has been learnt to best explain the natural progression of a phenomenon that is being studied. Since this study focuses on instructional leadership behaviours of the principal and their influence on instructional practices of teachers, an attempt was made to explore instructional behaviours observed to be enacted by school principals and the effect they have on instructional practices of teachers in a school.

The conceptual framework which informs this study was developed bearing in mind theories discussed in the previous chapter. These theories involve a number of principal's behaviours that create interaction between principals and teachers for the purpose of improving the quality of teaching in the classroom. Specifically, this conceptual framework was based on various factors that influence teachers' instructional practices, as adapted from Webber's (1996) and Lineburg's (2010) models.

Weber (1996) has listed five essential behaviours of instructional leadership of school leaders that influence the work of teachers and student learning. These behaviours include a) defining the school's mission, b) managing the curriculum and instruction, c) promoting a positive climate, d) observing and improving instruction and e) assessing the instructional

programme. Similarly, Lineburg (2010, p.9) identifies principal's strategies that influence teachers' instructional practices including a) communicating school goals, b) supervising instruction, c) promoting professional development and e) providing incentives. Considering the main purpose of the present study which is to find out how instructional leadership behaviours principals influence the instructional practices of teachers, the two models have been chosen to guide this study. These models describe clearly the way in which principals work collaboratively with teachers and support and guide their practices for raising student achievement. Figure 3.1 below summarises the key concepts that the researcher used to explore instructional leadership of school principals and its influence on instructional practices of teachers.

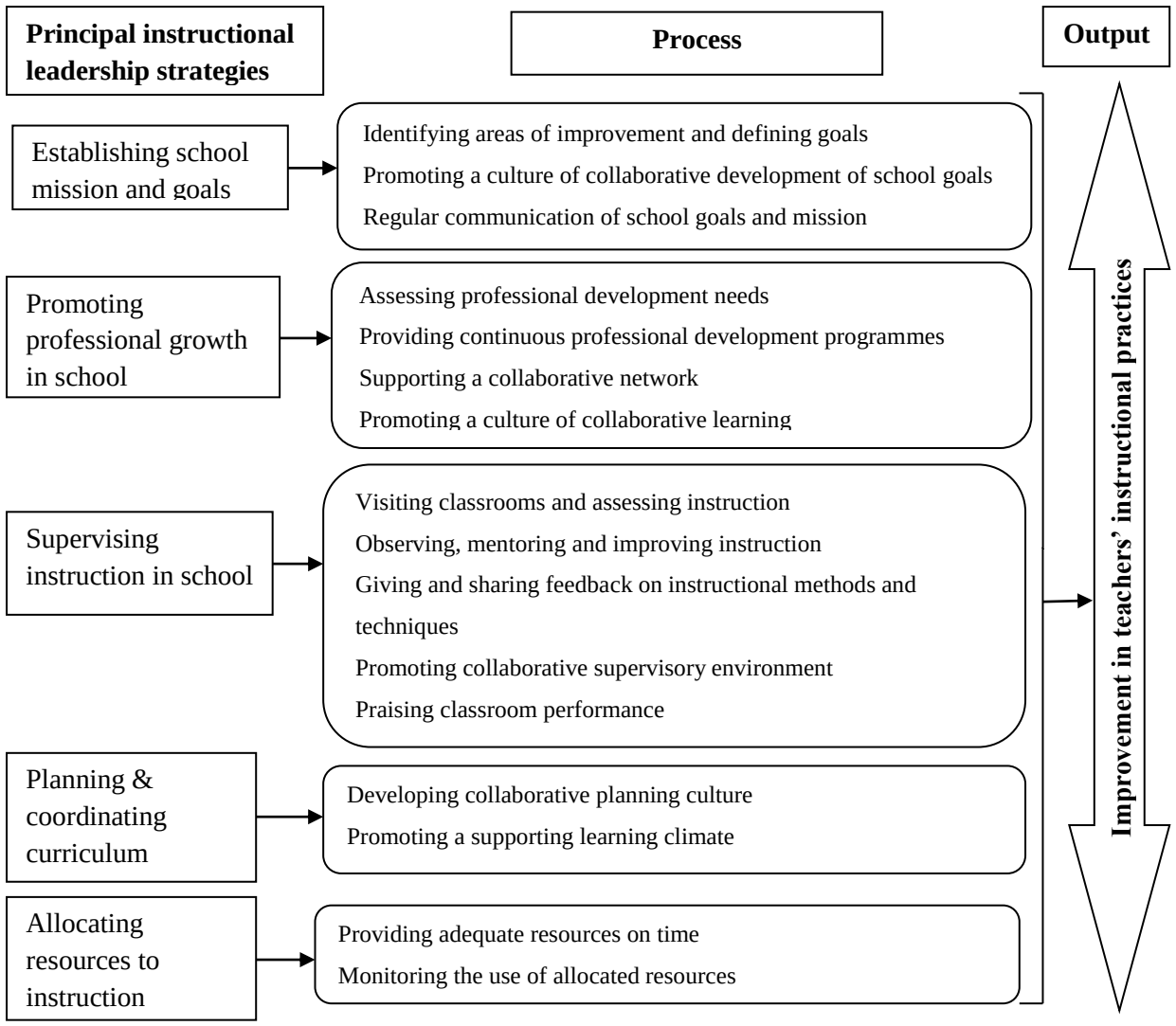

*Figure 3. 1: The conceptual framework of the study adapted and modified from Lineburg (2010) and Weber(199*6).

From Lineburg's (1996) and Weber's (2010) models, the researcher has selected aspects that fit the Rwandan context and which contribute more to addressing the research problem under investigation. The conceptual framework of this study is based on five key elements describing instructional leadership behaviours of the principal and the relationship they have with teachers' instructional practices. These elements include: a) defining and communicating school mission and goals, b) planning and coordinating curriculum, c) supervising instruction, d) promoting teacher professional development, and e) providing resources. Each of these variables is discussed below.

3.6.1 Defining and communicating school mission and goals

Many researchers see one of the key tasks of the principal instructional leadership to be setting the mission, vision and goals of the school. For instance, Gawlik (2018, p.550), Harris et al. (2017, p.213) and Salleh (2013, p.34) admit that an important dimension of principal's role as an instructional leader is to define and communicate a vision, mission and purpose of the school.

Mombourquette (2017, pp.20-21) observes that a vision is increasingly regarded as an important component of school leadership which principals need to be cognisant of. This suggests that effective schools have principals who are visionaries and who constantly dream about the future of schools and strategies and innovative ways to reach this future. Vision implies that the principal defines a wide and clear direction that gives all school stakeholders a sense of purpose and a way to prioritise activities that directly contribute to its achievement. Such a principal understands very well what the school is and where it intends to go and more importantly knows how to support and inspire teachers to follow this vision.

The task of school principal is to guide school staff to frame school academic goals, sharing a collective vision of where the school is trying to get to. This function, according to Hallinger & Wang (2015, p.25), refers to a school principal's role in determining the areas in which staff will focus their attention and resources during a given year. Academic goals at school are what school leaders and teachers want to achieve through the process of teaching and learning on the annual basis. To be effective, school mission and goals do not need to be defined unilaterally by the school principal and just manipulate the rest to confirming to them. Rather, they need to be developed in collaboration with other school members especially teachers to stimulate their energy and commitment towards their achievement.

School academic goals should also be clear, concrete and without being too slack or too constricted so that they can easily be implemented in classroom. Clear and shared school goals, according to Kin et al. (2018, p. 438), help to collectively identify the gap between what the school aspires to and what is presently being done and raise unconditional commitment for all school members to fill this gap. An analysis of the current and past academic performance of students may serve as an important tool to provide useful information needed to frame new, clear and concrete academic goals (Lunenburg, 2010, p.3; Salleh, 2013, p.34).

A principal who performs instructional roles always ensures that school goals are focusing on student learning and that they are translated into the teacher's daily practices. This requires, according to Murphy, Elliott, Goldring and Porter (2007, p.183), assisting or training teachers to incorporate school academic goals into the objectives of their respective subjects and continue monitoring their implementation.

A principal has an additional responsibility to ensure that instructional programmes, school procedures and all activities in the school consistently support the achievement of academic goals and that all resources needed are clearly identified and made available to the teaching staff. Support from principal is of paramount important since having academic goals without the support to achieve them will likely be futile. Thus, the achievement of academic goals necessitates the principal's commitment to support teachers and ensure that resources are made available. The principal also conducts a follow up to continuously identify who needs such support.

Murphy et al. (2007, p.181) reveal that principals from high-performing schools place a strong emphasis on the development, articulation, implementation, and stewardship of a vision and learning goals that are shared by the school community. Nyagosia, Waweru and Njuguna (2013, p.182) looked at public secondary schools in Central Kenya and observed that top performing schools put more emphasis on school mission and vision in comparison to low performing schools.

Blasé and Roberts (1994) and Sheppard (1996) also note that defining and communicating school goals by the principal has a direct relationship with teachers' classroom innovativeness. The results of the above studies revealed that both defining and communicating school goals at the high school level accounted for the largest amount (57%) of variance in classroom innovativeness. Teachers who understand the school goals use more

reflection in classrooms and always adjust their instructional techniques to address different learning needs of their students (Blasé & Roberts, 1994). Discussing school goals with teachers also helps the principal in determining whether good progress is being made in teaching and learning and what support and changes are needed to accelerate the effective implementation of the curriculum.

To ensure commitment, support, and excellent achievement of school academic goals, the principal is expected to communicate and discuss these goals with teaching staff on regular basis. Harris et al. (2017, p.214) and Kin et al. (2018, p.438) note that communicating the mission and school goals to teachers and other school members is an important role of the principal to seek support and make sense of the work of teaching and learning. Masitsa (2005, p.212) and Mombourquette (2017, p.22) further argue that it is important for school leaders to communicate and explain the vision, mission and goals as wide as possible to all stakeholders and ensure that they are understood and shared by all.

School goals can be communicated through departmental meetings, through individual meetings such as follow up conferences to classroom observation, through parent-teacher conferences and through the school newspapers and staff bulletins (Hallinger & Murphy, 1985, p.222). It may also be useful to display them on different notice boards in the school to continuously remind everyone about what the school stands for. With a shared understanding and sense of purpose, teachers and the principal plan and coordinate all instructional activities more easily because they know what do and why to do it.

3.6.2 Planning and coordinating curriculum

Planning and coordinating curriculum is among the key activities of principals who enact instructional leadership behaviours. One of the roles of principals, as instructional leaders, is to know if the existing curriculum meets the needs of students in the school and continue to assess it on a regular basis. Principals are responsible for jointly organising the curriculum to help all students to maximise their learning.

According to Ifeoma (2013, p.444), organising curriculum refers to a process of formulating and selecting curriculum objectives, content, and the actions to achieve these objectives. Likewise, Adokiye et al. (2015, p.379) and Pilli (2014, p.367) see curriculum organisation as a process of designing the curriculum and selecting the relevant content, organising this

content and allocating adequate resources to facilitate its acquisition and achieve pre-determined goals.

The role of principal is to work with teachers and share information and direction regarding relevant instructional content and methods to facilitate effective curriculum implementation (Mafora & Phorabatho, 2013, p.119). The principal is also responsible for guiding and supporting teachers to choose the appropriate teaching and learning resources that are aligned with the selected content and objectives. Henevelg and Craig (1996, p.23) argue that a well-organised curriculum facilitates the acquisition of basic skills because one is sure that learning objectives are matched with teaching strategies, available teaching and learning resources and an integrated sequence of topics across grade levels.

The planning and organising of the curriculum is a cooperative process that involves those who have an influence on instruction. By the nature of their responsibilities, principals should ensure that teachers are an integral part of this process. Here, effort must be made to help teachers have a good understanding of curriculum theory and practice and possess the necessary skills for competently implementing this curriculum. According to Muijis and Harris (2006, p.970), involving teachers in curriculum planning results in sharing knowledge, professional understanding, and practice. When working together on curriculum there is a possibility for teachers to learn of other types of teaching and learning, especially new teaching techniques from their peers. Cullingford (1995, p.168) says that planning curriculum together and discussing its implementation enhance teachers' understanding of the content they teach and equip them with a range of strategies that enable their students to learn well that content. Goddard et al. (2007, p.882) conclude that teachers who are given a voice in curricular organisation and development claim ownership of the teaching and learning process and are able to sustain changes decided at the classroom level. Thus, joint planning and working arrangements by the principal do not only equip teachers with curriculum implementation skills but also reduce their isolation which could be a barrier to a collective creativity and engagement in instruction.

Nevertheless, the active involvement of the principal in curriculum planning and organisation requires having knowledge and skills related to curriculum in order to guide teachers in choosing the right content, materials and strategies for effective curriculum implementation. Çalıskan and Tabancalı (2009, p.653) and Murphy et al. (2007, p.183) emphasise that principals must have profound knowledge about the curriculum they use in their schools in

order to be intimately and deeply involved in the development of the instructional programme, its implementation, and its evaluation. It requires the principal to have experience in teaching and learning in order to support teachers in this critical activity.

However, the majority of studies conducted in different countries mainly in Africa indicate that principals lack skills and knowledge in curriculum to perform this important role. For instance, Bush et al. (2010, p.164) and Taole (2013, p.79) found that principals' lack of deep understanding in curriculum impedes teaching and learning in South African schools. Principals in these schools do not sufficiently support their teachers because they are not trained in curriculum implementation. This issue was also raised by Ifeoma (2013, p.451) in the study conducted in Nigeria. Principals in Nigerian schools fail to instructionally support teachers because they do not understand curriculum. As a result, teachers tend to work on their own when it comes to decide what to teach and how to teach it. This lack of support sometimes leads to unsuccessful curriculum implementation and consequently to the poor academic performance (Kabeta et al., 2013, p.1882).

To remedy this problem, however, Smith and Andrews (1989, p.14) advise principals to have a minimum knowledge that should at least embrace the general trends in each subject area. The fact that principals cannot be experts in all subject areas of the curriculum, this minimum knowledge requirement can help to generally determine whether students are being taught the body of knowledge, the understandings and skills that they are expected to learn in the core curriculum. Other than that, principals have to encourage a system of collaboration among teachers, subject heads, and heads of departments to facilitate the task of planning and coordinating curriculum. They need, however, to remain as a guide along the path and ensure that teaching and learning takes place in a satisfactory way through the supervision and monitoring of instruction.

3.6.3 Supervising instruction

The supervision of instruction processes by the school principal is among his/her major functions. As an instructional leader, the principal needs to follow up activities of teachers and supervision is an important tool to accomplish this task. According to Gongera (2013, p.196), supervising instruction means collecting specific information about what is going on in a classroom and making decisions regarding teaching quality improvement. Bush (2013, p.8) argues that instruction supervision is an important activity for school leaders to collect data on student learning and consequently take action for improving quality teaching in

classroom. It involves working with teachers in the classroom, determining their progress, and providing them with expert assistance to help acquire more skills and competences useful for effective teaching. Here, supervising instruction does not mean to make judgements about teachers or control or punish them, rather, it is a collaborative activity which intention is to guide, direct and facilitate teachers in their teaching (Esia-Donkoh & Baffoe, 2018, p.44).

Principals who supervise instruction in their schools work with teachers, diagnose their strengths and weaknesses, and then devise collectively the strategies to address these weaknesses. The prime target of instruction supervision is thus to bring about improvement in instruction through promoting teachers' competences.

Anho (2015, p.51) notes that supervision is a process of guiding, reflecting, encouraging, stimulating, improving and overseeing groups or individual teachers to achieve desired objectives. In the same vein, Archibong (2012, p.62) says that supervision is conducted to sensitise, mobilise, and motivate teachers towards performing their duties optimally in terms of the achievement of the stated aims and objectives of the school.

Adequate supervision is concerned with identifying the level of academic performance for both teachers and students and assisting teachers to determine the right methods, teaching facilities, physical settings, and classroom attributes that are most likely to improve this performance (Egwu, 2015, p.104; Oyewole & Alonge, 2013, p.296). As improvement of instruction is a long process, effective supervision does not only help teachers to solve immediate problems. It also engages them in a continuous reflection of their practices so as to improve learning. Good supervision always releases the energy and commitment of teachers in creative ways to continuously solve individual and common problems in learning.

Classroom observations conducted by the principal or other school leaders is one of the most common forms of supervising teachers' instruction. This consists, according to Bush and Glover (2009, p.15), of visiting classrooms, observing teachers at work and providing them with feedback. Archibong (2012, p.67) states that classroom observations involve live observation of teacher teaching and analysis of his/her classroom practices, the teaching and learning process, teacher's personality, student-teacher interaction, lesson notes and lesson presentation, and assessment techniques. Principals use classroom observations to see what strategies are being used and assess these strategies to ensure that teachers comply with instructional goals of the schools.

In addition to classroom observations, there are other ways that skilful instructional supervisors can use to bring about desirable effect in teacher behaviours. These include: a) holding formal and informal interviews with teachers; b) holding staff meetings to discuss academic progress; and c) reviewing the student performance in terms of test results monthly or quarterly. Teacher visitation, where one teacher visits and observes another teacher in action within the same school or in another school, is one of the effective ways of enhancing teacher proficiency, specifically when novice teachers observe experienced teachers in action (Thomas, 2015, p.2859). Furthermore, short informal visits (walkthroughs) of the principal or other school leaders around the school are useful to provide valuable information about what is working or not working in school and assistance and support needed to make learning more successful (Gawlik, 2018, pp.552-553; Harris et al., 2017, p.214).

The supervision of instruction is a collaborative activity which is basically concerned with supporting and assisting teachers to grow professionally. In order for this to happen, there must be a good relationship between the supervisor (e.g. the principal) and the supervisee (teacher). The supervisor should understand that supervision is supportive, formative and not punitive. Good relationships and mutual understanding between teachers and the principal are necessary to facilitate teacher satisfaction. Sergiovanni and Starratt (2007) suggest that the exchange between the supervisor and teacher must be trusting, open and flexible to allow both to speak from their own sense of integrity. The supervisor must be sincere, firm, honest, and approachable in such a way that teachers feel free to exhibit real classroom behaviours in the interest of improvement (Wanzare, 2012, p.194). When supervision is constructive, interactive, supportive, and focusing on meaningful learning, teachers become excited to perform better on their work making teaching results-oriented (Egwu, 2015, p.105).

Wanzare (2012, p.194) highlighted four ingredients that successfully strengthen collaboration between teachers and the supervisor and that make supervision effective. These include: a) the supervisor's willingness to try and understand the teacher world and refrain from imposing supervisor's own world on the teacher; b) the supervisor's sensitivity to changes that take place in teachers; c) the supervisor's patience in helping teachers articulate the thinking behind these changes; and d) the teachers' open mindedness about the supervisor's comments and criticisms. These ingredients help the supervisor (e.g. the principal) to nurture the supervision environment in which teachers professionally grow through the direction and assistance provided during or after the supervision (ibid.).

Supervision is a professional, continuous and cooperative activity that covers all aspects of teaching and learning in school. When it is well conducted, supervision can have a positive effect on teacher classroom practices especially when the feedback is constructive. Good supervision of teachers is that which is immediately followed by an instructional conference or post-observation discussion. Teachers need to be aware of their weaknesses and strengths in order to improve the areas which require additional efforts.

Kalule and Bouchamma (2014, p.66) and Wanzare (2012, p.195) encourage supervisors to provide teachers with supervision feedback and time to discuss it to facilitate the attainment of desired pedagogical skills. As they emphasise, teachers are interested in feedback and constructive criticisms that would encourage them to improve their classroom teaching, to question, appraise, and reflect, and to adapt their current instructional practices. This suggests that the focus on supervision by principals should not only be confined to observing teachers in classrooms but also to include time to openly and mutually discuss the observed behaviours in classroom.

Research has revealed that formal and informal classroom supervision followed by constructive feedback is associated with teachers' practice improvement (Blasé & Blasé, 1999, Blasé & Roberts, 1994). Blasé and Roberts (1994) noted that the principal's visibility in the classroom was related to the teacher's use of new teaching strategies, different teaching techniques, and an increase of time on task. Oye (2009) found out that the principal's supervision and interaction with teachers increases teacher's reflection and awareness of the need to effectively plan and prepare lessons for instruction improvement.

Research conducted in Burundi further revealed that frequent teacher supervision by the principal improved the punctuality of teachers and their adherence to curriculum, which in turn, produced higher scores of students in mathematics (Eisemon, Schwille, & Prouty 1989). All these findings suggest that principal supervision produces a positive effect on teachers because of increased interaction, feelings of trust, feelings of respect, and more opportunities for teachers to express themselves.

While it is widely acknowledged that principal's supervision on teachers' instructional practices has important benefits, it has also been observed that sometimes the supervision has some demerits. As indicated by some researchers, principals' behaviours such as criticising teachers, threatening teachers, spying on teachers, giving teachers unfair evaluation, and preventing teacher advancement were found to have a negative effect on teacher performance

(Blasé & Blasé, 2004, p.252; Sidhu & Fook, 2010, p.604). In such situations, teachers become frustrated, lose motivation and confidence, and perceive the supervision process as an unnecessary activity which inhibits their creativity in the classroom.

Instructional supervision may have some advantages and/or disadvantages depending on how it is carried out. Principals and other school leaders should focus on supervision which is collaborative, interactive, and facilitative if they want to assist teachers to reflect on their own teaching practices and improve classroom instruction.

Formal classroom observations, peer observation among teachers, informal and formal interviews and discussions with teachers, and staff meetings at the departmental level are to be encouraged in school. In addition, a supervisory environment must be conducive to facilitate the collection of accurate information on current teaching and learning. This information is very useful because it forms the basis for a better instructional planning and more ultimately it can serve as a guiding tool to promote teacher professional development (Esia-Donkoh & Baffoe, 2018, p.44; Mafora & Phorabatho, 2013, p.119).

3.6.4 Promoting teacher professional development

A teacher is the most important factor that affects student learning in school (Dinham, 2013, p.226). According to Dinham (ibid.), one cannot improve education without improving the effectiveness of teachers in the classroom. Teachers perform many tasks besides teaching and learning. To mention a few, teachers lead and manage their classrooms, observe, mentor, and coach their colleagues, participate in continuous professional development process, and so on. In order to succeed in all these roles, teachers need to be professionally skilled, competent and updated in their career. The first person to intervene and help teachers in this process is the principal who must always think of promoting continuous professional development activities that increase teacher competence in the school and in the classroom.

Effective professional development is that which creates change that is necessary to continuously improve teachers' practices and student learning (Glover et al., 2016, p.2; Kirsten & Clive, 2012, p.59). Teachers become more effective when the principal works with them and promote professional development founded on a sense of collegiality and collaboration in a school. Gawlik (2018, p.332) and Thomas (2015, p.2859) argue that teachers grow in their profession and enhance their knowledge and skills when they interact with their colleagues and share what they know about their profession and about their subject

areas. Collective and collaborative professional development engages colleagues around learning issues existing in classrooms. This allows teachers an invaluable opportunity to reflect on their own practices, share ideas about instruction, and identify problems and possible solutions. Teachers learn from their colleagues and get ongoing support needed to make change in their own teaching. Based on the importance of professional development, Fullan (2014, p.15) and Thomas (2015, p.2862) urge school principals to create and nurture a culture in which teachers regularly meet and talk about teaching and learning if instruction in the classroom is to be improved.

Jovanova-Mitkovska (2010, p.2922) and Steyn (2011, p.45) argue that the purpose of teacher professional development is to bring about change in practices, attitudes and beliefs of teachers in the classroom. Research has revealed that promoting teacher professional development by the school principal has a positive effect on teacher classroom instruction. Blasé and Blasé (1999) noted that effective professional development was found to increase teachers' reflection and use of new instructional skills that improved the learning capacity of students. There is also evidence from the study of Cordingley et al. (2003, p.8) that collaborative professional development is significantly linked to improved student outcomes (learning and behaviours) and the practice, attitudes and beliefs of teachers. Furthermore, a study conducted by Jun (2014, p.243) in China revealed that teachers who were brought together for discussion and collaboration were likely to plan and present their lessons in the ways that were more beneficial to their students. From these findings, it can be concluded that principals who provide teachers with professional development opportunities expand knowledge and skills of teachers, improve their professional growth, and enhance learning effectiveness of students.

Guskey (2002, p.385) says that notable improvements in education cannot take place in the absence of teacher professional development. Professional development is a key dimension of leadership when it comes to providing opportunities for teachers to continuously improve their practices and to obtain high student achievement. It is a long term, context-based process that goes beyond the initial training of teachers to encompass a definition that includes formal and informal means of helping teachers to professionally grow at the workplace. Here, professional development is the formal and informal learning experiences undertaken by teachers that improve their professional practice and the school's collective effectiveness both measured by improved student engagement and learning outcomes (Cole, 2012, p.4). This definition emphasises the expectation that professional development

produces changes in teacher practice and ultimately in student learning outcomes. It is thus a learning process by which teachers maintain the quality and relevance of their skills so as to raise standards in student learning.

The United State Department of Education (2005, p.1) defines professional development as a process of improving staff skills and competences needed to produce outstanding educational results for students. Jovanova-Mitkovska (2010, p.2922), Kavanagh (2006, p.47), and Khan and Khan (2014, p.926) argue that the development of teachers can be provided in various ways ranging from the formal to the informal. Teacher professional development can be made available through external expertise in the form of courses, workshops, conferences or formal qualification programmes. It can also be provided through collaboration between schools or teachers across schools (observational visits to other schools or teacher network) or within the schools in which teachers work.

Activities such as peer coaching and mentoring, peer planning and teaching, and peer classroom observations are also part of teacher professional development process (Thomas, 2015, p.2857). The role of a school principal, as a professional development leader, is to ensure that teacher professional development process focuses on building existing knowledge and understandings of teachers and that it updates these knowledge and understandings to make teachers become more effective in school and in classroom.

The principal, as an instructional leader, needs to prioritise teacher professional development and encourage all teachers to take part in it. In order for professional development to be successful, the principal needs first to assess the needs of his/her workforce and arrange the support needed accordingly. Supervising teachers and analysing school wide and individual classroom data can help both teachers and the principal to identify areas that need improvement. Another way to do it, according to Kavanagh (2006, p.47), is to discuss with teachers and ask them to make a self-evaluation and determine what areas of their work require improvement and the strategies necessary to create such an improvement. The principal, however, has to ensure that each teacher's needs fit within the overall professional development and improvement goals of the school. Balancing and comparing school goals with current performance of students, teachers and the principal can easily identify the gap that needs to be filled by professional development skills. This process creates a collegial commitment because teachers take part in designing professional development programmes instead of being decided by the principal alone.

The identification of the needs of teachers in terms of professional development should be followed by teacher professional development activity plan, implementation and evaluation. Mizell (2010, p.10) says that effective professional development requires thoughtful planning followed by careful implementation with feedback to ensure that it responds to teacher and student needs. The role of the principal here is to involve teachers in on-going planning processes to design for themselves appropriate activities that will likely produce specific knowledge and skills useful to addressing student learning challenges.

Once teachers are engaged in planning their own professional development activities, they are less hesitant when the time for its implementation comes. Principals need to take advantage of this and support teachers in planning and implementing professional development activities by providing materials and resources necessary to make them successful. Principals have to keep in mind that successful school wide change cannot occur without adequate resources and support from school leaders. They should do their best to allocate resources to enable the accomplishment of pre-intended goals.

Professional development is effective when it is continuously evaluated to see if it is generating improved student learning. In addition to the implementation of the professional development plan, the role of the principal, as an instructional leader, is to develop a process for the systematic collection and analysis of data on its effectiveness. The only way to ensure that the intended results are achieved is to follow up and regularly assess its contribution to the learning.

Professional development evaluation, according to Ravhuhali et al. (2015, p.66), serves as a tool to point out the progress teachers are making and what needs to be done or changed to efficiently develop teachers. It is an opportunity for the principal to redesign formal professional development programmes and/or encourage interactions among teachers to facilitate this change (Hilton et al., 2015, p.116; Thomas, 2015, p.2859). It is noteworthy that the role of principals in professional development is not limited to supporting teachers. Principals have to be part of the whole process from the beginning to the end including participating with teachers in professional development sessions. On this issue, Robinson (2011) argues that leading teachers' learning process means being proactively involved with teachers such that principals and teachers both alike are learning. Fullan (2014) says that principals who learn alongside with teachers are more appreciated and become able to assist those teachers. Learning alongside teachers is important as principals themselves update their

knowledge and skills useful to support, monitor, and evaluate the instruction delivery in the classroom. Such knowledge and skills can be used to determine the types of teaching and learning resources teachers need to make instruction more successful.

3.6.5 Providing resources

The allocation of resources to the instruction process is one of the key roles that principals must play in a school. The principal influences instruction by providing teachers with adequate and necessary resources for successful learning. According to Usman (2016, p.28), principals in their schools have to ensure that teachers have access to a range of quality resources that are appropriate, current and relevant to make the teaching and learning process more effective.

The teaching and learning resources commonly used in schools include textbooks, teachers' guides, reference books, exercise books, textbooks, audio visual teaching aids, science kits, dictionaries, laboratory and science equipments, charts, chalks, pens, notebooks, and other teacher and student created resources that can be used in classroom (Okongo, Ngao, Rop & Nyongesa, 2015, p.135). The availability of these resources is likely to improve the quality of learning since they help teachers to promote proper sequencing of learning activities in the classroom and supplement their knowledge.

Usman (2016, p.35) posits that the provision of learning and teaching resources helps to organise a range of stimulating activities useful to motivate and extend students' understanding of various subject areas. It enables children to grasp the concepts and ideas more readily and connect them with real life situations. According to Lingam and Lingam (2013, p.2161) and Okobia (2011, p.90), the use of appropriate instructional materials keeps students busy and active and increases their participation in the teaching and learning process. It also helps teachers in illustrating the concepts clearer and better and use a variety of pedagogical approaches in their teaching.

Given the importance of instructional materials in the teaching and learning process, the principal should be there to ensure that they are available and that they are distributed timely to assist teachers in delivering the content. In addition, efforts must be made to ensure that they are adequately utilised in the classroom. As Hoadley et al. (2009, p.384) and OECD (2009, p.103) caution, it is not only the abundance of the teaching and learning materials that accounts for the level of the quality of learning. The management capacity of teachers and

how well they use these resources also contributes to making learning more meaningful. The provision of instructional materials in quality and quantity is thus necessary but not enough if teachers are not adequately trained in their use.

Teaching is effective when appropriate and relevant instructional materials are adequately used (Okongo et al., 2015, p.135; Usman, 2016, p.36). On the other hand, inadequate or lack of resources may make it difficult for teachers to employ some instructional strategies that may make teaching and learning more productive. After investigating the way in which instructional materials drive teachers' practices, Appleton and Kindt (1999, p.162) found out that the lack of resources (science equipment and reference materials) affected the way teachers taught science subjects in Australia. Schools did not have the necessary resources to support certain instructional strategies and activities in the classrooms. Teachers blamed school principals for the poor provision of resources and this affected the preparation of the lessons and activities that students had to engage in classroom.

Similarly, teachers in Fiji were reported to skip certain topics in basic sciences due to lack of suitable teaching and learning resources (Lingam & Lingam 2013, p.2162). From these studies, it is evident that the scarcity of instructional materials in schools is likely to be a barrier to the possibilities of the successful implementation of the curriculum in the classroom. In this situation instruction is compromised and student learning is adversely affected (Bizimana & Orodho, 2014, p.120; OECD 2009, p.105).

On the other hand, the availability of resources has a positive impact on both the work of teachers and students (Lingam &Lingam 2013, p.2161; Okobia, 2011, p.90). Najumba (2013) noted that instructional materials were reported to ignite teacher effectiveness and student performance in well-resourced schools. McGhee and Lew (2007) and Quinn (2002) also admit that the provision of resources by the principal was the most important instructional activity that affected the way teachers engaged in their teaching activities. McGhee and Lew (2007, p.370) observed that teachers appreciated the involvement of the principal in literacy and writing related-issues by providing resources and supplies to improve the teachers' writing instruction in the classrooms. Quinn (2002, p.461) says that teachers perceived their principals as effective instructional leaders because they were able to secure and allocate resources to support the achievement of school goals.

Smith and Andrews (1989, p.32) discovered that the majority of strong instructional leaders were given positive ratings as resource providers. Provision of instructional resources and

promotion of professional development were perceived by teachers as the most important strategies that school principals used to improve their practices. It can be deduced from these findings that teaching and learning resources constitute an important part of classroom life and that allocating adequate resources to support improvement in teaching and learning is critical to the school principal as an instructional leader.

3.7 Chapter overview

This chapter discussed the key concepts related to the principal's enactment of instructional leadership behaviours. The concepts such as leadership, leadership and management, the principal as an instructional leader, and teachers' instructional practices have been explored to provide a solid understanding on how principals in schools are responsible for the work performance of teachers with the purpose of improving student learning.

In relation to teachers' instructional practices, instructional leadership behaviours of the principal such as a) defining and communicating school mission and goals, b) planning and coordinating curriculum, c) supervising instruction, d) promoting teacher professional development, and e) providing resources have been discussed in this chapter because the main purpose of this study is to establish the extent to which the principal enacts each of these behaviours and how they contribute to the improvement of instructional practices of teachers.

The next chapter explores empirical studies conducted on instructional leadership of school principals in order to locate the present study within the context of local, regional and global debates in this area of study.

CHAPTER 4: EMPIRICAL RESEARCH ON INSTRUCTIONAL LEADERSHIP

4.1 Introduction

This study focuses on the principals' instructional leadership behaviours and their influence on teachers' instructional practices in Rwanda. Therefore, it is important to have a closer look at previous studies conducted in various countries to locate the study in relation to current and historical empirical research.

The examination of these studies helps in identifying the gap in knowledge that this study seeks to fill. The contribution is realised in different forms including confirming, extending, comparing, opposing and/or contradicting findings from previous studies. The chapter will discuss empirical studies conducted in developed countries. It will also look at the studies carried out in developing countries especially in Africa and empirical challenges that constrain school principals from executing instructional leadership roles effectively.

4.2 Empirical research conducted in developed countries

Instructional leadership influences teacher performance and student outcomes (Colden & Spillane, 2007, p.390; Quinn, 2002, p.461). As a result, various studies have been conducted in different developed countries on the role of school principals as instructional leaders (Hallinger, 2005, p.227). The findings of these studies revealed generally that school principals enacted different behaviours of instructional leadership which directly or indirectly influenced the work of teachers and students in schools and in classrooms. The following subsection provides an overview of some empirical studies conducted in United States of America (USA), Canada, England, and among other developed countries.

4.2.1 Studies conducted in USA

The notion of instructional leadership originated from USA in 1980s and its development was related to school principals who managed to turn around elementary schools which were serving the poor children. Principals changed their roles from managers to instructional leaders and started directing all school activities to student learning and achievement (Hallinger, 2012, p.4). Since then, many studies have been conducted on characteristics of

school leaders as instructional leaders, especially school principals within the evolving environment of instructional leadership.

Blasé and Blasé (1999) examined the everyday practices of principals' instructional leadership, drawing upon teachers' perspectives. Data for this study were gathered using a survey of over 800 teachers working in elementary, middle, and high schools in the South-eastern, Mid-western and North-western United States. Teachers indicated that interaction between principals and teachers was very important to make teaching and learning effective. Based on what teachers reported, talking with teachers and promoting professional growth were two major interrelated aspects of effective instructional leadership behaviours of principals affecting teachers and classroom instruction (p.132).

Teachers perceived their principals as effective instructional leaders because they provided them with opportunities to openly and frequently talk about instructional issues and develop their skills and abilities through various professional development activities. In this context, principals' instructional leadership role was more about creating opportunities and conducive environments for teachers and teacher groups to learn from each other and reflect on their colleagues' and their own instructional practices.

It was found that talking with teachers and promoting their professional development enhanced teachers' reflective behaviours through increasing greater variety in teaching, responding to student diversity, planning instruction more carefully, and taking more risks. Principals in this study realised that most teachers expanded their teaching capacity only when there was carefully designed support and assistance from school leaders notably principals.

Quinn (2002) investigated the impact of principals' leadership behaviours on teacher instructional practices and student engagement in 24 elementary, middle, and high schools across Missouri. The data that were collected using questionnaires, documents review, and observation, showed that instructional leadership dimensions were closely correlated with teacher instructional practice and student engagement. According to Quinn (2002, p.461), effective principals performed at high level in four areas, namely; as a resource provider, as an instructional resource provider, as a communicator, and visible presence. As a resource provider, teaching and learning occurred when principals took action and provided personnel and other resources necessary to help the school to achieve the school's goals. In the role of an instructional resource provider, effective principals set expectations for the continual

improvement of instructional programmes and actively engaged in staff development activities.

Working as a communicator, a principal modelled commitment to school goals, articulated a vision towards the attainment instructional goals and the means for integrating instructional planning and goal attainment. Lastly, concerning visible presence, principals were frequently out and around the school visiting classrooms, attending departmental meetings, walking the hallways and holing spontaneous conversations with staff and students. Quinn (2002, p.462) concluded that the above instructional skills were essential for school principals to create an atmosphere that supports students' success and academic achievement.

Supovitz, Sirinides and May (2010) measured the level of school principals' and peers' influence on teaching and learning in 38 middle and elementary schools in the South-Eastern United States. According to teachers' perceptions, the principal leadership was found to positively and significantly predict a teacher's change in instruction for both English Language and Arts (ELA) and Mathematics (p.43). This showed that principals who focused on instruction, fostered community and trust, and clearly communicated school mission and goals were associated with teachers who made significant changes in their instructional practices.

The development of the school mission and goals and the creation of a collaborative environment created an atmosphere where teachers worked together and constructively engaged with each other around issues of teaching and learning. By fostering a climate of instructional collaboration, peer teachers and principals impacted positively on student learning through sharing professional expertise. Such collaboration was also found to be a positive and significant predictor of teachers' change in instruction for both subjects (Supovitz et al., 2010, p.46).

Valentine and Prater (2011) highlighted the characteristics and actions of effective principals that promoted the best practices in teaching. In their study conducted in 313 high and public schools in Missouri on the perceptions of teachers of their principal leadership behaviours, Valentine and Prater (2011) indicated that effective principals demonstrated skills and engagement in classroom life. These principals were visibly present in schools and were available to teachers to help critique teaching practices and determine their applicability to the classroom. Principals influenced learning by working with teachers, analysing student academic progress, and devising strategies to support students' strengths and remediate their

weaknesses (ibid., p.22). The results also revealed that effective principals focused on the second order changes. That is, creating conditions necessary to make effective teaching and learning happen. Principals were involved in facilitating the professional growth of teachers through establishing a vision and emphasising a collaborative approach to decision-making and governance processes. Managerial activities such as organising tasks, providing important information to teachers, maintaining student discipline, and evaluating learning were a part of principals' everyday practices that led to a successful school operation (Valentine & Prater, 2011, p.23).

4.2.2 Studies conducted in Canada

The issue of an effective principal, as an instructional leader, was also studied and discussed in Canadian schools. Beauchamp and Parsons (2012) conducted a study on what makes a school a good place for teaching and learning in Alberta, Canada. The study was conducted in five elementary schools in Alberta on how principals enacted instructional leadership in the schools. Using a qualitative approach (interviews) to gather data, results indicated that principals in the schools were highly effective instructional leaders. Based on what teachers reported, highly effective principals built and communicated effectively common goals, a common sense of purpose, and a clear vision. Vision and goals were shaped and shared into collaborative work and tasks were clearly defined to facilitate their accomplishments (ibid., p.45).

Principals also created a family-based working and learning environment, listened, cared, and supported teachers on professional and personal matters. Principals enabled groups of teachers to work together, plan, and collectively decide what was to be done to bring about changes in teaching and learning. Principals were always available to teachers and created and engaged in establishing a conversational space that allowed vision and plans to be articulated, reaffirmed, and more importantly revised as needed (Beauchamp & Parsons, (2012, p.46) This conversation space allowed teachers to adopt pedagogical practices that enhanced students' learning opportunities.

Characteristics of effective principals were also emphasised in the study conducted by Bouchamma (2012) in high-performing high schools located in socio-economically disadvantaged areas in the Canadian province of Ontario, Québec, and New Brunswick. Using interviews, observations, and field documentation, Bouchamma's (2012, pp.13-14) findings indicated various activities of principals that contributed to teacher academic

performance. Principals in this study involved themselves in communicating school objectives and expectations to all teachers and included the teachers in planning instructional programmes and conducting their follow ups. They empowered teaching staff by responding to their needs and proposing training activities. Principals further encouraged teachers to seek out knowledge needed to do their job and invited them to pursue appropriate professional development programmes.

Supervising and coaching teachers especially the beginning teachers, allocating the necessary resource materials, participating in informal discussions with teachers about teaching, including teachers in decision-making process, and encouraging teachers to supervise one another were some of the activities that principals focused on to achieve the best individual and collective performance of teachers in the schools.

In another study on the perceptions of principals and teachers of large scale assessment in Sasktchewan schools (Canada), Prytula, Noonan and Hellsten (2013, pp.21-24) indicated that principals were struggling to find adequate time for instructional leadership. However, different instructional leadership aspects have been identified as critical to teachers and student performance in school. Based on the provincial assessment data, school principals in the study felt that increased discussion and collaboration among teachers would permit teachers to share expertise, develop goals for student learning, and collaboratively plan how these goals would be achieved (ibid., p.22).

Principals increased discussions and dialogue about teaching, learning and assessment, and increased collaboration around school mission and improvement plans as effective instructional practices that positively impacted the school performance. The findings further suggested that additional professional development in specific areas including learning different teaching strategies and improving 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.

4.2.3 Studies conducted in England

Functions and characteristics of the principal, as an instructional leader, were studied in England. Southworth (2002), using semi-structured interviews, conducted a study in eight primary schools in England about the characteristics of successful head teachers and how

they (head teachers) influence the quality of teaching and pupils' learning. The findings revealed that principals in these schools worked hard and devoted much time to teaching and learning through securing and allocating learning resources and creating structures and systems supportive to teaching and learning. Principals were approachable and accessible to teachers and learners and were willing to talk and listen to them about instructional issues.

Principals in these schools acknowledged that school's success depends on everyone pulling their weight, supporting one another and working together. It is in this regard that principals organised and helped teachers to work in teams characterised by professional openness, a unity of purpose, clear and shared goals, and education value. Heads in these schools believed that positive inter-professional relations were critical to school success and that teamwork was vital in improving the school.

Effective instructional leaders were found to be those that monitored teachers through looking at their weekly plans, visiting classrooms, and promoting professional dialogue through staff meetings, joint plan meetings, and informal discussions with individual teachers. These practices boosted effective teaching practices in the schools (Southworth, 2002, pp.83-85).

The findings of Southworth's (2002) study are not very different from the findings of Kaparou and Bush's (2016) study in English schools though the latter was conducted 14 years later. In their examination of the impact of instructional leadership on student learning, teacher professional growth and school improvement in English and Greek schools, Kaparou and Bush (2016) found that English school principals practiced more instructional leadership (shared instructional leadership) than their counterparts from Greece. In English schools, principals influenced the work of teachers and student learning by building a collaborative environment in which teachers and school leaders shared the school vision and direction. Principals also created opportunities to plan instructional programmes together with teachers and teachers were given room to modify curriculum to meet the specific needs of their students (p.17).

The research findings also suggested that English school leaders systematically monitored student results and collectively developed effective teams to create interventions. This was coupled with monitoring teachers' performance where school heads and HoDs visited teachers teaching and then organised workshops in which pertinent issues were discussed to improve teacher professional capacity. School heads focus on informal peer professional

discussions and peer coaching through learning, and teaching groups effectively fostered teacher professional performance. Formal professional development opportunities were also provided to teachers to encourage pedagogical improvements in classrooms (Kaparou & Bush, 2016, pp.19-21).

4.2.4 Studies in other developed countries

This subsection discusses the role of principals in improving the performance of teachers in developed countries other than USA, Canada and England. The intention here is to explore the principal's instructional leadership in different contexts as it may vary from one context to another. Some studies conducted in Nordic countries, Australia, and Turkey are examined in this subsection.

Some characteristics and functions of instructional leaders have been studied in Nordic countries (Norway, Sweden, and Finland). Exploring the concept of instructional leadership in these countries, Salo Nylund and Stjernstrøm (2015, p.449) noted that successful instructional leadership was characterised by solidarity, coproduction and direction. In these schools, principals exercised indirect instructional leadership to promote teaching and learning. Principals were more inclined variously to set the conditions and prerequisites for effective instruction to take place. They developed structures and systems that allowed teachers to improve personally and professionally as initiators, interlocutors, negotiators, producers, and evaluators.

Principals defined an overall ambition and vision of the school and stimulated and encouraged teachers to take action towards their achievements. Principals in Nordic schools also emphasised direct instruction such as visiting teachers in classroom and providing observation feedback. Classroom visits and observations of teaching were well prepared and structured and were agreed well ahead of time in order for teachers to be properly prepared. Feedback was given both individually directly afterwards, or collectively over a long period (ibid., p.500). Principals in Nordic schools demonstrated supportive engagement and participation in teachers' professional learning and growth for successful teaching and learning in schools.

Gurr, Drysdale, and Mulford, (2010) conducted a study in Australian schools on the direct and indirect influence of principal instructional leadership on teaching and learning. The findings indicated that the way instructional leadership was enacted varied depending on the

principal. Some principals linked themselves more directly to classroom instruction by spending a significant amount of time in classrooms observing teachers and advising them on effective teaching. Other principals worked with teachers to build capacity as a means of influencing instruction rather than engaging directly in the classroom. The majority of principals focused on attracting and retaining teaching staff and developing their personal and professional capacity by focusing on improving teaching and learning and building relations (ibid., pp.306-307).

Establishing professional learning community, challenging staff to reflect on their current practices, and debating instructional issues in staff forums were the principals' major instructional activities. Principals in this study made positive contributions to teaching and learning that included engendering a sense of confidence, providing a positive direction through their vision, focusing on student learning, empowering staff, promoting change in teaching and learning, and building school capacity through collective decision-making. All principals were recognised for their contribution to the success of their schools and were regarded as the 'engine rooms' of this success (Gurr et al., 2010).

While in these studies principals demonstrated critical instructional skills and proactively engaged themselves in working with teachers on instructional matters, the situation was different when it came to practicing instructional leadership in Turkish schools. Studies conducted by Gumus and Akcaoglu (2013) and Bellibaş (2016) showed that principals were not strong instructional leaders in both primary and middle Turkish schools. Exploring the perceptions of primary teachers toward their principals' instructional leadership abilities, Gumus and Akcaoglu's (2013) findings suggested that principals did their instructional duties on an occasion basis. Instructional activities such as providing instructional direction, encouraging teamwork spirit among teachers, planning and scheduling both the work of teachers and principals, communicating to staff, observing teaching and providing feedback, coaching, and taking responsibilities for improvement were among the instructional activities that Turkish principals did not always fulfil (ibid., p.298). Among the challenges that militated against the principals' desire for exercising instructional leadership included lack of training in monitoring and observing classes and instructional activities, a highly centralised education system, principal appointment to the post without prior training, and lack of computer skills (p.298).

The findings from Gumus and Akcaoglu's (2013) study were almost similar to the findings from Bellibaş's (2016) study on the principals' and teachers' perceptions of principals' efforts to improve teaching and learning in Turkish middle schools. Using interviews and documents to collect data, Bellibaş's (ibid.) findings indicated that principals exerted indirect influence on teaching and learning while direct involvement in instructional leadership issues was very limited.

Some of the activities by principals which indirectly contributed to improved teaching and learning included the creation of a disciplined school climate, dealing with teachers and students absenteeism, and informing teachers about opportunities for professional development (p.7).

On the other hand, it was reported that principals participated in few activities that directly influenced teaching and learning. It was less likely that teachers and principals engaged in the type of conversation that was intended to improve teaching in classroom. Among several factors that resulted in low levels of principal engagement in teaching and learning, as revealed by Bellibaş (ibid.), included limited financial resources, big size of schools, lack of knowledge in different subjects taught in schools, and teacher classroom privacy where a classroom was considered as a private zone for teachers in such a way that neither the principal nor teacher colleagues could attempt to observe instruction (p.9).

It is noteworthy that all studies that were conducted in developed countries on the roles and functions of school principals, as instructional leaders, were not included in this section. However, evidence from some of them indicated that school principals were committed to enacting instructional leadership behaviours that boosted teaching and learning activities. The results generally revealed that principals influenced the work of teachers and students both directly and indirectly through being visible at school and in classrooms, working together with teachers, and sharing instructional responsibilities. Talking to teachers, developing shared goals, promoting teacher professional development, allocating resources to instruction, and fostering a climate of instructional collaboration were among important instructional leadership behaviours of principals which influence teaching and learning. However, it is not evident to us whether these findings can equally be applied in developing countries such as Rwanda where schools operate in a different context. The next section discusses findings from previous studies conducted in different developing countries especially in African countries, to identify issues that could be relevant to the Rwandan context.

4.3 Empirical research conducted in developing countries

Oplatka (2004, p.428) defines developing countries as countries located out of Europe and North America with few exceptions (e.g. Australia, New Zealand, Japan). Though these countries differ in terms of economy, culture, political systems, and religions, they are usually characterised by high mortality rates, high birth rates, high levels of poverty, and large gaps between the rich and the poor. Most of these countries are lacking the required human and financial resources to expand access to education and enhance the quality of learning in schools (World Bank 2011, p.4). Therefore, some principals in these countries lead and manage schools in difficult conditions that, in most cases, impede the effectiveness of teachers and student learning in many countries.

While a considerable body of studies exists on the roles and functions of principals as instructional leaders all over the world, very little is known on this in developing countries, especially African countries. Hallinger (2005, p.227) indicates that studies on instructional leadership were conducted almost entirely in United States, Europe, and Asia. Little research that has been carried out in Africa reveals that principals in some schools do not see themselves as instructional leaders. They feel much better in the position of school administrators or managers and provide little help to the teachers. This section focuses on research findings from different Sub-Saharan countries including Rwanda to have a general picture of how school principals support teachers and influence their instructional practices.

4.3.1 Studies conducted in southern Africa

This subsection covers studies conducted in South Africa, Botswana, Malawi, Swaziland (currently known as eSwatini), and Zambia; the southern African countries in which some empirical studies on instructional leadership are available. In these countries, low involvement of school principals in teaching and learning was reported by many researchers. For instance, Taole (2013) after exploring the role of principals in providing instructional leadership in three public high schools in South Africa indicated that principals felt inadequate to initiate and develop instructional leadership in their schools. The results of Taole's (2013) indicated that principals were more concerned with managerial and administrative issues than curriculum and teacher development issues. Instructional leadership roles of school principals seemed to be delegated to the heads of departments. Principals did not provide any support to the heads of departments to accomplish the delegated tasks. Among challenges that prevented principals from executing instructional

duties included heavy workloads, irregular daily disruptions, poor provision of teaching and learning resources, and lack of training on curriculum (Taole, pp.78-81). Since principals identified themselves as managers not instructional leaders, it was still difficult to support teachers in their teaching activities because principals were not aware of classroom challenges. However, the work of teachers in the classroom remains a key factor on the learning process and their initiatives should be supported at all cost by their leaders.

The issue of instructional leadership was also raised by Hoadley et al. (2009) in their study conducted in 66 secondary schools in Eastern Cape and 76 in Western Cape in South Africa. Principals in these schools were reported to spend most of their time on administrative functions and disciplining learners. Only 17% of the principals were involved in overseeing the curriculum and instruction and 62% of the teachers who participated in the study reported that overseeing of curriculum coverage was primarily the task of heads of departments and subject heads (pp.281-282).

However, Bush (2013, p.18) advises school leaders to prioritise the management of teaching and learning and avoid sticking to routine administrative tasks. Collaboration with teachers in the development of curriculum and instruction is necessary if both principals and teachers want to see improvement in student learning. Le Fevre and Robinson (2015, p.87) see collaborations, relationships and trust between schools leaders and teachers as the important factors that lead to school improvement and success. It is difficult to establish and cultivate good relationships, collaboration and trust if there no support from the principal who is accountable for effective teaching and learning in the school.

The low level of involvement in instructional leadership by the principal was also observed by Mestry, Moonsammy-Koopasammy and Schmidit (2013). Using the qualitative approach, they explored principals' instructional leadership and its impact on teaching and learning in Gauteng primary schools in South Africa. Their findings revealed that principals were unduly swamped with administrative tasks though they considered instructional leadership to be their primary responsibility. Principals were involved in managerial activities such as reporting, handling relations with parents, finance management, ground building, and maintenance in such a way that it was impossible to devote sufficient time on instructional issues (ibid., p.60).

As this study looked at male and female principals in terms of performing instructional leadership duties, results suggested that female principals were more active in instructional

leadership than male principals. Female principals involved their teachers in professional development activities and encouraged them to attend workshops conducted by the district and other professional institutions. Female principals also encouraged experienced teachers to share their expertise with novice teachers and, in some cases, paid for them to participate in professional development activities. The payment was done on the condition that teachers accepted to mentor their colleagues after the training sessions (Mestry, Moonsammy-Koopasammy & Schmidit, 2013, p.61).

Naidoo and Peterson (2015) explored the nature of South African primary school principals' instructional leadership. As their findings indicated, school principals hardly saw themselves as curriculum leaders. They viewed their work as school managers. There was little evidence from this study that showed that the principals' task was to ensure that teaching and learning remained the core activity in schools. Only few principals were reported to follow curriculum implementation while the majority preferred to delegate this task to other school managers (Naidoo & Peterson, 2015, p.6). In general, principals in this study were found to ignore the supervision of instruction and the collection of information about teaching and learning and student progress.

Nevertheless, Printy and Marks (2006) stipulate that attending classroom activities by principals provides opportunity to talk with teachers about instruction and its components. Principals assess the quality of instruction that is being provided and offer guidance to teachers with regard to teaching and learning improvement.

In some schools, principals were found to be active instructional leaders. This evidence was observed in the study conducted by Jita (2010) in 102 successful schools serving disadvantaged children in South Africa. Looking at how instructional leadership improves the teaching and learning of science and mathematics, it was found that successful schools tended to share instructional leadership responsibilities instead of relying on a single school leader; the principal. As the findings suggested, school leaders and teachers collaborated and interacted with one another and the interaction and collaboration were carefully monitored to ensure that they all contributed to the effective teaching and learning of science and math.

In addition, peer classroom observations and the provision of feedback helped teachers who were experiencing difficulties in teaching to improve their classroom delivery. Principals in most successful schools were not the only custodians of high standards and good

performance of both teachers and learners (Jita, 2010, p.853). Several other formal and non-formal school leaders helped to shoulder some of the teaching and learning responsibilities.

It is important to note that the basis of instructional leadership in such schools was collaboration, dialogue and personal commitment by all school members involved. Principals were less dominant and served as facilitators, developers and coordinators of instructional activities.

Similar results were reported from the study carried out by Mokhele (2016, pp.266-268) on how principals support teacher-leader in ten selected South African schools. The study findings indicated that principals and teachers worked together and both were involved in discussing curriculum development in schools. To build teachers' capacity and improve their teaching skills principals invited external subject specialists for workshops and encouraged teachers to attend them. The study revealed that principals were always available and accessible to teachers and supported them with teaching and learning support materials, as well as science equipment and library materials.

In addition, teachers were provided with laptops and had individual office space. Generally, the results indicated that principals supported their teachers irrespective of their formal or informal positions in schools. Instructional practices were shared and realised within extended groupings and networks of teachers and principals (Mokhele, p.268). Principals devoted considerable time to supporting teachers in their efforts to strengthen the quality of instruction in classrooms.

Studies on instructional leadership of school principals were also conducted in other countries of the southern African region.

In Botswana, Isaiah and Isaiah (2014) investigated the perceptions of teachers on instructional leadership roles of head teachers in secondary schools. Using qualitative and quantitative approaches to collect data from 12 head teachers and 200 teachers, the findings revealed that principals were more administrative than instructional leaders and had little to do with instruction in their schools. The findings suggested that principals in Botswana did not support their teachers in implementing curriculum.

Principals were criticised for not availing opportunities for discussing issues related to teaching and learning. Teacher and student academic progress was not monitored and principals rarely communicated and kept teachers abreast of the changes that were likely to

occur in the schools. The study showed that almost all teachers who participated in the study acknowledged that school heads were not active resource persons and did not participate in the selection of instructional materials (Isaiah & Isaiah, 2014, p.123).

Unlike the findings from Botswana, the study conducted by Toprakçi, Beytekin and Chipala (2016) in Malawi revealed that principals were active in instructional activities and were committed to supporting teachers in their teaching duties. Focused on examining instructional leadership roles of principals in secondary schools in Malawi, the study revealed that principals established partnerships with teachers, students and even parents.

Principals in these schools were reported to put much emphasis on the academic results by prioritising the allocation of resources in teaching and learning as well as effective use of teaching and learning time (ibid., p.175). Principals also valued collaboration and built positive human relations in schools. Teachers were given opportunities for professional development to gain effective skills necessary for curriculum coverage. Principals ensured that the curriculum was covered through the supervision of instruction. From these findings, it was clear that school principals influenced teaching and learning through working with teachers and providing all possible support needed to make learning more effective.

Effective instructional leadership was noted in the study conducted by van de Merwe and Schenck (2014) in primary schools in Swaziland. Looking at how primary school principals practiced instructional leadership, the study revealed that their practices were characterised by collaborative efforts based on shared leadership and healthy interpersonal relationships. School principals were accountable for teaching and learning and were committed to optimising learners' learning through a shared and directive leadership. Key factors of instructional leadership programme in Swazi primary schools, as suggested by the findings, included sharing vision and clear teaching and learning goals, collaborative support through subject panels, recognition for achievement, the pursuit of healthy interpersonal relationships, and a non-negotiable respect for instructional time (van de Merwe & Schenck, 2014, p.11).

While Malawian and Swazi (eSwatini) school principals practiced instructional leadership, the situation in Zambia was quite different. The study conducted by Kabeta et al. (2013) in Zambia revealed that principals were inadequate instructional leaders. Exploring the practice of instructional leadership and its impact on teaching and learning processes among 32 head teachers and 160 teachers from Zambian basic schools, the findings indicated that the key instructional leadership functions were not actively practiced in schools. Framing and

communicating school goals and coordinating curriculum were delegated to deputy principals and senior teachers without any support to achieve them. The findings also revealed that the majority of head teachers did not supervise and evaluate the teaching and learning, monitor student progress, and protect instructional time because they were busy with administrative work. The findings of this study showed that head teachers were also not visible in the schools and environments in many schools were not conducive to teaching and learning. Infrastructure was dilapidated in such a way that it disturbed and interrupted teaching and learning. In most cases, school instructional tasks did not take precedence over other non-teaching activities (i.e. sport) and this would even lead to the cancellation of classroom activities (Kabeta et al., p.1881).

The study further showed that inadequate provision of instructional leadership by head teachers impacted negatively on the teaching and learning process and consequently led to poor teacher and learner performance (Kabeta et al., 2013, p.1882).

4.3.2 Studies conducted in west Africa

Research on school principals as instructional leaders has also been conducted in west Africa. This subsection focuses only on empirical studies conducted in Ghana and Nigeria due to the limited research on instructional leadership in this part of Africa.

A study conducted in Ghana by Malakolunthu, MacBeath and Swaffield (2014, pp.707-710) indicated that head teachers made efforts to engage teachers and the whole community in school instructional matters. Looking at how leadership for learning impacts on teaching and learning in Ghana's basic education, the study findings showed that head teachers paid attention to teaching and learning through providing teachers with teaching aids and learning materials. Collaboration among teachers through working in teams and collectively talking about instructional issues was one of leadership strategies used by head teachers to improve teachers' effectiveness (Malakolunthu, MacBeath & Swaffield, p.707).

To talk with colleagues and share views on teaching and classroom management stimulated teachers to make amendments and readjustments in their pedagogical style. In this study, it was discovered that teachers' instructional practices such as collective planning of instruction, engaging students in creative learning, using appropriate teaching aids, and using student groups were largely influenced by collaboration, cooperation, and teacher professional growth initiated and maintained by both teachers and principals (ibid., p.709).

Active participation in instructional activities by principals was also reported by Donkor and Asante (2016) in their study conducted in basic schools in the Kwaebibiren district of in Ghana. Using a survey approach, Donkor and Asante (ibid.) explored instructional activities of principals with 60 head teachers, 240 teachers and 5 circuit supervisors. The findings suggested that head teachers were committed to providing instructional leadership in the basic schools of Ghana. Principal supervision, evaluation of instruction, and direct personal support to teachers were dominant in these schools.

Both urban and rural head teachers were reported to perform the commonest instructional activities such as communicating clearly with staff regarding changes in instructional matters, organising staff meetings for teachers to interact on academic issues, assisting teachers who had problems in specific subject areas, providing curriculum materials for teachers and monitoring their effective use in the classroom, ensuring that teachers make effective use of learning time, and encouraging teachers to undertake distant learning programmes (Donkor & Asante p.74).

On the other hand, the study indicated that head teachers were less active in some other instructional activities which could positively impact on teachers' performance as well as student learning. These activities included providing teachers with opportunities for observing one another and discuss the content delivery, opportunities for teachers to organise in-service activities in schools, involving teachers in the planning of in-service training, and holding formal meetings with students to discuss their problems regarding teaching and learning. The findings indicated that instructional leadership existed in the schools that were investigated but some of its aspects seemed to be implemented more than others.

Principals' instructional leadership has also been studied in Nigerian schools. Enueme and Egwunyenga (2008) looked at the role of the principal as an instructional leader in affecting the work performance of teachers in government secondary schools from Asaba Metropolis of Delta State (Nigeria). Using questionnaire to collect data from 240 teachers, the findings revealed that principals were active in classrooms. Almost all teachers investigated were satisfied by the work of principals which consisted of checking teachers' lesson notes, offering corrections, maintaining a supportive teaching and learning environment, and promoting teacher professional growth.

Principals were also found to be committed to sharing curriculum knowledge with teachers and this was perceived as helpful support by the majority of teachers who participated in this

study. Instructional leadership significantly correlated with teachers' job performance in this study (p.16). What principals did in these schools is in line with Printy's (2008) view which emphasises that interaction between teachers and school leaders around instructional matters improves teaching and learning in the classroom. When teachers feel that they are collaboratively working with their principals, their morale, commitment and performance are easily boosted.

4.3.3 Studies conducted in east Africa

Empirical studies on principal instructional leadership have also been carried out in the east African region. This subsection focuses on studies that were done in Eritrea, Ethiopia, Kenya, Tanzania and Rwanda; the countries in which school leadership was explored.

In Eritrea, Tedla (2012) states that school principals provide inadequate instructional leadership in their schools. Exploring the instructional leadership of principals in creating a quality learning atmosphere in secondary schools in Eritrea, Tedla (2012) discovered that principal's time was largely consumed by other tasks than instructional leadership. Instructional leadership activities such as providing necessary resources to teachers, offering professional opportunities to teachers, supervising instruction, and creating conditions for effective teaching and learning were not emphasised.

The principal spends most his/her time dealing with managerial issues, meetings, paperwork, planning, budgeting, student discipline, and office work and had limited time to deal with instructional processes (p.851). Cooperation, collaboration, and communication were limited and teachers were not empowered to participate in the decision-making process. In sum, lack of teacher readiness, inaccessibility to adequate resources, limited participation and lack of teacher in service training impacted negatively on teacher effectiveness and student learning.

Ahmed (2016) looked at secondary school principals in the Assosa Zone of Ethiopia and noted that they were not active in providing instructional leadership. Using a survey approach to explore instructional leadership practices of principals, Ahmed's (ibid.) results indicated that school principals performed various instructional practices at low level. Among these practices only communicating school goals, supervision and evaluation of instruction, monitoring of school progress, protection of instructional time, maintaining high visibility, and promoting professional development seemed to be practiced at a level near to average. Other instructional activities such as coordinating curriculum, providing incentives for

teachers and students were performed at a very low level. Based on these findings, Ahmed (2016, p.208) concluded that principals performed poorly when it comes to instructional leadership practices in the secondary schools of the Assosa zone in Ethiopia.

Studies on school principal instructional leadership were also conducted in Kenya. Lydiah and Nasongo (2009) and Nyagosia, Waweru, and Njuguna (2013), using surveys, conducted studies to determine the role of principals in influencing academic achievement in secondary schools in Kenya. In these studies, it was found that the top performing schools had principals who emphasised instructional leadership. Principals from top performing schools focused on the school mission, safety and orderliness of schools, expectations for success, home-school relations and opportunity for students to learn. In these schools, it was discovered that principals ensured the achievement of established mission and goals through creating a good environment in which teachers and students felt comfortable to teach and learn. In addition, principals supervised teachers' work and encouraged them to keep updated professional documents. They also checked students' work and ensured that the curriculum was covered on time and that there were induction courses for novice teachers. Regular staff meetings, joint planning activities, and allocation of teaching resources by principals were among the factors that contributed to teachers' effectiveness and student achievement in top performing schools.

Unlike results from Kenya, a study conducted in Tanzania showed that school principals were not strong in carrying out instructional tasks in their schools. Manaseh (2016) investigated instructional practices performed by heads of schools to enhance instruction and student learning in secondary schools in Tanzania. The findings suggested that heads of schools were not active in various instructional functions including coordinating curriculum, monitoring teachers' classroom teaching, conducting classroom observations, and participating in the review of curriculum materials.

As Manaseh's (ibid.) findings suggested, principals' involvement in academic activities was not adequate to boost effective teaching and learning. An example was that principals checked the work of teachers (schemes of wok, lesson plans, and subject logbooks) not for the purpose of ensuring syllabi were covered timely, but for the sake of formality because these documents constituted the school inspection documents for external inspectors.

Heads of schools were also reported to occasionally observe instruction. They only walked around outside the classrooms but without any interest to enter classrooms and observe how

teachers were teaching and how students were learning. It was further revealed that heads of schools did not engage in the review of curriculum as they claimed not to be empowered to do so. In sum, the findings suggested the principals' intervention in curriculum planning and implementation was limited. As a result, it was difficult for them to identify areas that needed improvement and consequently design appropriate support strategies because they were not aware of strengths and weaknesses of their teachers (Manaseh, 2016, p.42).

4.3.4 Studies conducted in Rwanda

Instructional leadership has not received significant attention in Rwanda as there are no specific studies conducted and published on its implementation in both primary and secondary schools. Although some empirical studies have been conducted on school leadership with few aspects of instructional leadership (Kambanda, 2013; Karareba, 2016), there is no single research that has attempted to provide holistic insights into principal instructional leadership and its influence on instructional practices of teachers. Among the studies that were conducted on school leadership included the one by Kambanda (2013). Exploring the role of principals in leading and managing school culture in the Huye district, Kambanda (2013) indicated that very few secondary school principals in Rwanda promoted the culture of collaboration in teaching and learning in their schools. The few school principals encouraged instructional leadership practices through collectively planning instructional programmes, facilitating discussion about teaching and learning, and encouraging staff to exchange their expertise. They also provided constructive advice daily to teachers and students, encouraged teachers to share teaching resources, and facilitated teamwork in lesson plan. It was, however, discovered that the majority of principals were more administrative than pedagogical or instructional in leadership and sometimes invisible and inaccessible to teachers, students and other school members (Kambanda, 2013, p.259).

Similarly, Nsengimana, Ozawa and Chikamori (2014, p.84) investigated the implementation of outcome-based education (OBE) in science curriculum in secondary schools in the southern province of Rwanda. Nsengima et al.(2014) found that some principals exercised strong leadership by being visible in schools, supervising, supporting and monitoring teachers, working collaboratively with school staff and parents, and modelling through conducting lesson studies.

Other school principals, on the other hand, did not provide resources, promote teacher professional development and monitor student learning. In brief, ineffective school

leadership, lack of adequate resources, a low student proficiency in English, and low morale of teachers were the main factors that contributed to low level of OBE implementation in science curriculum in many schools that were investigated.

Principal's inattention on teaching and learning was also reported by Karareba (2016) who confirmed that school principals in Rwanda were more concerned with managerial than instructional duties. In his investigation of leadership at the primary school level in post-conflict Rwanda, Karareba (ibid.) posited that the managerial leadership style dominated primary school leaders in Rwanda. Managerial activities such as ensuring attendance of teachers at work and students in classrooms, managing students' discipline in and outside classrooms, coordinating activities pertaining to the construction and rehabilitation of classrooms, purchasing teaching materials, managing school finance and resources, and attending meetings at the sector and/or district level seemed to take up almost the time of school leaders. In this study, teachers expressed their concerns that school leaders did not professionally support them in important teaching areas including the implementation of learner-centred pedagogy, the acquisition of English language proficiency, and the ability to impart knowledge and skills to children with physical and intellectual disabilities. Lack of skills and knowledge in leadership, financial constraints, lack of training in English, and lack of adequate resources were among the factors that made it difficult for principals to support their teachers.

A study that observed some aspects of instructional leadership in Rwanda was conducted by Bizimana and Orodho (2014). Using the quantitative approach, Bizimana and Ordho (ibid.) investigated the relationship between the availability of teaching and learning resources and effective classroom management and content delivery in secondary schools in Rwanda. The results indicated that there was a significant and positive relationship between teaching and learning resource availability and teacher effectiveness, classroom management and content delivery (r=.711, p=.0001). However, the same study revealed that teaching and learning resources were scarce in the schools. It was discovered that laboratories, audio-visual teaching aids, libraries, computer labs, and classroom resources were insufficiently provided and this comprised the teachers' effectiveness in managing classrooms and the delivering the content (Bizimana & Orodho, 2014, p.120).

The overview of empirical research in Rwanda indicated that there are no previous studies that are focused on principal instructional leadership. In addition, other studies conducted in

the East African region and other parts of Africa established that principals were not effective instructional leaders. Part of this ineffectiveness lies in the fact that principals face some challenges that inhibited the development of instructional leadership in their schools. The following section discusses these challenges in order to expose the barriers and obstacles that prevent principals from effectively carrying out instructional leadership tasks in schools.

4.4 Empirical challenges that impede principal's instructional leadership

The principal is expected to fulfil a variety of roles that are related to the behaviours of teachers for improving students' learning outcomes. However, in spite of successes in some schools, a large number of empirical studies indicates that numerous barriers and obstacles exist that prevent principals from fulfilling their instructional roles. Though these challenges vary from one context to another, common challenges that were reported in developing countries and some developed countries include lack of time, lack of adequate training and skills, lack of (adequate) resources and highly centralised education systems (Bizimana & Orodho, 2014; Gumus & Akcaoglu, 2013; Kaparou & Bush, 2016; Oplatka, 2004; Taole, 2013).

4.4. 1 Principal's lack of time

One of the constraints that make it difficult for principals to fulfil their instructional leadership roles in schools is lack of time. This constraint is often a result of principals' heavy workloads where they fail to balance instructional activities and managerial and/or administrative tasks.

The lack of time is exacerbated these days by work intensification resulting from increased daily responsibilities (Mestry, 2017, p.258; Pollock, Wang & Hauseman, 2015, p.556). Work intensification makes principals, especially in developing countries, deal with managerial and administrative responsibilities at the expense of instructional leadership duties (Oplatka, 2004, p.433). Today, principals are more involved in maintaining student discipline, ordering and purchasing school equipment, managing school finances and other resources, building and maintaining classrooms, attending meetings outside the school, and handling relations with parents and other external agencies (Ahmed, 2016; Karareba, 2016; Mestryet al., 2013; Tedla, 2012).

To solve financial problems also takes up much time that school principals should spend on instructional leadership tasks. For example, school principals in Botswana, Ghana, Kenya and

South Africa were reported to engage in fundraising activities to gain access to facilities such as the telephone, clean water, physical facilities and extra land for school's extracurricular activities (Kitavi & van der Westhuizen, 1997; Mestry et al., 2013). In most cases, principals engage in such activities when governments fail to provide adequate funds and principals opt to gather funds from parents and communities. This supports Oplatka's (2004, p.435) argument that many African school principals are interested in performing managerial tasks and striving to satisfy basic needs and functions that most principals in Western countries have never included in their roles.

Principals whose focus is mainly on administrative and managerial duties than instructional duties are not accessible to teachers and students and cannot attend to matters related to teaching and learning. As a result, they are not aware of what is happening in their school and in the classroom. Both the work of teachers and students may not improve since there is no professional intervention and support from principals.

4.4.2 Principal's lack of skills and training

Another challenge that impedes effective execution of instructional duties by school principals is inadequate preparation and lack specific training in various aspects related to instructional leadership. For principals to work with teachers on curriculum and instruction they need to have skills on teaching and learning theory, instructional methods and new trends and be able to effectively share them with teachers (Bhengu et al., 2014, p.209). Yet, in many empirical studies reviewed above it was discovered that the majority of school principals lacked the required abilities, skills and knowledge necessary to provide support to teachers and students in relation to the teaching and learning process (Ahmed, 2016; Bellibaş, 2016; Manaseh, 2016). Part of this challenge lies in the fact that the pre-serve preparation that school principals receive from universities and colleges does not equip them with skills and knowledge to assume instructional responsibilities.

Colleges and universities tend to concentrate on non-instructional content areas and rarely included courses on instructional leadership (Wanzare & Dacosta, 2001, p.278). In many countries, especially in Africa, the majority of school principals are prepared as teachers not as prospective school leaders, which later impacts on their capacity to perform leadership roles embodied in the principalship position.

In schools where professional development has been explored and documented, few opportunities for principals and teachers development were available especially in developing countries. This is because, in addition to ill-preparation at universities and colleges, principals are appointed to their post without prior training for the role of leading schools. It was reported, for example, that in Tanzania, Zambia, Bangladesh, Nigeria, Ghana , Botswana, and also Turkey principals are appointed on the basis of qualification rather than leadership potential and skills (Gumus & Akcaoglu, 2013; Kabeta et al., 2013; Ifoema, 2013; Manaseh, 2016; Oplatka, 2004; Salahuddin, 2012). To be principals in these countries, training is not compulsory; instead bachelor or master's degree in education is a must for those who desire to be school principals. Most principals' leadership skills are developed on the job through experience and intuition rather than training because many of them do not receive leadership training prior to, or at the work place (Karareba, 2016; Salahuddin, 2012, p.59).

The transformation of principals from the roles of managers to leaders is still a challenge in developing countries because of the principals have not be trained in the area of principal leadership. Thus, there is need for the governments to understand that principals with limited or no access to ongoing leadership professional development often do little or none to support teachers and students' learning. The possession of a teaching qualification or experience is not enough in itself to ensure that principals' central leadership tasks are well performed and that teachers and students are appropriately supported. Rather, a requirement for specific preparation and continuous professional development programmes is needed to capacitate and ensure that those who are promoted to principalship position have knowledge, skills and disposition critical to attain high quality teaching and learning (Bush, 2008; Zame, Hope, & Respress, 2008).

4.4.3 Principal's lack of (adequate) resources

Given the financial constraints under which schools are operating, it was discovered that the majority of schools in developing countries face many challenges related to the development of educational infrastructure, the provision of teaching and learning material support and even human resources (Oduro & MacBeath, 2003; Oplatka, 2004). For instance, research conducted in Ghanaian schools by Malakolunthu et al. (2013, p.210) indicated that due to the insufficient textbooks two or more students shared one book for the core subjects (English, Math, Science) and one book for the whole class in moral and religious courses. Westbrook

et al. (2013) add that the primary teaching and learning materials in many Ghanaian schools remained the blackboard, student notebooks and some textbooks.

The lack of resources is common in many developing countries where the shortage of school equipment, physical resources (i.e. classrooms, latrines, staff accommodation), lack of play ground facilities and other resources makes it very difficult for principals and teachers to enact instructional leadership (Bush & Oduro, 2006).

Research conducted in Rwanda, Eritrea, Ethiopia, South Africa, and Bangladesh highlighted the same problem and it was discovered that teaching and learning was compromised by the inability of principals to provide teachers with sufficient teaching and learning resources (Ahmed, 2016; Bizimana & Orodho, 2014; Salahuddin, 2012; Taole, 2013; Tedla, 2012). Akinyi and Onyango (2014, p.55) and Bizimana and Orodho (2014, p.120) posit that the paucity of resources and materials constrains teachers' content delivery and students' learning activities. In other words, insufficient resources, students' active participation in the lesson and the possibility for teachers to use a variety of pedagogical approaches are all limited. Teachers handle subjects in an abstract manner and chances are high that some teachers skip certain lesson topics as a result of insufficient teaching and learning resources (Lingam & Lingam, 2013, p.2162).

The situation of inadequate supply of appropriate instructional materials in a large part of developing countries was mostly observed in the countries displaying high student enrolment rates in which classes are overcrowded than expected. It was, for example, revealed that teachers in Uganda could not use group work in classrooms though they were aware of its importance because it was not possible to provide sufficient resources to a class size of over 150 students (Nyakabugo et al., 2006). Similarly, Salahuddin (2012, p.61) said that one of the problems that Bangladeshi schools were facing was the high teacher-student ratio not generated according to a standard level based on the teaching facilities available. Many students exceeding allocated seats, insufficient teachers, insufficient learning-teaching materials and lack physical facilities all impacted on teaching and student outcomes in Bangladeshi urban secondary schools.

In general, there is evidence that many schools, especially those from developing, countries are poorly resourced. Though the availability of resources per se does not guarantee effective teaching and learning (Hoadley et al., 2009, p.384; OECD, 2009, p.103), insufficient or a lack of resources may hinder effective practices of teachers and students' activities in learning.

Therefore, school leaders and other educational partners should make an effort to overcome the problem of limited resources in schools as this has the potential to encourage school principals and teachers to keep their focus on student learning and school success.

4.4.4 A highly centralised education system

A highly centralised education system creates barriers that impede instructional leadership to flourish in schools. With this system, the central government remains with the complete power and control of education with very limited flexibility for school principals and teachers to take their own initiatives about school improvement. This situation is common in developing countries and some developed countries where the States are still working in a centralised system. Referring to centralisation in developing countries Oplatka (2004) said:

> the highly centralised systems in developing countries, coupled with the minor importance attached to principalship and education, appear to create a narrow definition of the role that is largely expressed by the over-emphasis accorded administrative-managerial functions and the relatively small amount attention given to instructional tasks (p.432).

The problem of high centralised education system is observed in developing countries as well as in some developed countries. For instance, Gumus and Akcaoglu (2013, p.299) in their study in Turkey and Kabeta et al. (2013, p.1881) in Zambia found that centralised education structures made it difficult for school principals to provide professional activities for teachers. It was only the Ministry of Education which was allowed to announce teacher professional development opportunities. In such situations, principals and teachers do not have autonomy and flexibility to seek various means for achieving professional growth at school level. Rather; they have to wait for the central government decisions which, in many cases, do not consider the local needs of specific schools.

Similarly, Kaparou and Bush (2016) revealed that principal's instructional leadership was undermined by tight centralised system in Greek secondary schools. The mission and vision of the schools were merely articulated in the more centralised setting and principals and teachers were simply required to perform instructions to achieve the government stated mission and goals. Principals were requested to follow national curriculum guidelines which did not provide them with opportunities to be flexible, creative and innovative in their schools. Collaboration and dialogue between teachers and principals were not emphasised

and principals dominated all activities in schools as they were dealing with the government directives and control (Kaparou & Bush, 2016, p.16).

The fact that governments have a tight control of their education systems undermines the practice of instructional leadership and principals tend to adopt a stance in favour of management and administration (Bush, 2008; Oplatka, 2004). Yet, for effective instructional leadership to happen in school a certain degree of decentralisation is necessary to allow principals and teachers to make some decisions at the school level and have ownership of activities in schools. In such a situation, commitment and morale increase since all school members implement decisions partly coming from within the schools rather than only coming from the central government. Developing teacher capacities and promoting collaboration among teachers and principals around instructional matters become easy as there is a certain amount of autonomy and scope of creativity and initiative to improve instruction and student learning in schools (Brauckmann & Schwarz, 2014, p.825).

In short, the challenges that were discussed above contributed to school principals spending most of their time performing managerial and administrative tasks at the expense of their instructional duties in schools.

It is important to emphasise that empirical evidence from both developing and developed countries indicated that school principals from developed countries were generally more active and involved in instructional leadership activities than their counterparts in developing countries. Many important principals' instructional leadership behaviours observed in Western countries such as developing shared goals, talking with teachers, promoting teacher professional development, monitoring instruction, fostering collaboration, and maintaining high visibility were yet to be fully practiced in developing countries, especially in Africa.

It should be noted, however, that evidence from research conducted in developing countries showed that the practice of instructional leadership varied from one school to another and from country to another. Generally, the majority of principals in Africa accord more emphasis to administrative and managerial functions than instructional leadership activities. Principal's lack of time, lack of in-depth training in instructional leadership roles, lack of adequate teaching and learning resources, and a highly centralised education system were some of the barriers that constrained principals from exercising effective instructional leadership in many countries.

In Rwanda, to the researcher's knowledge, there are no specific studies that were conducted on the principals' involvement in instructional leadership and its influence on teachers' instructional practices. In addition, studies conducted elsewhere in Africa have not clearly established the link between instructional leadership behaviours of the principals and teachers' instructional practices. Therefore, this is the gap in knowledge that this study seeks to fill.

Again, the fact that these studies were conducted in the contexts different from Rwanda, leads to the need to conduct this research in Rwanda because there is not one-size-fits-all leadership model available for all countries. Hallinger (2011, p.138) says that there is need to match instructional leadership strategies with context-specific conditions and have information on how it works in different settings. Rwanda presents a unique history of not only economic challenges but also of post-conflict scenarios. It should further be noted that some developing countries like Botswana, South Africa, Nigeria, Kenya, Tanzania are classified as emerging economies hence their contextual specificities may not necessarily be applicable to the Rwandan context.

4.5 Chapter overview

Chapter 4 has examined empirical studies conducted in both developed and developing countries on instructional leadership of school principals. The chapter has also looked at the challenges that prevent school principals from implementing instructional leadership effectively. Evidence from examined studies shows that school principals from developing countries work in difficult conditions in comparison to school principals from developed countries. It was also evident that studies conducted on instructional leadership especially in African countries focus more on school principals' impact on students' learning and achievements than on teachers' instructional practice improvement. This leaves a gap that this study intends to bridge by exploring instructional leadership of school principals and its influence on teachers' instructional practices in the Rwandan school context.

The next chapter is devoted to discussing the methodological approaches that were utilised in the process of collecting and analysing data for this study.

CHAPTER 5: RESEARCH METHODOLOGY

5.1 Introduction

Subedi (2016, p.570) maintains that the determination of research methodology is one of the key challenges that a researcher can confront. According to Kothari (2004, p.8), this challenge lies primarily in the way a researcher selects research methods and how s/he determines their efficiency and suitability to find solutions to the research problem. This chapter, therefore, provides insights into the research methodology and designs used to investigate school principals' enactment of instructional leadership behaviours and how these behaviours influence instructional practices of teachers in secondary schools in Rwanda.

As any research is underpinned by a theoretical perspective, this chapter starts with a discussion on two major research paradigms; positivism and interpretivism. Based on ontological, epistemological and methodological positions of both paradigms, an analysis of a controversial debate between positivists and interpretivists provides insights that justify the use of mixed methods in this study. The chapter also explains and justifies the research approaches adopted, the research instruments used for data collection, the sampling strategies, and data collection and analysis techniques. Lastly, this chapter deals with the issues related to validity and reliability of the research findings, as well as ethics.

5.2 Research paradigm debate

A paradigm, according to Kivunja and Kuyini (2017, p.26) and Rubin and Rubin (2005), is an overarching philosophical or ideological stance, a system of beliefs about the nature of the world and ultimately, when applied in research setting, the assumptive base from which we go about producing knowledge and interpreting it. Morgan (2007, p.50) sees a paradigm as world views or all-encompassing ways of experiencing and thinking about the world including beliefs about morals, values, and aesthetics. Paradigm refers to shared belief and systems that influence the kinds of knowledge researchers seek and how they interpret the evidence they collect. It helps to determine the criteria by which a researcher selects and defines problems for inquiry and how to approach these problems theoretically and methodologically (Harrits, 2011, p.152).

In order to differentiate one paradigm from another different taxonomies have been used but it has been shown that the paradigms have a common denominator, namely, the sharing of three fundamental components: ontology, epistemology, and methodology (Cameron, 2011, p.100; Scotland, 2012, p.9).Ontology is defined by Crotty (2003, p.10) and Mertens (2007, p.215) as 'the study of being'. It is concerned with 'what kind of world we are investigating, with the nature of existence, with the structure of reality as such'. Ontology reflects beliefs about the nature of reality. Ontological assumptions are concerned with what constitutes reality, in other words *what is*. Researchers need to take a position regarding their perceptions of how things really are and how things really work (Scotland 2012, p.9).

Epistemology, on the other hand, is a way of understanding and explaining how we know what we know (Crotty, 2003, p.3; Kivunja & Kuyini, 2017, p.27). Epistemological assumptions are concerned with how knowledge can be created, acquired, and communicated, in other words '*what it means to know'* (Scotland 2012, p.9). Epistemology provides a philosophical ground for deciding what kinds of knowledge are possible and how we can ensure that they are adequate and legitimate. This adequacy and legitimacy depend on the nature of the relationship between the investigator (the knower) and the investigated (the would-be known) (Mertens, 2007, p.215). The pertinent question in epistemology is to know whether a researcher should be close to participants to fully understand their experiences or if s/he should keep a distance to remain neutral in the process. It thus affects how a researcher will go about uncovering knowledge in the context of investigation.

The last component of a paradigm is methodology. Kivunja and Kuyini (2017, p.28), McGregor and Murnane (2010, p.420) and Scotland (2012, p.9) define methodology as a strategy, or plan of actions which lies behind the choice and use of particular methods. In other words, methodology refers to the group of methods, approaches, and procedures that complement one another to deliver data and findings that reflect the research questions and suit the research purpose. Mertens (2007, p.215) states that methodology asks the question of how researchers can go about finding out whatever they believe can be known as a reality. Thus, methodology is a full process of research from formulating research questions to drawing conclusions in a study including the methods and the conceptualisation and interpretation stages of this process (Plano Clark & Ivankova, 2016, p.61).

Based on different beliefs about the nature of social realty (ontology), how we know this reality (epistemology), and the process of studying it (methodology), two major research

paradigms; positivism and interpretivism have been subjects of many discussions in social science methods for the past two decades (Johnson & Onwuegbuzie, 2004, p.14; Morgan, 2007, p.48). Positivist and interpretivist thinkers adopt contrasting positions about what the social world is like and how it is possible to understand phenomena that take place in it. Despite this dichotomy some researchers like Mertens (2007, p.67) and Nudzor (2009, p.118) advocate the combination of two perspectives to alleviate the tension between them and to take advantages of each perspective's strengths.

5.2.1 The positivist paradigm

Nudzor (2009, p.116) defines positivism as an approach to social research that seeks to apply the natural science model of research to investigating social phenomena. The positivists or quantitative research defenders find it necessary to apply methods that are successful in natural sciences in social or human sciences in order to scientifically validate theories of human behaviours. Positivists claim that social observations should be treated as entities in the same way that physical scientists treat physical phenomena (Johnson & Onwuegbuzie, 2004, p.14). The French philosopher, Auguste Comte, the first thinker of positivist model in social science argues that observation and reason are the best means of understanding human behaviours. The genuine knowledge is based on sense experience and can only be obtained by means of observation and experiment (Cohen, Manion, & Morrison, 2011, p.7).

At the ontological level, the positivists contend that there is only one truth, an objective reality that exists independently of human perceptions (Sale, Lohfeld & Brazil, 2002, p.44). This suggests that positivist researchers do not by themselves create the reality in their research; rather, they discover it through empirical means. They work with an observable social reality and direct observation and experiments are important tools to produce objective and quantifiable knowledge free of human perceptions. Most positivists assume that reality is not mediated by our sense and that it exists independently of whether or not the social researcher has yet discovered its existence (Nudzor, 2009, p.116; Scotland, 2012, p.10).

Epistemologically, Sale et al. (2002, p.44) posit that the main concern of the positivists is for the investigators to study a phenomenon without influencing it or being influenced by it. This assumption is premised on the belief that the social investigator and the investigated are two different and independent entities, and consequently the investigator needs to adopt a distant, detached, neutral, and an interactive position. This position, according to Kivunja and Kuyini (2017, p.33), enables the investigator (researcher) to remain emotionally neutral and to

assume the role of an objective analyst avoiding anything that can alter the substance of the data collected. All sources of bias are minimised and all ideas based on personal preferences, beliefs and values are eliminated at all cost. During the whole process of data collection and interpretation, the research remains impartial in order to produce reliable, valid, and generalisable results.

The positivists suggest that the goal of an investigator is to measure and analyse relationships between variables (dependent and independent) but within a value-free framework (Gray, 2004, p.20). The positivist methodology consists of collecting numerical data, analysing them, and explaining the relationships with an attempt to identify the causes that influence the outcomes (Howe, 2011, p.169; Scotland, 2012, p.10). Techniques such as randomisation, closed ended questionnaires, standardised observation tools are used to collect data and descriptive and inferential statistic techniques are employed to analyse them in order to verify the predetermined hypotheses and generalise the sample results to the whole population (Sale et al., 2002, p.45; Scotland, 2012 p.10).

While positivist researchers recommend social phenomena to be researched in ways similar to natural and physical phenomena, many scholars disagree with this point of view and criticise the tenets of positivism to be inappropriate when it comes to study the social world. Silverman (1970) cited in Goldkuhl (2012, p.4) says that natural scientists and social scientists are two different entities that work in different realms. As a result, the idea of replicating the successful research methods in the natural world to the studies of social world is not justifiable as it deprives human beings of their ability to interpret their experiences and provide the contextual meanings to the world.

To support Silverman's idea, Nudzor (2009, p.117) adds that natural science and aspects of social science have different areas of discourse, and as such, each adopts a different approach to constructing knowledge. Social phenomena are not understood through the use of rigorous scientific methods; rather they are understood from the standpoints of the individuals who are part of the ongoing action being investigated (Cohen et al., 2011, p.15).

Meaning and realty in the social world are not discovered but constructed from the process of social interaction and through the perceptions and experiences of the investigator and the subjects under investigation (Kivunja & Kuyini, 2017, p.33; Gray, 2004, p.24; Scotland, 2012, p.12). The above criticism led to the introduction of a different paradigm, namely, the interpretivist paradigm.

5.2.2 The interpretivist paradigm

The interpretivist theoretical perspective is a reaction against the positivist beliefs concerning research in social phenomena. Unlike positivists who maintain that reality is fixed and objectively measured, interpretivists or qualitative researchers believe that reality is subjective and socially constructed by individuals or groups within a particular social and historical context. In social science research, reality is not constant and does not exist prior to the activity of investigation. Reality emerges during the research process and ceases to exist when we no longer focus on it (Sale et al., 2002, p.45).

Interpretivist researchers posit that there are multiple truths and multiple realities based on human perceptions. The purpose of research in interpretivism is to seek an understanding and interpretation of people's lives, experiences, and meanings associated with particular events, actions or decisions (Gray, 2004, p.24, Nudzor, 2009, p.118). In this paradigm, researchers believe that each individual constructs his or her own view of the world based on his or her own experience and perceptions.

Kivunja and Kuyini (2017, p.33) note that in interpretive research, a researcher tends to rely on the participant's views of the situation being studied and recognises the impact of participants' back ground and experience on the research. To answer the research questions in such paradigm, researchers use these experiences and construct and interpret their understanding from the gathered data (Thanh & Thanh, 2015, p.24).

Interpretivists hold the view that social phenomena cannot be understood through the application of principles adopted from natural sciences. Interpretivist research, for instance, does not aim to identify cause and effect relationships and establish universal truths about the world. Rather, it focuses on understanding the social world through the interactions of humans and this world (Scotland, 2012, p11; Thanh &Thanh, 2015, p.25).

Intepretivist researchers recognise that different people and different groups have different perceptions of the world (Willis, 2007). Silverman (2001) adds that people's experiences are complex, subjective, and embedded in specific social and historical context. All this suggests that each community or organisation experiences its own reality that needs to be understood in a particular context. The role of interpretive researcher is thus to make sense of what is happening through interpretation of individuals' understandings. Generalisability in this process is not of crucial importance because reality can change from time to time or vary

from on community to another. That is, something that holds true today may not necessarily hold true tomorrow, or in another community with a different social and historical context.

The interpretivists also assume that the best way to understand a social phenomenon for a researcher is to become immersed in it in order to uncover rich and detailed information (Goldkuhl, 2012, p.6). For this reason, investigators should not be detached from the object of the study; rather, they should be interactively linked so that findings become mutually created within the context of the situation which shapes the inquiry (Krauss, 2005, p.760).

One of the interpretivist principles, according to Goldkuhl (2012, p.6), is to maintain a closer relationship between researchers and the researched in such a way that empirical data collected become a product that is socially generated by both sides. This assumption is premised on the belief that in social phenomena, researchers and their informants (participants) are interdependent and mutually interactive. Because of this interaction, it may not be possible to assume a value-neutral stance during the data collection process.

Objectivity in data analysis may also not be attained since researchers' professional judgments and participants' perspectives are considered in the interpretation of the findings (Scotland, 2012, p.12). Social science is thus seen as primarily more subjective than objective (Cohen et al., 2011, p.15).

Methodologically, interpretivist researchers do not use rigorous scientific methods that produce numerical and quantifiable data. Rather, they use methods that enable them to understand social phenomena from the individual's perspectives (Creswell, 2009). According to Nudzor (2009, p.117) and Scotland (2012, p.12), interpretivist methodology is concerned with investigating a small number of cases in details through the use of explicit interpretation of meanings and functions of human actions which take the form of verbal descriptions and explanations. A sample in interpretive research does not necessarily represent the large population; rather it is selected to provide rich information about the phenomenon under investigation. In-depth and focus group interviews, open-ended observations, open-ended questionnaire, text messages and discourses are key data collection methods within interpretivist research that usually generate qualitative data (Kivunja & Kuyini, p.33; Scotland, 2012, p.12). Interpretation of these data yields insights and understandings of behaviours and actions from different participants' views.

It is worth noting that the interpretivism paradigm, like its counterpart positivism, has been subjected to numerous criticisms. First, it is said that in interpretivist research, researchers do not have a consensus on appropriate methods or ways to collect data and analyse them (Bryman, 2001). As a result, legitimacy and trustworthiness cannot be fully achieved. Secondly, interpretivist researchers produce unreliable findings. This is because, as Nudzor (2009, p.118) and Rolfe (2006, p.305) say, interpretivism is more concerned with issues of subjectivity and there is a tendency for research participants to provide contradictory and inconsistent explanations while describing social phenomena. Lastly, knowledge produced by the interpretive paradigm is not generalisable because researchers generate it in a highly contextualised environment with subjective individual constructions (Scotland, 2012, p.12, Yilmaz, 2013, p.313).

Having discussed the basic assumptions of the two paradigms and considering the strengths and limitations of each of them, the researcher opted to combine both paradigms (quantitative and qualitative approaches) as they can complement each other to understand better the research problem. According to Nudzor (2009, p.120), the qualitative approach itself is unable to tell us how variables interact or which of them has a stronger relationship to the phenomenon under investigation. Quantitative methods, on the other hand, cannot tell us about the complexity of the phenomenon within a particular situation and environment. That is why Mertens (2007, p.67) and Nudzor (2009, p.119) suggest the combination of two perspectives in a single study to take advantages of each perspective's strengths.

In combining positivist and interpretivist perspectives in this study, the researcher took account of the purpose of the study. Quantitative principles were used to describe instructional leadership behaviours school principals enact and to establish the relationship between these behaviours and teachers' instructional practices. Qualitative methods were used to explain this relationship through the perceptions of teachers and their principals within a specific school context. Hence, mixing quantitative and qualitative approaches as a mixed methods research design was deemed appropriate since quantitative numerical data were supplemented with qualitative texts to explain more fully the issue of instructional leadership of school principals.

5.2.3 Mixed methods research

There is increasing recognition of the importance of combining qualitative and quantitative research as mixed methods research (Alise & Teddlie, 2010, p.106; Chaumba, 2013, p.307).

Mixed methods research is recognised as the third major research approach along with quantitative and qualitative research. It is positioned between two extreme sides of debates (positivist and interpretivist) to take advantage of the wisdom of both point of views and at the same time seek a workable solution for many research problems of interests (Johnson, Onwugbuzie & Turner, 2007, p.112).

The concept of mixing or combining quantitative and qualitative approaches is not new as it dates back to the late 1950s with the work of Campbell and Fiske (1959) advocating the collection of multiple forms of quantitative data to study one psychological construct. A particular interest in combining quantitative and qualitative data sources was observed in the work of Denzin (1978) and Jick (1979) who, after realising that one method had some limitations, supported the use of both qualitative and quantitative approaches to better understand the research problem (Migiro & Magangi, 2010, p.3757).

Denzin (1978) and Jick (1979) argued that the combination of different data emerging from different perspectives was practically possible and this helped researchers to be more confident of their results as one research approach's strengths could offset the weaknesses of the other. Since then, mixing quantitative and qualitative approaches became gradually popular in many disciplines such as education, sociology, psychology, nursing, health sciences and many others (Leech & Onwuegbuzie, 2007, p.266).

Mixed methods research has been defined in different ways. For instance, Johnson et al. (2007) define mixed methods research as:

> type of research in which a researcher or a team of researchers combine elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purpose of breadth and depth of understanding and corroboration (p.123).

The philosophical assumption is that the combination of qualitative and quantitative aspects in a single study makes the overall strength of this study greater than using either qualitative or quantitative research.

Teddlie and Tashakkori (2009, p.4) are of the opinion that the mixed methods research is the third research community that emerged as an alternative to the dichotomy of qualitative and quantitative traditions. Likewise, Morse and Niehaus (2009, p.9) define mixed methods

research as “a systematic way of using two or more research methods to answer a single research question”.

The fact that there are varied definitions of mixed methods research and that there is no one accepted or best definition (Plano Clark & Ivankova, 2016, p.70), a working definition for this study was adopted from Creswell and Plano Clark (2007, p.5). Creswell and Plano Clark (ibid.) say that mixed methods research involves philosophical assumptions that guide methodologically 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, mixed methods research 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 together provides a better understanding of the research problem than either approach alone.

From this definition, the rationale for combining both research approaches in this study was grounded in the belief that neither qualitative nor quantitative approach was sufficient to fully understand instructional leadership behaviours of school principals and how these behaviours influence the work of teachers in schools. Thus, mixing qualitative and quantitative methods at the interpretation stage was found to be appropriate to allow for a better understanding of the research problem under investigation (McMillan & Schumacher, 2010, p.396).

Researchers emphasise that mixed methods research was introduced to reduce the weaknesses and the problems of mono-methods and to overcome the tensions between positivist and interpretivist researchers in terms of epistemological, ontological, and methodological differences (Henderson, 2011, p.343; Johnson et al., 2007, p.113). Arguments supporting the suitability of mixing qualitative and quantitative methodologies were based on the tenets of pragmatism that advocates for the use of both competing paradigms, trying to give each one a relatively equal footing and merit. According to Shannon-Baker (2016, p.325) and Subedi (2016, p.570), pragmatism rejects an either-or view on interpretivism and positivism and reconciles the confrontation between these paradigms by embracing both points of views.

According to John Dewey (Pratt, 2016, p.513), pragmatism offers an alternative world view to those of positivists and interpretivists. The main point that pragmatists make, according to Morgan (2014, p.1048), is that both paradigmatic approaches are crucial and are needed to produce knowledge that best represents the reality. On one hand, our experiences in the world

are necessarily constrained by the nature of that world; on the other hand, our understanding of the world is inherently limited to our interpretations of our experiences. For this reason, pragmatism rejects many of the rigid criteria for knowledge claims posed by positivists and interpretivists and takes a middle position which calls for a convergence of both quantitative and qualitative methods as they share many commonalities in their approaches to inquiry (Feilzer, 2010, p.8).

From an epistemological perspective, pragmatists believe that a researcher, at some stage, needs to take an objective approach by not interacting with subjects, while at another stage it will be necessary to take a more subjective approach by interacting with research subjects to construct reality (Brierley, 2017, p.18). This is because pragmatists claim that there are singular and multiple realities that are open to empirical inquiry derived from both quantitative and qualitative approaches (Brierley, 2017, p18; Feilzer, 2010, p.8).

To access to this reality, the methodological concern for pragmatists is to choose appropriate methods that potentially answer the research questions rather than focusing on methodological preferences of the researchers. Pragmatism does not take a dogmatic position regarding different methods; rather it gives flexibility to researchers to determine the best way to carry out research and successfully meet its purpose. Research questions and/or the nature of the problem to be studied are the most important determinants of the research design from a pragmatic perspective (Feilzer, 2010; Teddlie & Tashakkori, 2009)

Informed by the pragmatic philosophy, the present study examined the complex problem of school principal instructional leadership in Rwanda through the use of both positivist and interpretivist world views. The combination of quantitative and qualitative approaches provided the researcher with different ways of looking at this problem using numerical information gathered using the quantitative approach and textual information collected using the qualitative approach (Plano Clark & Ivankova, 2016, p.84; Almalki, 2016, p.291).

While the qualitative approach was not useful for identifying the relationship between instructional leadership behaviours of the principal and teachers' instructional practices, quantitative results from a large sample were employed to identify this relationship and establish its magnitude. On the other hand, it was necessary to collect qualitative information with a small and purposeful sample to provide a rich and detailed description of this relationship.

A combination of quantitative and qualitative approaches in this study was employed bearing in mind that the truth about the real world cannot necessarily be accessed using a single research method. Instead, multiple sources of information can be applied to gain greater insights and high chances to answer specific research questions for a comprehensive analysis of a phenomenon under investigation (Chaumba, 2012, p.326).

The use of mixed methods approaches has advantages over a single approach. Quantitative and qualitative approaches are more useful when used together than in isolation. For instance, Plano Clark and Ivankova (2016, p.84) admit that the use of both quantitative and qualitative approaches in a single study helps to obtain a more rigorous conclusion as strengths of one approach offset weaknesses of another approach. Quantitative research is strong in seeking the causal relationship, prediction and generalization of the findings but weak in explaining the phenomenon in context-specific settings as much as the qualitative research does. Therefore, putting them together can produce a more robust understanding of a complex problem, which is not available when two research approaches are used in isolation (Almaki, 2016, p.291; McKim, 2017, p.203; Johnson & Onwuegbuzie, 2004, p.17).

Another rationale for using mixed methods is when results of one approach are used to inform or explain the results of another approach to develop a more effective and refined conclusion (Ivankova, 2014, p.31; Plano Clark and Ivankova 2016, p.85). In this case, the problem is explored both quantitatively and qualitatively and the results from one approach are used to expand on the other approach's findings. In sum, specific findings from one research approach need additional explanations from another approach (Migiro & Magangi, 2011, p.3759).

Based on advantage of mixed-methods research, the identification of instructional leadership behaviours enacted by school principals and the relationship between these behaviours and teachers' instructional practices were conducted quantitatively in this study, using a survey questionnaire. The qualitative approach was subsequently used in two case studies to capture the participants' views in relation to how instructional leadership behaviours are enacted and to explain why some of them are more or less associated with instructional practices of teachers. Numerical data collected in the first quantitative phase provided a general picture of how school principals engaged in instructional behaviours and the behaviours teachers perceived as being more effective. Qualitative follow-up interviews sought to explain this picture using the voices from participants.

Another advantage of mixing qualitative and quantitative research is that it enables triangulation to take place. According to Denzin (1978, p.291) cited in Johnson et al. (2007, p.114), triangulation refers to a combination of different methods in the study of the same phenomenon. Distinguishing within-methods triangulation from between-methods triangulation, Denzin says that the former uses either multiple quantitative or qualitative approaches while the latter employs both quantitative and qualitative approaches. It is the between-methods triangulation that facilitates a comparison of qualitative and quantitative data sets to produce well-validated conclusions in mixed methods research. Comparing, for example, statistical results from a quantitative survey with thematic results from qualitative interviews a researcher can be confident when both results agree or take a further step to reconcile them when there is divergence (Plan Clark & Ivankova, 2016, p.85).

Generally, mixed methods research allows convergence, corroboration and correspondence of results from different approaches as well as elaboration, enhancement, illustration, and clarification of the findings from one approach with the results from the other approach (Almalki, 2016, p.291; Migiro & Magangi, 2011, p.3759).

One of the limitations of the mixed methods approach, according to Johnson and Onwuegbuzie (2004, p.21) and Migiro and Magangi (2011, p.3763), is that it is more expensive and time consuming than using one research approach. Also, when quantitative and qualitative approaches are applied concurrently it may be difficult for one researcher to carry out both research approaches as data collection takes place simultaneously. An additional limitation of the mixed methods research is that it requires a researcher to have expertise and competence necessary to understand multiple approaches and mix them appropriately (McKim, 2017, p.202; McMillan & Schumacher, 2010, p.397). In this study, the above limitations have been considered while formulating research questions and examining available evidence in literature to decide on the specific mixed methods design that best addresses the research problem.

5.2.4 Mixed-methods design

Plano Clark and Ivankova (2016) define mixed method design as "a research design in which researchers mix quantitative and qualitative methods in specific ways to address a research purpose" (p.107). A mixed-methods design serves as a framework for researchers to organise thought process about the order and manner of how the quantitative and qualitative components are implemented in a mixed method study process. Given its importance, every

researcher is strongly recommended to carefully select an appropriate research design that best facilitates the collection and analysis of data, their integration, interpretation and the development of a solid conclusion (Creswell & Plano Clark, 2011).

Very often, mixed methods research involves qualitative and quantitative phases that are designed in terms of order (concurrent versus sequential), weight (equal status versus dominant status), and the level at which quantitative data and results are mixed or integrated (Leech & Onwuegbuzie, 2009, p.268). Based on these criteria, Creswell and Plano Clark (2007) distinguished six common and major types of mixed methods designs from which one can choose to ensure that the research purpose is effectively achieved. These designs are: 1) convergent parallel design, 2) explanatory sequential design, 3) exploratory sequential design, 4) embedded design, 5) transformative design, and 6) multiphase design. A brief description of each of them is provided below.

According to Creswell and Plano Clark (2007; 2011), convergent parallel design is one-phase design in which a researcher implements the quantitative and qualitative methods within the same timeframe. The researcher gathers both quantitative and qualitative data, analyses both datasets separately, compares the results, and makes interpretation as to whether the results support or contradict each other (Subedi, 2016, p.572).

Explanatory sequential design is a two-phase mixed method design that involves gathering sequentially quantitative and qualitative data in two phases. Initially, quantitative data are collected and analysed followed by qualitative data collection and analysis to explain the quantitative results or elaborate on the quantitative findings (Creswell, 2009, p.211; McMillan & Schumacher, 2010, p.401; Subedi, 2016, p.573). Within this design, quantitative findings can be used to guide sample selection for the subsequent qualitative phase.

Like explanatory sequential design, exploratory sequential design also uses two phases but the researcher begins with collecting qualitative data in the first phase to explore a phenomenon and quantitative data in the second phase to explain relationships found in the qualitative data (Creswell, 2009, p.211-212; McMillan & Schumacher, 2010, p.402).

Concerning embedded design, Creswell and Plano Clark (2007; 2011) and Creswell (2009, p.214) describe this design as a concurrent or a sequential design where a qualitative part is embedded in quantitative study, or vice versa, so that the findings of one part are used to

support or explain the findings of the other. The premise of this design is that a single data set is not sufficient to answer the research questions.

Transformative design uses one of the above four designs, but it encases the design within a transformative framework. This frame work provides an orienting lens for mixed methods design and its intent is to address a social issue for a marginalised or underrepresented population and engages in research that brings about change (Subedi, 2016, p.573).

Lastly, the multiple phase design refers to a design that builds on convergent, explanatory, exploratory and embedded designs. This design is conducted overtime by one researcher or a team of researchers examining a problem or a topic through a series of phases or separate studies (Creswell & Plano Clark, 2011; Subedi, 2016, p.574).

This study employed the explanatory sequential design to investigate the influence of the principal's leadership behaviours on teachers' instructional practices in Rwanda.That is, the quantitative phase followed by the qualitative phase.

Almalki (2016, p.293), Leech and Onwuegbuzie (2009, p.271) and Subedi, 2016, p.573) argue that a researcher who employs the explanatory sequential design first collects and analyses the quantitative numerical data which in most cases inform the qualitative data selection process. The qualitative data (text) are collected and analysed second in the sequence to explain, or elaborate on, the quantitative results obtained in the first phase. The identification of associations or relationships between variables and the provision of explanations of these relationships are fundamental objectives of explanatory sequential mixed methods design. A procedural diagram of mixed-method sequential design is provided below.

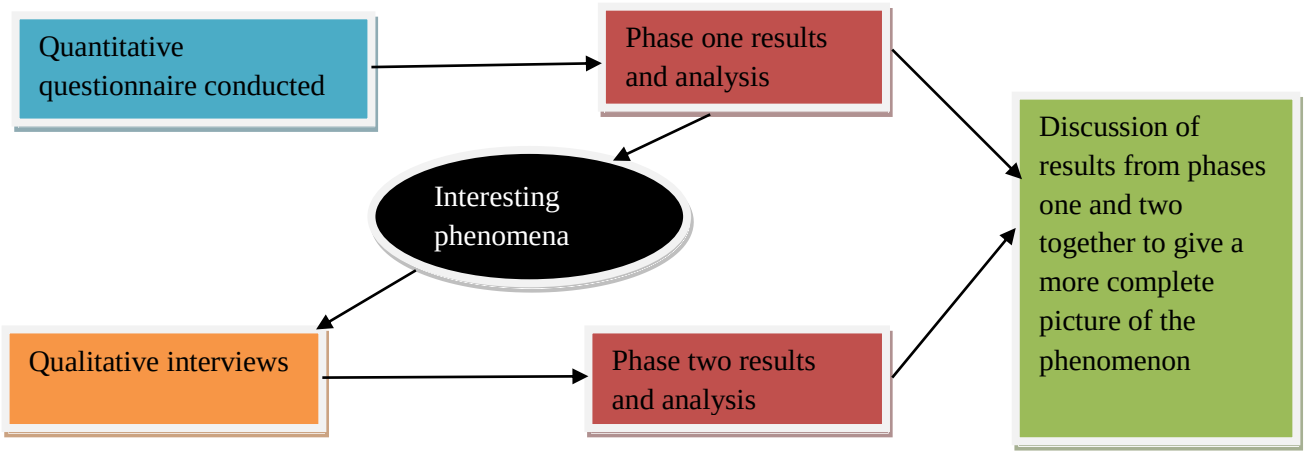

Figure 5. 1: Explanatory sequential design adopted from Plano Clark and Ivankova (2016, p.123).

In this research, quantitative and qualitative phases were organised sequentially and data collected were separately analysed. A great emphasis was placed on the quantitative data as the researcher's main focus was on identifying instructional leadership enacted by school principals and the influence these behaviours exert on instructional practices of teachers. However, each phase had its particular aim and different research questions to address.

The goal of the first quantitative portion of the study was to identify instructional behaviours enacted by school principals and establish the relationship between these behaviours and teachers instructional practices in classrooms. To achieve this purpose, questionnaires were administered to a large sample of teachers to provide a general picture related to the engagement of school principals in instructional leadership activities and their relationship with teacher instructional practices. Results from quantitative survey phase were used to identify individuals for follow-up qualitative interviews in the second phase (Plano Clark & Ivankova, 2016, p.122).

The main purpose of the follow-up qualitative phase was to explain the survey quantitative results by obtaining a detailed understanding of the level of school principals' engagement in instructional leadership behaviours and the level of these behaviours in influencing teachers' practices. The second phase involved a sub-sample from the survey of groups of teachers and their principals from two case study schools that is, one secondary school in which teachers scored the highest records on their principal's engagement in instructional leadership behaviours and the one where teachers scored the lowest records.

Results from the quantitative research phase and those from the qualitative research phase were integrated at the interpretation stage to provide a holistic picture of principal instructional leadership and its influence on teachers' instructional practices. Both quantitative and qualitative phases were sequentially conducted using a survey and two case study approaches.

5.3 Research approaches

Mindful of the nature of the problem under investigation, the types of research questions, and research objectives, an early decision was taken to use a survey and case study approaches in this study. In taking this decision, a number of issues in relation to the strengths and weaknesses of each approach were considered and the researcher addressed the weaknesses of one approach using the strengths of another.

5.3.1 Survey research approach

Kelley, Clark, Brown and Sitzia (2003, p.261) and McMillan and Schumacher (2010, p.235) state that the survey approach remains an important research strategy as accurate information can be obtained for a large number of people using a small sample. According to Ponto (2015, p.168) and Gable (1994, p.114) the survey approach refers to a group of methods which emphasise quantitative analysis where data from a large number of organisations are collected through different instruments and analysed using statistical techniques. Furthermore, McMillan and Schumacher (2010, p.235) add that in survey research, the investigator selects a sample of respondents from a larger population and administers a questionnaire or conducts interviews to collect information on variables of interest. By studying a representative sample, the survey approach is used to learn about people's attitudes, behaviours, beliefs, opinions, and sometimes seeks to cover relationships that are common across organisations. The goal of employing scientific methods to critically analyse and interpret survey research data is often to generalise the results to the entire population of interest (Fraenkel, Wallen, & Hyun, 2012, p.394; Mathiyazhagan & Nandan, 2010, p.34).

Survey research is used for research that seeks to describe specific aspects of a population and examining relationships among variables (Cohen et al., 2011, p.256; Kelley et al., 2003, p.261). This study used a survey research approach to investigate teachers' attitudes, opinions, and ideas on the instructional leadership behaviours of their principals. By means of a questionnaire administered to a sample of teachers, an attempt was made to find out the perceptions of secondary school teachers on two variables, namely, principal's instructional leadership behaviours (independent variables) and teachers' instructional practices (dependent variables). Information provided on these two variables served to ascertain instructional leadership behaviours enacted by schools principals and instructional practices performed by teachers. The same information was used to establish the relationship between the two variables and compare the level of enacting instructional leadership between boarding and non-boarding school principals.

In order for a research survey to be successful, one of the requirements is to clearly define its purpose and design the right questions to collect a wide range of data that address this purpose (Fraenkel et al., 2012, p.399). To be able to identify the relationship between instructional leadership of principals and teachers' instructional practices in this study; a

questionnaire was designed to collect data useful to address the following quantitative research questions:

What instructional leadership behaviours do secondary school principals in the Nyamagabe district enact?

What instructional practices do secondary school teachers in the Nyamagabe district perform?

What is the relationship between instructional leadership behaviours of principals and teachers' instructional practices in secondary schools in the Nyamagabe district?

What is the difference between boarding and non-boarding secondary school principals in enacting instructional leadership behaviours in the Nyamagabe district?

Cross-sectional surveys and longitudinal surveys are two major types of survey approaches that can be conducted to answer research questions. Kelley et al. (2003, pp.261-262) and Cohen et al. (2011, p.267) describe cross-sectional survey as a type of survey research that is carried out at just a single point in time. It provides a snapshot of what is happening in a community at a particular point in time and usually takes a descriptive or exploratory form that simply sets out to describe behaviours or attitudes (Mathers, Fox, & Hunn, 2009, p.5).

In a longitudinal survey information is collected at different points in time in order to study changes overtime (Fraenkel et al., 2012, p.394; Cohen et al., 2011, p.266). As the focus of the present study was not to study changes or causal relationship over time, cross-sectional survey was appropriate because its data helped to describe instructional leadership behaviours of principals and explore relationship between these behaviours and teachers' instructional practices at the time of data collection. This was achieved through the collection of numerical information using a self-administered questionnaire containing items on both variables. The questionnaire was distributed among selected teachers by the researcher himself to ensure quick access to the participants.

Very often, a survey generates large amounts of information on a large population using a small sample with a relatively low cost (Mathers et al., 2009, p.6; McMillan & Schumacher, 2010, p.236). However, there are also a number of weaknesses which call for a combination with other research approaches to produce rich data on the research problem under investigation.

First, the survey approach, especially the cross-section survey provides a snapshot of the situation at a certain point in time, yielding little information on underlying meanings of data (Gable, 1994, p.2; Rindfleisch, Malter, Ganesan, & Moorman, 2008, p.262). This is an issue because people's attitudes, opinions and behaviours change overtime and one single survey research may not be enough to describe specific aspects of a population or establish relationships that are common among variables of interest.

Secondly, participants in the survey research are somehow limited to freely express their feelings, opinions and ideas because their responses are guided by the predetermined instruments like closed-ended questionnaires or structured interviews; the most frequently used instruments for a survey data collection (McMillan & Schumacher, 2010, p.237).

Thirdly, some potential participants may decline to take part in the survey study or, survey questions may not be sufficiently comprehensive to some of the participants until they provide inconsistent or incorrect answers, or skip some questions without answering them (Cohen et al., 2011, p.270).

With regard to this study, all the above weaknesses provided a cautionary guidance to make the survey more successful. One of the strategies used to minimise them was to combine this survey with qualitative case study to allow participants (teachers and principals) to freely express their feelings, opinions and ideas about instructional the leadership of principals. Also, a careful selection of the sample was undertaken and the data collection instrument (a closed-end questionnaire) was piloted and validated to ensure its consistency and clarity before embarking on the actual study. In addition, the researcher conducted the survey himself and explained as much as possible the purpose of the study to the participants. This was done to ascertain their acceptance to participate in the study and carefully complete the survey questionnaire in order to have a high response rate and possible accurate information.

5.3.2 Case study approach

The term case study is defined in different ways by different scholars. For instance, Simons (2009) defines a case study as "an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, policy, institution, programme or system in a real-life context" (p.21). Crowe et al. (2011, p.1) and Robson (1993, p.54) regard a case study as an approach for doing research which involves an empirical investigation generating an in-depth, multi-faceted understanding of a complex issue or a particular contemporary

phenomenon within its real-life context. Furthermore, according to Yin (1994a, p.13), a case study is an "empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used."

Creswell, Hanson, Plano Clark and Morales (2007, p.33) outline the core features of a case study as follows:

> A case study research is a qualitative approach in which the investigator explores a bounded system (a case) or multiple-bounded systems (cases) through detailed, in-depth data collection involving multiples sources of information (e.g., observation, interviews, documents) and reports a case description and case-based themes.

The above definitions are different but the central tenet of the case study is the need to investigate contemporary, as opposed to historical, phenomenon in depth and in its natural context using more than one method. As human experience is shaped in a particular context, the phenomena to be studied cannot be isolated from their contexts. The aim of a case study is to understand how behaviours and/or processes are influenced by, and influence the context in which they occur. Case study is thus suited to understanding human relations because of its ability to appreciate the uniqueness and complexities of the people who are embedded within the context of the phenomenon to be studied (Baxter & Jack, 2008, p.245).

The key concern for this study was to interact with teachers and principals from the two selected schools as cases and understand through semi-structured interviews the meanings that they attach to instructional leadership behaviours of the principal and their influence on teachers' instructional practices. The uniqueness of the two schools selected was based on the fact that statistical data analysis distinguished them from having high and low scores in terms of enacting instructional leadership in schools. The case study approach was thus carried out to explain how principals and teachers perceive instructional leadership in their schools and why instructional leadership is more enacted in some schools and less implemented in the others. The case study research component of this study addressed the following qualitative research questions:

How do principals and teachers perceive instructional leadership behaviours of the principal in secondary schools in the Nyamagabe district?

What are the challenges that impede instructional leadership of the principal in secondary schools in the Nyamagabe district?

The 'how' question sought details of instructional leadership behaviours principals enact to guide teachers in improving their teaching practices. Yin (2003, p.9) argues that this type of question seeks to establish and explain relations between a phenomenon and specific events which for this study were instructional leadership behaviours implemented by principals and their link with teachers' instructional practices. The 'what' question was used to describe the challenges that impede instructional leadership to flourish in schools and the purpose was to offer additional insights into 'why' instructional leadership behaviours are enacted to a certain extent and why they influence the practices of teachers at the degree they do.

McMillan and Schumacher (2010, p.345) state that case study research may focus on one entity (within a single-site study) or several entities (multiple-site study) depending on the purpose of the research. This study adopted a multiple-case study and collected qualitative data in two schools. The reason for choosing two cases was the assumption that principals and teachers from two different schools with different contexts would provide information for analytical generalisation rather than would be the case with a single school.

Fraenkel et al. (2012, p.435) posit that the results of multiple-case studies are more compelling and lend themselves to valid generalisation. In order to gain are deep and broad understanding of instructional leadership of the principal it was necessary to enter the environment of two schools and examine the similarities and differences between the participants' contextual views before generating a broader appreciation of the problem under investigation.

The case study approach, like other types of research approaches, presents advantages as well as limitations. The strengths of a case study lie in its capacity to enable researchers to study behaviours in a natural setting, learn about the state of the art, and generate theories from practices. Case study also allows researchers to understand the nature and complexity of the process taking place because it provides an opportunity to ask penetrating questions and to capture the richness of organisational behaviours (Gable, 1994, p.2; Vissak, 2010, p.374).

However, case study research has its own flaws which may be compensated by using information from other sources. These weaknesses, according to Vissak (2010, pp.376-377; Gable (1994, p.2), include its inability to manipulate independent variables, the risk of improper interpretation and the lack of power to randomise and generalise the findings

especially when it is a single case study. Other case study weaknesses include the bias of a researcher and the possible inaccessibility to all aspects of the phenomenon under study (Cohen et al., 2011, p.293).

The study used a survey approach to offset the possible case study limitations. The use of multiple sources of information was in the line with Vissak's (2010, p.380) view that using multiple methods of data collection improves the quality of research in the sense that it reduces the respondent bias, provides additional information, and increases support for the researcher's conclusion. As such, multiple facets of the phenomenon can be revealed and understood easily.

Bush (2007, p.100) and Plano Clark (2016, p.84) also indicate that the use of multiple sources of information (triangulation) helps researchers compare many sources of evidence in order to determine the accuracy of information collected. Thus, the purpose of using survey and case study approaches in this study was to triangulate data from diverse sources. To do so, the two approaches were conducted separately and results were merged at the interpretation stage as illustrated by Figure 5. 2 below.

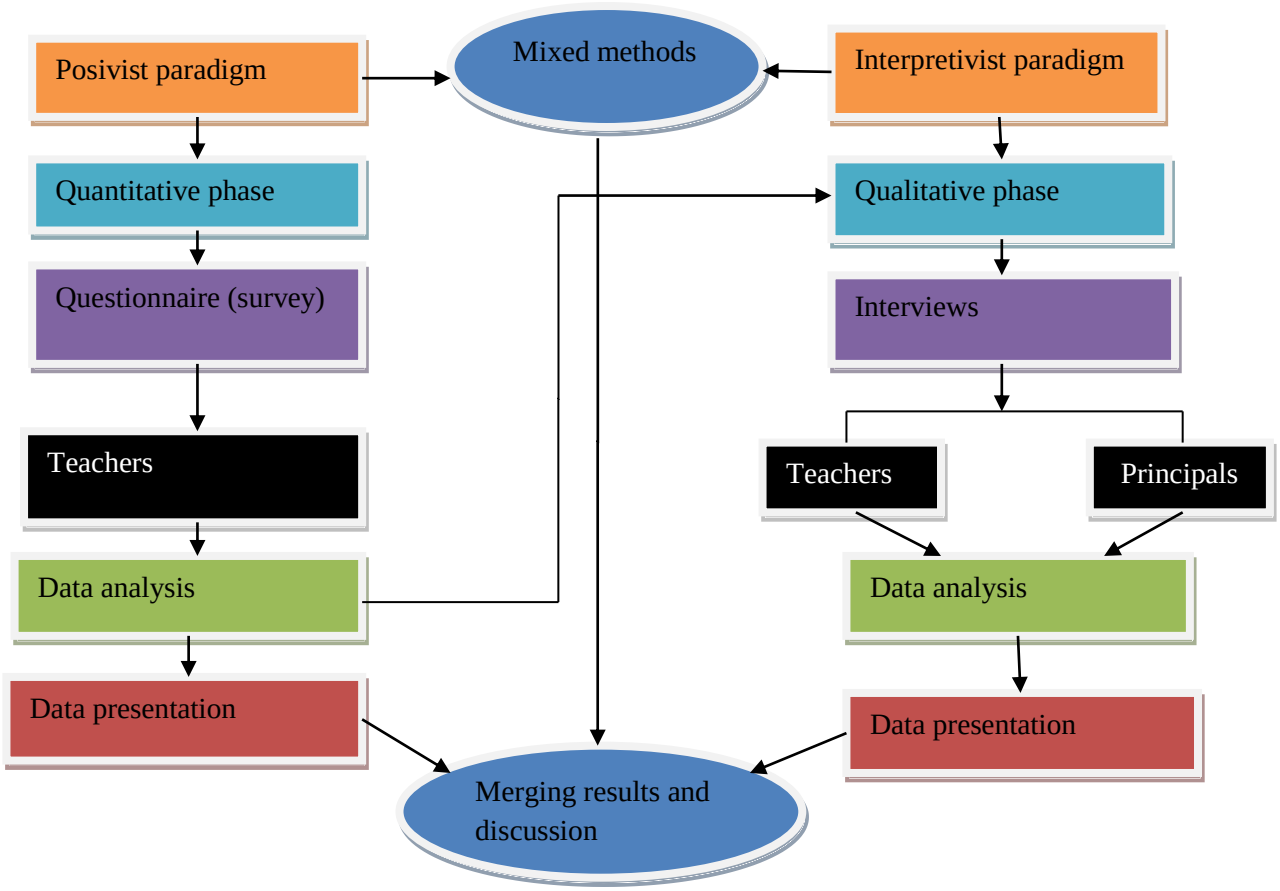

Figure 5. 2: Flow chat for studying principals' instructional leadership behaviours in secondary schools in the Nyamagabe district.

5.4 The quantitative phase

A mixed methods approach was used to collect data from teachers and school principals in secondary schools in the Nyamagabe district. The survey questionnaire method was used to obtain quantitative data from teachers and semi-structured interviews were used for the qualitative portion of the study. As an explanatory sequential mixed methods design, the researcher started with the quantitative phase to collect statistical data. Sampling, instrument design, and data collection and analysis were the three main activities performed in the quantitative phase.

5.4.1 Research sampling and participants

In most cases, it is almost impossible to collect data from every single person in a given population especially when the population is too large. In this context, a sampling process is needed to obtain a portion that adequately represents the entire population under study. Fraenkel et al. (2012) define sampling as a process of selecting individuals from a larger group and use them as a basis for making inferences about the larger group (p.91). Most of the time, the purpose of sampling in quantitative research is to make statistical generalisations to a wider population (Bird, 2009, p.1314). What is more crucial, however, is to decide on the population of interest and then select an appropriate sample accordingly.

5.4.1.1 Population of the study

McMillan and Schumacher (2010, p.129) refer to the population of the study as a group of elements or cases, whether individuals, objects or events that conform to specific criteria and to which we intend to generalise the results of the research. In education research, this population may be teachers, students, or other individuals who possess certain characteristics (Fraenkel et al., 2012, p.92). In this study, the population of interest in the quantitative phase included all 816 teachers; women and men from 48 public and subsidised secondary schools[2] in the Nyamagabe district. Public and subsidised secondary schools were targeted because almost all private schools located in the Nyamagabe district have shut down the doors due to lack of funds after the government's introduction of free basic education for all Rwandan children in 2009.

[2] Subsidised schools are schools that are operated by religious organisations which receive regular grants from the government for their day-to-day running costs and teachers' salaries.

5.4.1.2 Sample size and sampling strategy

A sample is defined as a group of subjects or participants from whom the data are collected (McMillan & Schumacher, 2010, p.129). The sample can be selected either using the probability sampling technique or non-probability sampling procedure. Probability sampling, according to Cohen et al. (2011, p.153), implies selecting randomly a fraction of the population in such a way that each element has an equal chance of being included in a sample. The purpose of this sampling strategy is to seek the representativeness of the wider population from which results can be generalised. Non-probability sampling, on the other hand, involves a deliberate selection of particular settings, persons, places or events for the important information they can provide that cannot be obtained as well from other choices (Teddlie & Yu, 2007, p.77). In this process, a researcher's subjective judgment plays a critical role in determining elements to be included in the sample. Probability sampling is typically associated with quantitative research while non-probability sampling concerns qualitative research. Both forms of sampling are used in mixed methods studies, but in some cases, one method alone can be appropriate (Bird, 2009, p.1315; Teddlie &Yu, 2007, p.96).

With regard to the present study, a non-probability sampling method was adopted. Participants for the quantitative phase were selected among 816 teachers from 48 secondary schools located in the Nyamagabe district. The sample was calculated using Taro Yamane's (Yamane, 1967, p.886) formula[3] (also known as Slovin's formula) with 95% confidence level. The calculation formula of Taro Yamane is presented as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n= sample size required (to be calculated)

N= number of people in population (population size)

e= allowable error/margin error (sampling error assumed as 0.05)

By substituting numbers into the formula, the number of sample in the quantitative phase of this study was:

[3] Yamane's (1967) formula is the famous and simplified formula used to calculate sample sizes with a finite population and when the population size is well known.

$$n = \frac{816}{1+816(0.05)^2} = 268{,}4$$

Applying Taro Yamane's formula, a sample of 268.4 teachers was derived from 816 teachers to take part in the survey. To increase the chance of obtaining reliable data, the researcher has increased the sample size to 269. Thus, 269 secondary school teachers were selected across the district to respond to the survey questionnaires in the first phase of the study (n=269).

With the sample size, the next step was to determine a number of teachers from each school to take part in the study. To do so, the researcher used the proportionate stratified random sampling[4] .and a sample of teachers from each school was determined by multiplying the sample size by a total number of teachers in the school dividing by the population size ($\frac{269(X)}{816}$ where X is a total number of teachers in the school). Using this sampling technique, all secondary schools in the district were proportionally represented. The researcher believed that data collected from the participants would be useful to answer the research questions and draw a solid conclusion about instructional leadership of school principals and its influence on instructional practices of teachers (for more information about a number of teachers selected from each school, see Table 5.1).

After calculating a total sample size and a sample size from each school, the researcher moved to select participants (teachers) for the quantitative phase of the study. A purposive sampling was used and the researcher identified male and female teachers with at least two years teaching in the same school (the school under investigation). The rationale behind the choice of non-probability sampling (purposive sample) over probability sampling in the quantitative phase is explained below.

First, the research was conducted in beginning of academic year in Rwanda (February, 2016) and there were many new teachers recruited to either occupy the new teaching posts or replace the non-qualified teachers who, according to the government reform, had to relocate from secondary schools to primary schools. Since almost a quarter of teachers were new in the district (183 out 816), the researcher deliberately excluded them from the study because they were not yet ready to provide information about the study. Many of them were not even

[4] Proportionate stratified random sampling is a sampling strategy used when the population is composed of several subgroups that are different in number (schools in the case of this study). The number of participants from each subgroup is determined by the number relative to the entire population (population size).

at school when the research was being conducted as they were busy dealing with administrative issues at the district's department of education.

Secondly, non-probability sampling was used to increase the questionnaire return rate and accuracy of information provided. Since new teachers were not familiar with the problem under investigation and that they were not yet at their respective schools, the researcher deliberately selected teachers who were present at schools at the time of collecting data and whom he thought to have information required through the effective completion of the questionnaire.

Lastly, the study focused on the district of the Nyamagabe to understand the issue of instructional leadership of school principals and its influence on teachers' instructional practices. Though the results given insights into the nature of instructional leadership in the whole country, the main purpose of the research was not to generalise the results. The concern was more on acquiring in-depth information about the topic in the selected district and from those who were in a better position to give it (Cohen et al., 2011, p.156).

The above factors led the researcher to use personal judgment and select the potential participants with a large sample of 269 teachers to be able to make a good statistical analysis and draw an appropriate conclusion about the results. A closed- ended questionnaire was employed to gather quantitative data from the selected teachers.

5.4.2 Survey questionnaire

The researcher employed the questionnaire in the first phase of the study to collect statistical information about instructional leadership behaviours of school principals and teachers' instructional practices. Questionnaires are considered as the most popular tool for collecting quantitative data, especially when the population is too large to use other means of data collection. According to Rowley (2014), the term questionnaire refers to "documents that included a series of open and closed questions to which the respondents are invited to answer" (p.308).

In other words, questionnaires are instruments that present information to a respondent in writing which require written responses. Questionnaires can be used to obtain quantitative information about opinions, attitudes, beliefs, facts and behaviours (Rowley, 2014, p.310), which for this study, were the opinions and views of teachers about instructional leadership behaviours of school principals and their own instructional practices in the classroom.

Very often questionnaires that seek information from respondents appear in two basic forms, that is, closed-ended (or structured) questionnaires and open-ended (or unstructured) questionnaires (Bird, 2009, p.1310; McMillan & Schumacher, 2010, p.197; Pallant, 2011, p.7; Rowley, 2014, pp.13-14). Scholars advise that each of these forms of questionnaires has its own strengths and weaknesses that every researcher needs to consider before making a decision about their use. The strengths of closed-ended questionnaires, according to Bird (2009, p.1311), Rowley (2014, p.314), and Zohrabi (2013, p.254) are that they are quick to administer and complete and easy to code and analyse as they are more concerned with quantitative or numerical information.

Cohen et al. (2011, p.382) add that closed questions are more useful because they can generate the frequencies of response amenable to statistical treatment and analysis with a possible comparison across groups in the sample. The limitations of closed questions lie in the fact that they do not allow respondents to freely express their own feelings and views because they have to choose among predetermined responses (Cohen et al., 2011, p.382; McMillan & Schumacher, 2010, p.198).

Unlike closed questions, open-ended questions, on the other hand, provide useful insight into the topic under study because respondents have the freedom to provide information as much as possible. However, such questionnaires are time consuming to complete and analyse (Bird, 2009, p.1311; Rowley, p.2014, p.313) and can provide irrelevant or unnecessary information to the topic under investigation as there is no possibility to ask additional or probing questions (Cohen et al., 2011, p.383).

Mindful of the above advantages and disadvantages, the researcher decided to use closed-ended questions in the first phase of the study. The reason for choosing them was that the sample was large and closed questionnaires are easier to administer to many respondents, and quicker to complete and analyse than open questionnaires.

Closed-ended questions are those that ask a respondent to choose among a possible set of answers, the response that most closely represents his or her view point (McMillan &Schumacher, 2010, p.197). To quantitatively ascertain teachers' perceptions of their principals' instructional leadership and seek opinions and views on their own instructional practices, a closed-ended questionnaire was distributed among the selected teachers. This questionnaire consisted of three main parts (see appendix G). The first part of the questionnaire sought data about the participants' personal information such as sex, age,

number of years of teaching, qualification, and type of school they belong to (boarding or non-boarding school).

The second part of the questionnaire included a set of actions which best described instructional leadership behaviours of the principal. The content of the questionnaire was adapted from the Principal Instructional Management Rating Scale Questionnaire (PIMRSQ) developed by Hallinger and Murphy (1985) and some aspects of instructional leadership skills identified by Weber (1996). The questionnaire was subject to some modifications to match it with the theoretical and conceptual framework of the study and to adapt it to the Rwanda context. With these modifications, the questionnaire contained 40 instructional leadership behaviours of the principal grouped into six categories namely, 1) *defining and communicating school goals*, 2) *planning and coordinating curriculum*, 3) *supervising instruction*, 4) *providing classroom observation feedback*, 5) *promoting teacher professional development*, and 6) *providing instructional resources*. Each category comprised various items specifying instructional leadership behaviours of the school principal.

The third and the last part of the questionnaire contained a set of actions that described instructional practices of the teacher. As there was no existing and tested instrument on instructional practices of the teacher, the questionnaire was designed and developed by the researcher himself in line with the conceptual framework of the study and other studies conducted to assess instructional practices of the teacher (e.g. Lineburg, 2010; OECD, 2014a; Quinn, 2002). This instrument comprised 22 items grouped into four main categories of teacher instructional practices that is a) *teacher collaboration*, b) *lesson planning and preparation*, c) *classroom content delivery* and d) *peer classroom observation and feedback*. Each of these categories had various items describing specific activities of teachers in classroom and outside of it.

To facilitate quick completion, questions of part two and three were designed in the form of Likert rating scale. For the questions regarding the principal instructional leadership, teachers were asked to indicate on a scale of one to five the extent to which their principals perform various behaviours at the time of responding. On this scale, 5 represented '*always*'; 4 represented '*frequently*'; 3 represented '*sometimes*'; 2 represented '*rarely*', while 1 represented '*never*'. Similarly, the items that comprised teacher's instructional practices were rated in a five point Likert scale from '*strongly agree*' to '*strongly disagree*' to determine the

extent to which a teacher performs each practice. Both questionnaires were subject to a pilot study to test their validity and reliability prior to conducting the actual study.

5.4.3 Quantitative data collection

After designing, developing, and testing the questionnaire, the next step was to collect data from 269 selected teachers. According to Cohen et al. (2011, p.404), Rowley (2014, p.320) and Zohrabi (2013, p.255), there are different ways of administering the questions to the respondents. Questionnaires can be given to the respondents in person, or administered through the mail, email, telephone or through a website. As all schools in the sample had no access to internet or post, the researcher administered the questionnaire to the teachers in person to increase the chance of getting a high rate of response. Rowley (2014, p.320) and Zohrabi (2013, p.255) say that this method is more efficient and preferable to get a high return rate because a researcher is present to explain anything that might be unclear to the participant and that can cause him/her to provide irrelevant responses or skip some questions. Taking cognisant of this advantage, the researcher distributed the questionnaires among teachers at each school (during tea break and lunch time) and provided them with explanations about the completion instructions before leaving the questionnaires to be completed in teachers' private and spare time.

Another way of ensuring a high return rate was to design a clear, short and coherent questionnaire to facilitate ease of completion. The questionnaire was constructed in a way that it was comprehensive to every participant and could be completed without taking much time. It was developed in both English and Kinyarwanda (mother tongue) to enable each participant to use the language s/he felt comfortable with. Each questionnaire was accompanied by a covering letter explaining the purpose of the research and asking for the participant's cooperation in its completion. All participants were guaranteed anonymity, confidentiality and non traceability to encourage more responses before completing the questionnaire (Cohen et al., 2011, p.399).

The collection of the completed questionnaires was also done in person by the researcher a few days later to avoid responses being returned via any other person who was not the researcher. Out of 269 questionnaires distributed, 231 were completed and returned which is 85.8% of return rate. Table 5.1 bellow shows in more detail a number of teachers selected from each school, questionnaires distributed and questionnaires completed and returned.

Table 5. 1: Summary of sampled population and returned questionnaires

Sector	School	Population size	Sample selected	Questionnaires distributed	Questionnaires filled and returned	Response rate (%)
Gasaka	1	9	3	3	3	100.0
	2	25	8	8	8	100.0
	3	37	12	12	11	91.7
	4	21	7	7	6	85.7
	5	22	7	7	6	85.7
	6	27	9	9	8	88.9
Buruhukiro	7	17	6	6	6	100.0
	8	10	3	3	3	100.0
	9	9	3	3	3	100.0
	10	18	6	6	4	66.7
Kaduha	11	21	7	7	7	100.0
	12	9	3	3	3	100.0
	13	21	7	7	6	85.7
	14	20	7	7	6	85.7
Kibirizi	15	10	3	3	2	66.7
	16	23	8	8	7	87.5
Mbazi	17	26	9	9	6	66.7
	18	12	4	4	3	75.0
	19	9	3	3	2	66.7
Mushubi	20	10	3	3	2	66.7
	21	28	9	9	6	66.7
	22	26	9	9	7	77.8
Tare	23	15	5	5	5	100.0
	24	12	4	4	4	100.0
	25	31	10	10	10	100.0
	26	10	3	3	3	100.0
Gatare	27	19	6	6	6	100.0
	28	10	3	3	2	66.6
Kamegeri	29	14	5	5	5	100.0
	30	11	4	4	3	75.0
Kitabi	31	20	7	7	7	100.0
	32	12	4	4	3	75.0
Musange	33	11	4	4	3	75.0
	34	10	3	3	3	100.0
	35	16	5	5	5	100.0
Cyanika	36	9	3	3	2	66.7
	37	11	4	4	3	75.0
	38	41	13	13	9	69.2
	39	14	5	5	3	60.0
Kibumbwe	40	19	6	6	5	83.3
Mugano	41	16	5	5	5	100.0
	42	9	3	3	3	100.0
Musebeya	43	10	3	3	2	66.7
	44	19	6	6	5	83.3
Nkomane	45	18	6	6	5	83.3
	46	6	2	2	2	100.0
Winkingi	47	19	6	6	6	100.0
	48	24	8	8	7	87.5
Total		**816**	**269**	**269**	**231**	**85.8**

After the collection of the completed questionnaires, the next step was to analyse the data provided by the participants.

5.4.4 Quantitative data analysis

The purpose of data analyses in research is to summarise data so that they are easily understood and provides answers to the research questions (Kelley et al., 2003, p.265, Mathiyazhagan & Nandan, 2010, p.37). To achieve this purpose, quantitative data gathered in the first strand of the study were analysed using different statistical techniques depending on the type of each research question. Prior to analysing the collected data, some preparatory stages were undertaken to facilitate the data entry and data analysis.

First, all filled questionnaires were checked one by one to see if they were all completed and if possible discard those that were insufficiently completed. The next step was to number and code all questionnaires and then enter their data into a Statistical Package for the Social Science (SPSS) software, version 23. The captured data were carefully checked before the actual analysis to look for omissions or mistakes which might occur during the data entry process.

Second, before the actual data analysis, a type of factor analysis; a principal component analysis (PCA) was conducted to reduce the items of principal instructional leadership behaviour questionnaire (PILBQ) and teachers' instructional practice questionnaire (TIPQ) to a smaller set of factors for data analysis. The PCA helped the researcher to group together variables which had something in common and which measured the same concept (Cohen et al., 2011, p.674).

Prior to performing PCA, the suitability of data for factor analysis was assessed. Sample size (n=231) was appropriate and an inspection of the correlation matrix revealed the presence of many coefficients of .3 and above. The Kaiser-Meyer-Olkin (KMO) value was .95 for PILBQ and .88 for TIPQ both exceeding the recommended value of .6 (Kaiser, 1970; 1974). Bartlett's test of Sphericity (Bartlett, 1954) for both PILBQ and TIPQ reached statistical significance (p=.000) supporting the factorability of the correlation matrix.

The PCA for PILBQ produced six components with eigenvalues exceeding 1, explaining a total of 65.69 percent (65.69%) of variance, 41.55%, 8.00%, 5.37%, 4.36%, 3.39%, and 2.54%, respectively. These components were retained on the basis of Kaiser's criterion (component with eigenvalue ≥1.0) and were labelled as follows: 1) *defining and*

communicating school goals, 2) *promoting teacher professional development*, 3) *supervising instruction and providing feedback*, 4) *providing resources*, 5) *reviewing curriculum materials*, and 6) *discussing observation feedback*. In general, 39 items grouped into six components were retained after running the principal component analysis (PCA).

For TIPQ, PCA revealed the presence of five components with eigenvalues exceeding 1, explaining a total of 69.21 percent (69.21%) of variance, 32.09%, 17.26%, 8.36%, 6.37%, and 5.11%, respectively. An inspection of the screeplot revealed a clear break after the fifth component, hence retaining only five components. The TIPQ components were retained on the basis of Kaiser and screeplot criteria and were labelled: 1) *delivering instruction*, 2) *engaging in collaborative learning*, 3) *introducing changes*, 4) *observing each other's classes*, and 5) *planning instruction*. Once components of each type of questionnaire were identified, the researcher proceeded to analyse data to answer the research questions.

The first question was to ascertain instructional leadership behaviours enacted by school principals. Data related to this question were analysed using descriptive statistical techniques. Such techniques helped to compute means and standards deviations which indicated the extent to which school principals enacted instructional leadership behaviours. As each item (behaviour) was rated in a five point Likert scale from '*always*' to '*never*', a score of 3 was taken as a cut-off mean for accepting the behaviour. The behaviours with 3 (mean of 3) and above were considered as satisfactorily performed while behaviours below 3 were taken as poorly enacted.

The question two was concerned with the identification of the teachers' perceptions of their own instructional practices. Like question one, data collected in answering question two were analysed using descriptive statistical techniques and means and standard deviations were computed to indicate the level of agreement with the performance of each practice. Questionnaire items were rated in a five Likert scale from "*strongly agree*" to '*strongly disagree*" and a mean of 3 was taken as a cut-off mean to distinguish the well performed practices from those poorly practiced. That is, teachers' instructional practices that scored a mean of 3 and above were considered as good practices while those scored below 3 were taken as poor practices.

The third question concerned the establishment of a relationship between principals' instructional leadership behaviours and teachers' instructional practices. To establish this relationship, Pearson Moment Correlation (PMC) was used and correlation coefficient was

calculated to determine the direction (positive or negative) and magnitude (strong or weak) of this relationship. Prior to analysing these data, however, Pearson correlation assumptions were verified to see if they meet the criteria.

The assumptions of linearity, normal distribution, and homoscedasticity were carefully checked. Both PILBQ and TIPQ variables were scale level measurement and there was a linear relationship between them (r^2 linear=0.316). The assumption of normal distribution was also tested and satisfied via Skewness and Kurtosis results. The Skewness for PILBQ was -.601 and that for TIPQ was .488 both meeting the standard requirements (between -1 and +1).

Regarding Kurtosis, the results displayed a value of .065 for PILBQ and 1.059 for TIPQ, both ranging between -2 and +2; the recommended values. Lastly, both PILBQ and TIPQ variables displayed the homoscedasticity (similar distance between the points on line from the left to the right) following how points were distantly scattered around the line.

Pearson Correlation coefficient was calculated after the verification of assumptions. The factor that the value of correlation coefficient ranges from -1.00 to +1.00 and that different authors suggest different interpretations (Pallant 2011, p.134), the correlation of .50 (or-.50) and above was suggested in this study as a strong indicator of a relationship between principal instructional leadership behaviours and teachers' instructional practices.

The fourth question was to find out whether there was a difference between boarding and non-boarding school principals in terms of enacting instructional leadership. In addressing question four, independent sample t-test technique was used to compare the mean scores between boarding and non-boarding school principals. However, like the second question, assumptions of independent sample t-test technique were first checked. Only two population subgroups were compared (boarding school principals versus non-boarding school principals). Both variables had a scale measurement level and were sufficiently normal for the purpose of conducting t-test (ie. Skew <|2.0| and Kurtosis <|9.0|). In addition, the assumption of homogeneity of variances was tested and satisfied via Levene's F test, F (229) =.368, p=.544.

After the assumptions were verified Cohen's d scores were calculated to determine the effect size of the difference between boarding and non-boarding secondary school principals in performing their everyday activities related to instructional leadership. As Cohen's d effect

size varies from 0 to 1 (Pallant, 2011, p.242), the effect size of 0.80 in this study was considered as large, 0.50 as medium while the effect size of 0.20 and below was taken as small but significant.

In general, the analysis of quantitative data provided a general picture on how school principals enacted instructional leadership behaviours, the level of influence these behaviours had on teachers' instructional practices, and the difference between boarding and non-boarding school principals in performing instructional leadership. However, it was necessary to conduct a qualitative research phase to elaborate the numerical data obtained in the first quantitative strand of the study.

5.5 The qualitative phase

As a mixed method approach, data in this study were collected in two sequential phases. In addition to quantitative strand, a subsequent case study was conducted to elaborate on statistical results obtained from the quantitative phase. Purposive sampling and semi-structured interviews were employed to gather qualitative data in this second phase.

5.5.1 Sampling

The most common approach in selecting participants in qualitative research is purposive sampling. According to Bird (2009, p.1315), Gentles et al. (2015, p.1778) and McMillan and Schumacher (2010, p.138), this technique consists of deliberately selecting a group of participants who are likely to provide specific and more relevant information about the topic. The primary concern is not to generalise the results but to acquire in-depth information useful to explain more a phenomenon under study (Cohen et al., 2011, p.157).

The qualitative phase of this study employed a purposive sample which consisted of two school principals and six teachers from two secondary schools; a boarding school and a non-boarding school. The choice of these schools was based on the fact that the former displayed the highest scores in enacting instructional leadership behaviours while the latter obtained the lowest scores.

To be able to learn about why some instructional leadership behaviours were more enacted than others and why some of them had significant influence on teachers' instructional practices, one school principal and three teachers (two female and one male) were chosen from each school. Each teacher had at least five years of teaching experience in the same school. The only reason behind this criterion is that five years of teaching in the same school

gives an opportunity for teachers to be familiar with the principal and to be able to sufficiently describe his or her instructional behaviours than anyone else who is new in the same school.

The choice of the school principals to participate in this study was motivated by the fact that this research was built around their instructional leadership behaviours which influence teachers' instructional practices in schools. Therefore, their information could add valuable insights for the understanding more how instructional leadership was enacted, its success, challenges, and how best it contributed to instructional practices of teachers. Teachers were selected to take part in this research as they are the curriculum implementers and are the ones who, under the influence of principals, could instructionally improve their teaching practices in schools. The majority of secondary schools in Rwanda have a principal, teachers and a few supporting staff because of the small number of students. Therefore, both school principals and teachers provided rich information primarily because of their daily involvement in teaching and learning. To collect qualitative data, all selected participants were subject to semi-structured interviews.

5.5.2 Interviews

In the second phase of the study, the researcher used interviews to gather in-depth information important to expanding the detail learnt from the quantitative section. Interview is considered as a main data collection tool in qualitative research that enables a researcher to reach a holistic understanding of the problem being studied (Anyan, 2013, p.2; Baxter & Jack, 2008, p.534). It allows interviewer and interviewee to mutually interact and jointly produce knowledge, meanings and narratives that are needed to understand better the topic.

Unlike questionnaires where a respondent is required to record information in a certain way, interview provides free space for both researchers and interviewees to converse and give explanations or ask clarifications for obtaining or providing valid information (Alshenqeeti, 2014, p.40; Cohen et al., 2011, p.409). Besides, information gathered in the interview can be useful in elaborating the issues raised in the questionnaires as was the case in this study. Two school principals and six teachers were interviewed to obtain information that clarifies the engagement of school principals in instructional leadership behaviours and the magnitude of the relationship between these behaviours and teachers' instructional practices.

Schostak (2006, p.54) defines interview as "an extendable conversation between partners that aims at having in-depth information about a certain topic or subject, and through which a phenomenon could be interpreted in terms of the meanings interviewees bring to it". Very often, interview involves participants to think and talk about their views, discuss their perceptions and interpretations in regard to a given situation (Cohen et al., 2011, p.409).

The primary purpose of interviewing people is to find out what is on their minds, what they think or how they feel about something (Fraenkel et al., 2012, p.451). Here, the strength of interview lies in the fact that it offers a researcher an opportunity to uncover information that cannot be accessible using other methods or techniques like observation and questionnaire.

In qualitative research, researchers categorise interviews into three types. According to Alshenqeeti (2014, p.40) and Cohen et al. (2011, p.411), interviews can range from the formal interviews in which set questions are asked and the answers recorded on a standardized schedule through less formal interviews in which the interviewer is free to modify the sequencing of questions, change wording, explain them or add to them, to the completely informal interviews where the interviewer may have a number of key issues s/he raises in a conversation style. In other words, interviews can be structured, semi-structured or unstructured depending on the types of research questions and information to be collected.

Among the three types of interviews, semi-structured interviews were considered as appropriate and effective to answer the second research phase questions. Semi-structured interviews are interviews, according to Fox (2009, p.6), in which a researcher (interviewer) predetermines the key themes, issues and questions to be covered prior to the interview. In this type of interviews, however, the researcher can modify the sequence of questions and change the wording and additional questions can be asked to probe and expand interviewee's responses (Cohen et al., 2011, p.416).

Semi-structured interviews were thus used in this study because they allowed the researcher an opportunity to carefully prepare the questions in relation to the issues that arose from the quantitative results. Poor performance of some instructional leadership behaviours by school principals and low level of influence of these behaviours on teachers' instructional practices were some of the issues that needed additional information from participants. Since the researcher had an overview on the topic in advance, pre-arranged questions were supplemented by prompts and probes to gain an in-depth understanding of the issues in question (Alshenqeeti, 2014, p.40).

5.5.3 Conducting interviews

Before conducting interviews, the researcher developed an interview guide based on the quantitative results of the first portion of the study. Interview guide for each category of respondents (school principals and teachers) was designed separately and was administered to one school principal and two teachers who were not part of the sampled participants to test its consistency prior to the actual interview. This was done following the advice of Fox (2009, p.32) and McMillan and Schumacher (2010, p.206) that a pilot test is necessary because it helps to check bias in the procedures, the interviewer, and the questions. It is also an opportunity to assess the clarity and the length of the interview questions for further refinement (Alshenqeeti, 2014, p.41; Majid et al., 2017, p.1074). Therefore, based on the recommendations suggested by the participants in the pilot test, it was necessary for the researcher to review the interview and modify some questions to make it clearer and consistent.

Interviews can be undertaken in different ways including focus group, face-to-face, telephone, email, or website (Bolderston, 2012, p.68). For this study, the researcher used the face-to-face approach and each participant was interviewed individually. This method allowed the interviewee an opportunity to speak freely and privately and the researcher to record non-verbal behaviours (facial expressions, gestures) which could accompany the interviewee's verbal expressions to strengthen his/her arguments. The same method also aided mutual understanding between the researcher and the interviewees and increased chances of obtaining appropriate answers as the researcher rephrased or simplified questions that were not understood by interviewees (Dornyei, 2007, p.143).

In total, eight participants were interviewed; one school principal and three teachers from each school. The researcher visited each participant at his/her school and agreed in advance on the time and venue for the interview. All interviews were undertaken at school at different times depending on the availability of each participant.

Each school made available a room which enabled uninterrupted and private interviews to take place. Interviews explored two major themes; the school principal enactment of instructional leadership behaviours and the challenges that impeded this enactment. The researcher interviewed school principals on the perceptions of their own instructional behaviours and challenges that prevented them from guiding effectively teachers in their classroom practices. Similarly, teachers were asked to provide perspectives on their

principals' instructional leadership and challenges they thought impede instructional leadership in schools. Responses from teachers and principals were compared to identify similarities and differences before drawing conclusions about instructional leadership and its effect on teachers' instructional practices.

Interview data collection in this phase followed the similar procedures as those of collecting quantitative data. Each interviewee used a language s/he was comfortable with to be able to express her/his views confidently and freely without any pressure of language mistakes. Generally interviews were conducted in English and Kinyarwanda and seven out of eight participants opted for Kinyarwanda to express themselves freely. According to Alshenqeeti (2014, p.41), Berg (2007, p.96) and Fraenkel et al. (2012, p.454), interviews are usually successful when there is an appropriate atmosphere through which interviewees feel at ease to talk. To establish and maintain a good rapport with interviewees, the researcher introduced himself to each participant before the interview started, explained briefly the purpose of the interview and why the participant was selected. This was also an opportunity to reassure the participant of his/her confidentiality and anonymity and seek his or her consent to participate in the interview and to tape-record information that s/he had to provide.

Interviews were undertaken in an interactive and non-threatening way and each participant spoke freely without any unnecessary interruptions. This was in line with Dornyei's (2007, p.143) golden advice that researchers need to minimise interruptions and give the interviewees enough time to elaborate and explain a particular issue. To adhere to this advice, yes and no questions which could restrain interviewees to bring up their stories were avoided and the researcher played a less powerful role in the interview process by listening more to the participant than speaking too much. Probe and prompt questions were used only when a need arose more clarifications.

The interviewer (the researcher) was familiar with the interview questions and this enabled him to keep interviews focused on the target issues although he had to be neutral to avoid too much bias in the interview process. The neutrality was maintained, for example, through the avoidance of asking leading questions which could make interviewees respond in a particular way (Robson, 2011; Cohen et al., 2011, p.205). Other questions like long questions, double or multi-barrelled questions and challenging questions were avoided to help interviewees respond more freely and accurately.

Each interview session lasted approximately one hour and during the whole process, interview responses were tape-recorded (with the agreement of interviewee) and notes were taken to assist in transcribing and analysing interview data. Before ending the interview each participant was requested to sum up the points s/he made in order for the researcher to have a whole and clear picture of information provided. Each interview ended with the researcher thanking the participant for the time s/he devoted to it and the contribution s/he brought to the research in general.

5.5.4 Interview data analysis

After conducting the interviews, the next stage was to analyse and produce a meaningful report. Analysing interviews means reducing them into a manageable size and generate categories and themes that can be interpreted to provide explanations of the problem under investigation (Gale et al., 2013, p.5; McMillan & Schumacher, 2010, p.367). Though there is no fixed method of analysing interview data in the literature (Alshenqeeti, 2014, p.41; Cohen et al., 2011, p.427), Robson (2011) provides three most common approaches that can be used to analyse qualitative data including interviews. These approaches include: a) a quasi statistical approach, b) a thematic coding approach and c) a grounded theory approach.

Based on the purpose of the research, a thematic coding approach was employed to analyse interviews in the study. Thematic analysis approach refers to a set of techniques used to examine data and identify themes that are central to the description of the phenomenon under study (Braun & Clarke, 2006, p.6; Gale et al., 2013, p.3). This method helps to precisely determine the concepts, their relationships, and how well these concepts illuminate the research problem. Dividing data into parts, coding these parts according their meanings, and searching their relationships are part of thematic analysis process (Braun & Clarke, 2006, p.15; Ibrahim, 2012, p.42).

The analysis of interview data provided by school principals and teachers in this study began with transcribing interviews. Since many interviews were tape-recorded in the Kinyarwanda language, the researcher had first to transcribe them in their original version and then translate them into English to facilitate analysis and interpretation. This process was very challenging and time consuming as the researcher had to transcribe word by word and ensure that there was no loss of information from the original verbal account. However, as Bolderston (2012, p.74) and Braun and Clarke (2006, p.17) indicate, it constitutes a key phase of data analysis in the sense that it provides an excellent way to start familiarising with

such data. Transcribing interviews helped the researcher in maintaining close attention to the data and develop a thorough understanding of the main ideas as they were coming out through the process. Immersion in data was also enhanced by reading interview transcripts several times to be able to identify patterns.

After the interviews were transcribed, the researcher proceeded to generate initial codes. This was done manually and each participant' interview transcript was carefully read and examined word-by-word to try to capture what s/he was discussing. In thematic analysis, to read data several times is the best way to start identifying the connection between the participants' views and the themes that can emerge from those views (Maguire & Delahunt, 2017, p.3355). This however requires a researcher to keep an eye on the research questions and objectives s/he wishes to code around in order to produce the themes that match up with these questions and objectives (Braun & Clarke, 2006, p.18; Theron, 2015, p.4). The coding interview data was carried out separately for each participant and each question. The researcher used highlighters and coloured pens through the text to highlight the key idea (s) and then write the corresponding code in the margins on the right side of the text.

Once codes for each participant's interview data on each question were available, the researcher checked the similarities and differences among participants' views within the school and across the schools and then sorted out the codes into the potential themes of similar meaning. With a careful examination of data that constituted different themes, each theme was given a label that represented the main ideas developed from them. Themes on perceptions of school principal's instructional leadership behaviours and challenges that impede the effective implementation of these behaviours were produced deductively in line with the insights from the literature review and quantitative results and were used to build an overall story about the interview data in relation to research questions.

5.6 Validity and reliability of the study

Scholars contend that validity and reliability are the two important aspects any researcher should take into consideration when designing a study, analysing results and judging the quality of study (Alshenqeeti, 2014; Mathiyazhagan & Nandan, 2010; Mohajan, 2017). According to Bird (2009, p.131) and Mathiyazhagan and Nandan (2010, p.41), validity in research refers to whether or not a study measures or examines what it claims to measure or examine. Bernard (2006, p.53) states that validity refers to the accuracy and trustworthiness of instruments, data and findings in research. Bernard (ibid.) further adds that validity of data

is tied to the validity of instruments. This is because, as Fraenkel et al. (2012, p.147) argue, the conclusions that researchers draw are based on the information obtained using these instruments. Good quality instruments are required to produce validated data and conclusions.

Reliability refers to the consistency of a question, that is, the probability of obtaining the similar results if the question is duplicated (Bolderston, 2012, p.74; Mohajan, 2017, p.10). In other words, the study is reliable when it produces stable and consistent results when a researcher studies the same phenomenon, in a similar context, using the same research instruments more than once (Cohen et al., 2011, p.199).

There are, however, many factors that can affect validity and reliability in quantitative, qualitative, or mixed methods research and that can render the findings and conclusions invalid and unreliable. These threats include a researcher's bias, inadequate instruments, insufficient or biased sample, and failure to connect empirical evidence to the existing theory (Ihantola & Kihn, 2011, pp.42-43). To minimise these threats and increase the validity of the information gathered, Onwuegbuzie and Johnson (2006) introduced a legitimation framework that came to the fore as a result of combining inferences from qualitative and quantitative components of a mixed methods research. In this framework, Onwuegbuzie and Johnson (ibid.) provided nine types of legitimation that need to be addressed in order to obtain valid findings and make credible and trustworthy inferences. Among these types of legitimation are sample integration, inside-outside, weakness minimisation, sequential, conversion, paradigmatic mixing, commensurability, multiple validities, and political legitimation (pp.56-60).

Since the present study combines quantitative and qualitative aspects as a mixed methods approach, the researcher employed Onwuegbuzie and Johnson's (2006) legitimation framework to address the issues of threats to validity at different stages of the research.

To produce credible results, weakness minimisation legitimation was addressed. This type of mixed methods research legitimation refers to the extent to which the weaknesses from one approach are addressed by the strengths from the other approach (ibid., p.57). The argument is that different methods have different strengths and weaknesses and when combined together they complement each other as one method's strengths offset the weaknesses of another (Plano Clark & Ivankova, 2016, p.84). Thus, the researcher used the survey and case study in the present research so that the strengths of questionnaire offset the weaknesses of

interviews and vice-versa. Questionnaires helped to collect numerical information from a large sample about the school principal's instructional leadership behaviours and teachers' instructional practices. However, this information lacked some details, hence the need to use interviews to explain deeply statistical results though the interview findings were limited to a few specific schools. Taken together, both results compensated each other and jointly provided a better understanding of how school principals enacted instructional leadership behaviours and how these behaviours influenced the practices of teachers.

The second strategy used to enhance the quality of findings and inferences of the study was to address multiple validities legitimation threats. According to Ihantola and Kihn (2011, p.16) and Onwuegbuzie and Johnson (2006, p.59), multiple validities legitimation refers to the extent to which a researcher addresses legitimation of the quantitative component and then the qualitative portion (component) of the study to jointly produce high quality inferences in a mixed method study.

To address the validity legitimation of the quantitative portion of the study, both types of questionnaires, PILBQ and TIPQ were piloted to test their usefulness in providing valuable information. Pilot study, according to Bird (2009, p.1317) and Kelley et al. (2003, p.263), is a small study conducted prior to a large piece of research that covers a sample of members of the target population to detect any defects in questionnaire design. The primary purpose of piloting is to identify whether respondents understand the questions and instructions so that a researcher can eliminate ambiguities or difficulties in their wording. To improve the validity of the instrument in the study, both PILBQ and TIPQ were tested and administered to 24 teachers from six secondary schools in the district. The pilot study helped the researcher to identify mistakes in the instrument design, refine its content, and determine the time participants would take to complete it and its level of clarity (Cohen et al., 2011, p.402; McMillan & Schumacher, 2010, p.204). Pilot study results were also used to test the validity and reliability of statistical techniques that were adopted for data processing and analysis in the research (Mathiyazhagan & Nandan, 2010, p.41).

The validity of the instrument (questionnaires) was strengthened by running a principal component analysis (PCA) to identify clusters of key variables and redundant items on the questionnaires (Cohen et al., 2011, p.674). With PCA, the number of PILBQ items from pilot study results was reduced from 52 to 40 while the number of TIPQ items was reduced from 31 to 22. All retained items were significantly loading on their components with a lot of

weight (≥.40). In general, six components were retained for PILBQ items and four components for TIPQ items. These components were later used in collecting data for the main study. Before analysing the final data, both PILBQ and TIPQ were again subjected to PCA. PILBQ revealed the presence of 39 items grouped into six components while TIPQ retained 22 items grouped into five components.

In addition to PCA, the researcher sought assistance from his peers who were doing PhD in instructional leadership to go through the questionnaires and their suggestions together with those provided by teachers in the pilot study enhanced the validity of the instrument.

The reliability of the instrument was assessed by its internal consistency. Internal consistency refers to the degree of correlation among the various items measuring a construct (Cohen et al., 2011, p.201). Very often, the Cronbach alpha coefficient is used as a reliable technique to demonstrate how well items are correlated with one another which indicates the level of consistency of the instrument. According to Cohen et al. (2011, p.639), Fraenkel et al. (2012, p.157) and Mohajan (2017, p.11), alpha coefficient varies from zero to one and high reliability is reported when alpha coefficient is close to one. On the other hand, if questionnaire items are poorly designed and do not correlate strongly, alpha coefficient is close to zero. Cohen et al. (2011, p.640) provide some guidelines to interpret alpha coefficient which were also adopted in this study: a) ≥ 0.90 very high reliable, b) 0.80-0.90 high reliable, c) 0.70-0.79 reliable, d) 0.60-0.69 minimally reliable, and e) <0.60 unacceptably low reliable.

Using the SPSS software programme, Cronbach alpha coefficient was calculated to assess the internal consistency of each type of the questionnaire's items (PILBQ and TIPQ). In general, the total PILBQ alpha coefficient of the sample (n=231) was .93 (very high reliability) while TIPQ test yielded a total alpha coefficient of .87 (n=231) (high reliability), both coefficients exceeding the recommended value of .6 (Cohen et al., 2011, p.640; Pallant, 2011, p.100). Tables below summarise the results of Cronbach alpha coefficient calculated for each type of questionnaire used in the study.

Table 5. 2: Cronbach alpha coefficient for the components comprising PILBQ.

Factor/component	Number of items	N sample	Alpha
Defining and communicating school goals	11	231	0.93
Promoting teacher professional development	11	231	0.91
Supervising instruction and providing feedback	8	231	0.90
Providing resources	3	231	0.89
Reviewing curriculum materials	3	231	0.83
Discussing observation feedback	3	231	0.87
Total PILBQ items	**39**	**231**	**0.96**

As indicated in Table 5.1 above, alpha coefficient for all components comprising principal instructional leadership behaviour questionnaire (PILBQ) ranged from 0.83 to 0.93 and was all higher than 0.6; the minimal recommended value of alpha coefficient. Therefore, it was accepted for further analysis and interpretation.

Table 5. 3: Cronbach alpha coefficient for the components comprising TIPQ.

Factor/component	Number of items	N sample	Alpha
Delivering instruction	7	231	0.90
Engaging in collaborative learning	5	231	0.87
Introducing changes	4	231	0.84
Observing each other's classes	3	231	0.84
Planning instruction	3	231	0.79
Total TIPQ items	**22**	**231**	**0.87**

The results in Table 5.2 above, show that coefficient for all components of teacher instructional practice questionnaire (TIPQ) varied from 0.79 to 0.90 exceeding the recommended minimum value of 0.6 and thus, allowing for further analysis and interpretation.

To make strong meta-inference in a mixed methods study there is need to address legitimation of the qualitative component in addition to quantitative component in multiple validities legitimation (Onwuegbuzie & Johnson, 2006, p.59). To produce trustworthy findings in a study, the issues of credibility, transferability and dependability of the qualitative portion must be considered.

Golafshani (2003, p.604) posits that trustworthiness of the research report cannot be enhanced unless reliability and validity in qualitative research are addressed. For credible and defensible results to be achieved in qualitative research, Anney (2014, p.276) and Onwuegbuzie and Leech (2006b, pp.239-246) in Cohen et al.(2011, p.182) provide different steps a researcher can take including prolonged engagement in the field, persistent observation, triangulation, member checking/informant feedback, peer examination, making contrasts and comparisons, and theoretical sampling.

Ihantola and Kihn (2011, pp.8-9) provide a list of threats to the credibility and dependability of the qualitative research. These threats include inaccurate and unsystematic interview questions, inaccurate transcriptions, failure to tape record or take notes on the spot, poor relations between researchers and participants and failure to reconnect the empirical findings of the study at hand to those of others.

To enhance the trustworthiness of the qualitative portion results, the researcher used semi-structured interviews with few open-ended questions to allow participants to openly express their views. Prior to conducting interviews, however, a pilot test was administered to a small sample of one school principal and two teachers to ensure the consistency of the interview questions and to refine the content and time they could take to be appropriately responded. During the interview process, the researcher tape-recorded all responses provided, took the notes and allowed all interviewees to cross-check their recorded responses to make modification where necessary. The researcher also established and maintained a good rapport with interviewees as a strategy of motivating them to furnish sufficient and reliable information (Fraenkel et al., 2012, p.454; McMillan & Schumacher, 2010, p.332).

Another way of ensuring the consistency and dependability of the qualitative information in the study was the use of triangulation. Triangulation, according to Cohen et al. (2011, p.195) and Onwuegbuzie and Leech (2007, p.239), refers to the use of two or more methods of data collection in a study to produce results that a researcher is confident of. Triangulation strengthens a study's findings in that it helps to minimise bias or distortion which may occur when a single method is used.

Anney (2014, p.277) and Bush (2007, p.100) argue that valid findings and conclusions can be produced using both methodological and respondent triangulation. Methodological triangulation refers to the use of two or more methods in one study and respondent

triangulation involves using the same instrument to collect data from different participants. For this study, both types of triangulation were employed. Survey questionnaires were administered to teachers while semi-structured interviews were conducted with teachers and school principals. The combination of two types of results was an attempt to enhance the validity and reliability of the findings by providing a more complete picture of instructional leadership of school principals that could not be achieved with an exclusive reliance upon one approach.

The third strategy to deal with the threats to the validity and reliability of the findings was to address the inside-outside legitimation. This legitimation, according to Onwuegbuzie and Johnson (2006, p.58) and Ihantola and Kihn (2011, p.13), refers to the extent to which a researcher accurately presents and appropriately utilises the insider's view and the observer's view for the purpose of making strong meta-inferences in the mixed methods research. This legitimation suggests that in order to produce high quality results and valid conclusions it is better for a researcher to have trained outside researcher (s) and inside participants or members capable to examine interpretations made, the conceptualisations, and the relationship between the data and conclusions.

Thus, to address inside-outside legitimation in the study, interviews, questionnaires, and the findings were reviewed and commented on by several people (e.g. the university lecturers) who were familiar with the topic of the study. In addition to the comments and suggestions provided by the supervisor of this study, it was necessary to hire an expert in instructional leadership research to review the whole work and provide suggestions on how it could be improved. Furthermore, other PhD students in the Education Leadership and Policy Studies department at Wits University were consulted during the whole process of the research (Anney, 2014, p279). Zohrabi (2013, p.259) emphasises that peer examination of research is an important strategy that tremendously augments the validity of the research. The following section discusses ethical issues that were adhered to in the process of carrying out this study.

5.7 Ethical considerations

Oates, Kwiatkowski, and Coulthard (2010, p.5) define research ethics as "the moral principles guiding research from its inception to completion and the publication of results". The fact that research involves human participants, especially in social sciences, the adherence to these principles serves as a way of protecting participants from malpractices, establishing a good relationship between a researcher and participants, and clarifying the

conditions under which research is carried out (Bolderston, 2012, p.73; McMillan & Schumacher, 2010, p.117). Research ethics deal with a number of ethical issues that need to be taken into consideration by a researcher (Fouka & Mantzorou, 2011, p.4). These issues include confidentiality, anonymity, informed consent and right to withdraw. The following subsections discuss each of these ethical issues and how they were addressed in this study.

5.7.1 Confidentiality

In this study, participants' right to privacy was protected through assurance of confidentiality of information provided. Confidentiality in research ethics refers to control of access to information provided by participants and the guarantee that this information will not be shared with unauthorized people (Anderson 2009, p.75; Cohen et al., 2011, p.92). Though a researcher may know everyone who has provided information during data collection, s/he is not ethically allowed to disclose this information in any way that can lead to identification or traceability of the information provider without his/her permission. On this issue, Bolderston (2012, p.73) and Oates et al. (2010, p.26) say that participants have the right to expect that the information that they provide will be treated confidentially, and if published, will not be identifiable as theirs.

Thus, to protect the participants from any harm or discomfort, all were assured that the information that they provided would be used for the purpose of the research and that it would not be made available to anyone who is not directly involved in the study. Each participant was given a signed statement indicating nondisclosure of information provided. In addition, data were collected by the researcher himself to avoid information leaking to someone else who was not concerned with the research.

5.7.2 Anonymity

Anonymity is another ethical issue which needs to be addressed to protect research participants from any physical, mental or emotional harm. According to Anderson (2009, p.74), anonymity refers to keeping the identity of research participants from being known. Similarly, Halai, (2006, p.6) and McMillan and Schumacher (2010, pp.121-122) define anonymity as the state of not revealing the identity of individuals and institutions involved in research. Participants are said to be anonymous when no one other than a researcher manages to identify their names or their identity from the information they have provided. According to Cohen et al. (2011, p.91), this may be possible only when a researcher uses aliases, codes, and pseudonyms in the place of real names. Anonymity in this study was protected by

guaranteeing all participants that their identity, and that of their schools, will remain anonymous throughout the study. Both questionnaires and interviews had no space for the information provider's identification and the researcher used only symbols and fictitious names in place of the real names of the participants and their schools. Participants were also assured of the destruction of their responses once the study is complete.

5.7.3 Informed consent

The principle of informed consent in research ethics concerns the participants' right to agree or disagree to take part in research. According to Bolderston (2012, p.73) and Cohen et al. (2011, p.78), informed consent means a process in which a participant consent to participate in a research project after being informed of its procedures, risks and benefits. In order to decide, in a conscious and deliberate way, Halai (2006, p.5) stipulates that researchers should furnish participants with prior information on key elements of research such as purpose, risks and benefits, and a clause stipulating that participation is voluntary and that the participants have the right to withdraw from the study. In doing so, researchers avoid putting participants in a situation where they might be at risk of harm as a result of their participation (Fauka & Mantzorou, 2011, p.4).

Although participants may be reluctant to participate through the refusal of signing a consent form, informed consent helps in yielding better data as it plays a role in establishing rapport and trust between researchers and participants (Cohen et al., 2011, p.80). Participation rates can also be increased since participants have basic information about the research together with assurances of confidentiality and anonymity.

To be able to collect data for this study, the ethics clearance was first sought from Wits School of Education Ethics Committee and permission to conducted research in secondary schools was granted by the Rwanda Ministry of Education (see appendices A and B). In line with ethics procedures, the researcher informed participants of the nature, objectives, purpose and importance of the research, and the role that everyone would play in it before collecting data. An information letter was submitted to the participants and each of them was requested to sign a consent form indicating that s/he accepted to participate in the study without any intimidation or coercion.

5.7.4 Right to withdraw

The right to withdraw from research suggests that every participant has the freedom to discontinue their participation in the research at any given time. According to Edwards (2005, p.113) and Melham et al. (2014, p.3), a person who decides to take part in research is also free to withdraw from it at anytime and without any repercussions. Prior to collecting data, researchers hold the responsibility for informing participants that they have this right at any stage of the study. To avoid violating their privacy, all participants in this study were debriefed on their right to withdraw from the research and not to use information collected about them in the case they requested it. The participation in the study was voluntary and participants had the right not to answer some research questions that they were uncomfortable to answer.

5.8 Overview of the chapter

This chapter described the research design and methodology used to collect data on school principals' instructional leadership behaviours and their influence on teachers' instructional practices in the Nyamagabe district, in Rwanda. As a mixed methods study, positivism and interpretivism paradigms were discussed and justified. The chapter explained how both quantitative and qualitative phases of the study were conducted and how each phase data were analysed. Lastly, the chapter described how the issues of validity and reliability were addressed and how ethical issues in the study were handled.

The next chapter presents the quantitative findings of this study.

CHAPTER 6: QUANTITATIVE RESULTS PRESENTATION

6.1 Introduction

This chapter presents results from the quantitative component of this mixed methods study. The chapter provides the results from data collected using two types of questionnaires in the survey, namely, principal instructional leadership behaviour questionnaire (PILBQ) and teacher instructional practice questionnaire (TIPQ). Quantitative data analysed and presented in this chapter were provided by 231 secondary school teachers out of 269 sampled in the district to address the following quantitative research questions:

1. What instructional leadership behaviours do secondary school principals in the Nyamagabe district enact?
2. What instructional practices do secondary school teachers in the Nyamagabe district perform?
3. What is the relationship between instructional leadership behaviours of principals and teachers' instructional practices in secondary schools in the Nyamagabe district?
4. What is the difference between boarding and non-boarding secondary school principals in enacting instructional leadership behaviours in the Nyamagabe district?

Each question's results are presented in the following sections.

6.2 Results of the research question one

The purpose of the question one of the quantitative phase of the study was to identify instructional leadership behaviours enacted by school principals and the level of this enactment through the perceptions of teachers. Six major instructional leadership components based on Hallinger and Murphy (1985) and Weber (1996) and Lineburg (2010) instructional leadership framework were identified in teachers' responses. These components include: 1) defining and communicating school goals, 2) promoting teacher professional development, 3) supervising instruction and providing feedback, 4) providing resources, 5) reviewing curriculum materials, and 6) discussing observation feedback.

To respond to this question, PILBQ was designed in a way that teachers rate their principals' involvement in instructional leadership behaviours by rating how frequently they do them. The questionnaire used a five-point Likert scale ranging from "*never*" to "*always*". As indicated in chapter five, one represented '*never*", two represented '*rarely*', three represented '*sometimes*', four represented '*frequently*' while five indicated '*always*'.

The scale was assigned points; five points were assigned to '*always*' while one point was assigned to '*never*'. The average mean (bench mark mean) on each instructional behaviour item was then three (5+4+3+2+1/5=3) while maximum (Mx) and minimum (Mn) were five and one, respectively.

Means (M) and standards deviations (SD) were computed using descriptive statistical techniques to indicate the general trend of principals' instructional leadership behaviours. Mean was taken as an indicator of high or low level of principals' involvement in instructional leadership behaviours and standard deviation allowed the researcher to observe variability of responses on each item. That is, a low standard deviation implied that response scores clustered around the mean and high standard deviation indicated that there was a lot of variation in responses. A standard deviation of zero demonstrated that all responses to a question were the same.

As noted in chapter five, a score of three was taken as a cut-off mean for accepting the behaviour. Behaviours having means below 3.00 were categorised as poorly enacted while those having 3 and above were ranked as acceptably enacted. To be specific, behaviours that ranged between 4 and 5 were considered to be excellently performed, between 3 and 3.99 as moderately performed, between 2 and 2.99 as poorly performed, between 1 and 1.99 as very poorly enacted while the behaviours that scored less than 1 (0.00-0.99) were considered to be almost absent.

6.2.1 Defining and communicating school goals

The defining and communicating school goals component contains 11 instructional behaviour items on the questionnaire and teachers were requested to indicate the level of the principal's involvement in each behaviour item. Results of this instructional leadership subscale are summarised in Table 6.1 below:

Table 6. 1: Means and standard deviations of defining and communicating school goals.

Item	Mean	SD	Mn	Mx
My principal:				
Uses student performance data to define school goals	3.77	1.20	1	5
Holds meetings to discuss school goals	3.74	1.30	1	5
Keeps on reminding teachers of school goals	3.68	1.16	1	5
Promotes individual school goal commitment	3.64	1.16	1	5
Refers to school goals for curricular decisions	3.63	1.15	1	5
Creates opportunity for informal discussion of school goals	3.52	1.13	1	5
Defines goals in terms of teacher responsibilities	3.52	1.20	1	5
Creates opportunity to formally discuss school goals	3.43	1.20	1	5
Is receptive to teacher's input while defining school goals	3.42	1.28	1	5
Defines school goals with teachers and others	3.40	1.29	1	5
Defines school goals easily translated into classroom	3.36	1.24	1	5
Overall mean score	**3.55**	**1.21**	**1**	**5**

As indicated in Table 6.1, principal instructional leadership behaviours that comprise *defining and communicating school goals* are all enacted. However, they are not excellently enacted because none of them has a mean which is equal or slightly below 5, the maximum mean. All items have the mean slightly greater than the bench mark mean (cut-off mean of 3) and this indicates that defining and communicating school goals is moderately practiced although there are some observed mean differences. For instance, while teachers rank their principals high in using *student performance data to define school goals* (M=3.77, SD=1.20) and *holding meetings to discuss school goals* (M=3.74, SD=1.30), they indicate that school principals are relatively low in *defining school goals with teachers and others* (M=3.40, SD=1.29) and in *defining school goals that are easily translated into classroom* (M=3.36, SD=1.24). This shows that school principals are more active in some items on this dimension and less active in the others. However, the overall mean of this component (M=3.55, SD=1.21) indicates that teachers are affirmative that school principals involve them in setting schools goals, discussing these goals and promoting individual and collective commitment to ensure their achievement. Although teachers seemed to be heterogeneous in their responses with a high value of standard deviation, it can generally be concluded that school principals in the Nyamagabe district are active and proactive in setting the direction of their schools in conjunction with their teachers.

6.2.2 Promoting teacher professional development

The promoting teacher professional development instructional dimension contains 11 items and participants were required to indicate how best school principals enact each behaviour item. Means and standard deviations were calculated to indicate the trend of each behaviour performance as summarised in Table 6.2 below:

Table 6. 2: Means and standard deviations of promoting teacher professional development.

Item	Mean	SD	Mn	Mx
My principal:				
Encourages teachers to take responsibilities for their own growth	3.54	1.18	1	5
Encourages teachers to teach each other how to improvise teaching and learning local materials	3.51	1.90	1	5
Supports professional development activities initiated by teachers	3.42	1.17	1	5
Supports the use of skills acquired from teacher in-service training sessions	3.38	1.17	1	5
Ensures that in-service training sessions attended by teachers are consistent with their needs	3.30	1.21	1	5
Creates opportunity for teachers to share skills from in-service training sessions	3.21	1.27	1	5
Plans professional development activities together with teachers	3.21	1.25	1	5
Organises in-service activities based on classroom observation and feedback	3.20	1.17	1	5
Provides individual opportunity to discuss instructional issues	3.11	1.28	1	5
Creates ongoing opportunity to collectively discuss teaching practices	3.06	1.27	1	5
Encourages teachers to visit other schools	2.79	1.31	1	5
Overall mean score	**3.24**	**1.22**	**1**	**5**

Statistics in Table 6.2 indicate that all instructional behaviours comprising *promoting teacher professional development* are enacted at a different level. The highest performed instructional leadership behaviour, according to teachers' perceptions, is *encouraging teachers to take the responsibilities for their own growth* (M=3.54, SD=1.18). However, the mean of this

behaviour is not far from the cut-off mean indicating that teachers are not highly encouraged to be responsible for their own growth.

Another instructional behaviour that teachers report to be significantly enacted is *supporting professional development activities initiated by teachers* (M=3.42, SD=1.17). However, *encouraging teachers to visits other schools* (M=2.79, SD=1.31) is poorly enacted as is indicated by the mean which is below the cut-off mean (M<3).

Overall, statistics in Table 6.2 show that providing ongoing teacher professional development is enacted at a moderate level because the overall mean (M=3.24, SD=1.22) is slightly greater than the cut-off mean. Although teachers' responses tend to diverge with a value of standard deviation, school principals are generally reported not to be significantly involved in promoting teachers' learning and only few opportunities are provided to increase teaching capacity of teachers. According to the teachers' perceptions, school principals are relatively more engaged in some professional development activities and less active in the others.

Encouraging teachers to take responsibilities for their own growth and supporting professional development activities initiated by teachers are among instructional behaviours school principals emphasise more on. However, encouraging teachers to participate in observational visits to other schools seems to be neglected. Apparently, teachers learn almost only from their own school context.

6.2.3 Supervising instruction and providing feedback

Teachers in the survey were also asked to rank their principals' involvement in activities related to the supervision of teaching and learning activities and the provision of feedback to teachers. Almost all teachers agree that school principals perform well in the eight behaviours that comprise this component, as indicated by the means and standards deviations computed in the Table 6.3 here below:

Table 6. 3: Means and standard deviations of supervising instruction and providing feedback.

Item	Mean	SD	Mn	Mx
My principal:				
Encourages interaction and cooperation during the classroom observation process	4.11	1.05	1	5
Conducts walkthrough observations	4.08	1.00	1	5
Provides honest, open and constructive feedback	4.04	1.04	1	5
Plans supervision activities with teachers	4.01	1.03	1	5
Reviews teachers' work while supervising instruction in classroom	4.00	1.15	1	5
Provides classroom observation feedback	3.95	1.11	1	5
Conducts formal classroom observations	3.78	1.18	1	5
Ensures that classroom objectives are consistent with stated goals of the school	3.72	1.16	1	5
Overall mean score	**3.96**	**1.09**	**1**	**5**

With regard to dimension three which is *supervising instruction and providing a feedback*, results in Table 6.3 indicate that the majority of instructional behaviours are excellently performed. *Principal interaction and cooperation in observation process* (M=4.11, SD=1.05), *conducting walkthrough observations* (M=4.08, SD=1.00) and *providing honest, open and constructive feedback* (M=4.04, SD=1.04) are among the instructional behaviours that are excellently enacted by school principals as shown by their means that range between 4 and 5.

The results suggest that the poorly performed instructional leadership behaviour in Table 6.3 is *ensuring that classroom lesson objectives are consistent with the stated goals of the school* (M=3.72, SD=1.16). However, the fact that this item's mean is greater than the cut-off mean confirms that school principals perform well in all instructional behaviours of this dimension. This also suggests that principals adequately engage in both formal and informal classroom visits and work and cooperate with teachers in collecting information about teaching and learning. School principals are also reported to be active in providing observation feedback to teachers to reflect on their teaching practices and to adapt them in accordance with the students' needs. Generally, teachers in the survey consider their school principals as being effective in collecting information about the teaching and learning process and in sharing this

information, with teachers as is indicated by the overall mean of the dimension (M=3.96, SD=1.09).

6.2.4 Providing resources

Participants in the survey were requested to indicate how school principals enact instructional leadership behaviours regarding the provision of teaching and learning support materials for successful teaching and learning. Participants' response means and standard deviations are summarised in Table 6.4 below.

Table 6. 4: Means and standard deviations of providing resources.

Item	Mean	SD	Mn	Mx
My principal:				
Provides teachers with instructional resources	3.49	1.13	1	5
Provides teachers with enough instructional resources	3.19	1.12	1	5
Provides instructional resources on time	3.10	1.05	1	5
Overall mean score	**3.26**	**1.10**	**1**	**5**

As indicated in Table 6.4, *providing instructional resources* is not strongly enacted by school principals as perceived by their teachers (M=3.26, SD=1.10). All items that comprise this instructional behaviour have means that are slightly greater than the cut-off mean. The highest mean is 3.49 (SD=1.13) for providing instructional resources and the lowest mean is 3.10 (SD=1.059) for providing instructional resources on time.

The value of SD obtained indicates that teachers are not homogeneous in their responses. However, statistics indicated that almost all teachers are of the view that their school principals do not sufficiently provide them with teaching and learning support materials for effective teaching and learning. The perceptions of teachers also indicate that teaching and learning support materials are not always allocated on time. Though the overall mean of this instructional leadership dimension is above the benchmark mean (3.26>3), this is a slight difference and one can conclude that secondary school principals in the Nyamagabe district are not strong resource providers.

6.2.5 Reviewing curriculum materials

Participants in the survey were requested to indicate how often school principals participate in the selection of instructional materials. This component consists of three specific

principals' instructional behaviours and response scores were computed into the means and standard deviations presented in the Table 6.5 below.

Table 6. 5: Means and standard deviations of reviewing curriculum.

Item	Mean	SD	Mn	Mx
My principal:				
Participates actively in reviewing curricular materials with teachers	3.29	1.24	1	5
Participates in selecting content, teaching methods and teaching aids together with teachers	3.08	1.29	1	5
Encourages teachers to use student performance data to select content, teaching methods and teaching aids	3.07	1.37	1	5
Overall mean score	**3.14**	**1.30**	**1**	**5**

Statistics in Table 6.5 above indicate that three behaviour items comprising the dimension of *reviewing curriculum materials* are moderately enacted by school principals because the overall mean is 3.14 with the standard deviation of 1.30. The highest performed instructional behaviour is *the active participation of school principals in reviewing curricular materials* (M=3.29, SD=1.24) whereas the lowest item is encouraging teachers to use *student performance data to select content, teaching methods and teaching aids (M*=3.07, SD=1.37).

When considering each behaviour item mean, the researcher observed that none of these behaviours is excellently performed because all means are nearly equal to the bench mark mean (cut-off mean of 3). These results suggest that teacher-principal collaboration on curriculum review and planning is not emphasised in schools. Apparently, principals do not sufficiently work with teachers in the selection of content, instructional methods, activities and appropriate resources to facilitate effective curriculum implementation. Their role on participating and providing information and direction regarding instruction planning is, to some extent, limited. The perception of teachers indicates that school principals are not fully active and supportive in planning and organising instruction in their schools.

6.2.6 Discussing observation feedback

As school principals are rated the highest in supervising instruction and providing feedback, teachers were at this point asked to indicate whether school principals provide them with opportunities to discuss classroom observation feedback. The responses on this dimension

were recorded and means and standard deviations were calculated to show the trend of school principals' performance in related behaviours. Table 6.6 below summarises the results.

Table 6. 6: Means and standard deviations of discussing observation feedback.

Item	Mean	SD	Mn	Mx
My principal:				
Points out teacher strengths and weaknesses in teaching	3.91	1.14	1	5
Provides teachers with opportunities to discuss observation feedback	3.70	1.16	1	5
Values teacher input while discussing classroom observation feedback	3.68	1.06	1	5
Overall mean score	**3.76**	**1.12**	**1**	**5**

The dimension of *discussing classroom observation feedback* comprises three behaviour items, as indicated in Table 6.6. Although none of them is excellently enacted (M ≥ 4), teachers rank them as strongly performed by school principals in the sense that their means are greater than the benchmark mean and tend to be higher. *Pointing out teacher strengths and weaknesses* in the feedback discussion is the highest behaviour that is enacted by school principals (M=3.91, SD=1.14) while *valuing teachers' input* in discussing classroom observation is the lowest behaviour (M=3.68, SD=1.06) but with the mean which is greater than the bench mark mean.

Teachers acknowledge that school principals provide them with opportunities to discuss and share information on what has been observed during instruction supervision. The results also emphasise that teachers are given a voice in discussing the feedback. Overall, though teachers' responses tend to diverge (SD=1.2), statistical results in Table 6.6 above suggest that school principals are collaborative when it comes to discuss observation feedback with teachers in schools (M=3.76).

6.2.7 Overall principals' instructional leadership behaviours enactment

The statistical results presented above indicate the extent to which school principals in the Nyamagabe district enact specific instructional behaviours depicted in various instructional leadership dimensions. An attempt was also made to identify instructional leadership behaviours that are prioritised by school principals. Average means and standard deviations were computed for all subscales (dimensions) of instructional leadership of school principals

to determine instructional behaviours that the majority of principals are actively involved in as perceived by their teachers.

Table 6. 7: Overall principals' instructional leadership behaviours enactment.

IL subscales	Mean	SD	Mx	Mn
Defining and communicating school goals	3.55	1.21	1	5
Promoting teacher profession development	3.24	1.22	1	5
Supervising instruction and providing feedback	3.96	1.09	1	5
Discussing observation feedback	3.76	1.12	1	5
Providing resources	3.26	1.10	1	5
Reviewing curriculum materials	3.14	1.30	1	5

As indicated in Table 6.7, results of average means demonstrate that all instructional behaviour dimensions are moderately enacted by school principals because their means range between 3 and 3.99 and none of them is reported to be excellently enacted ($M \geq 4$). However, the differences observed in the means demonstrate that some behaviours are prioritised more than others.

According to teachers, *supervising instruction and providing feedback* is the highest instructional behaviour that enacted by school principals (M=3.96; SD=1.09). It is followed by *discussing observation feedback (*M=3.76, SD=1.12) and *defining and communicating shared school goals* (M=3.55, SD=1.25). On the other hand, *providing instructional resources (M=3.26, SD=1.10)*, *promoting teacher professional development (M=3.24, SD=1.11)*, and *reviewing curriculum materials* (M=3.14, SD=1.30) are the dimensions of instructional leadership which are lowly prioritised by the school principals. A summary of instructional leadership behaviours enacted by secondary school principals in the Nyamagabe district is provided in Figure 6.1 below.

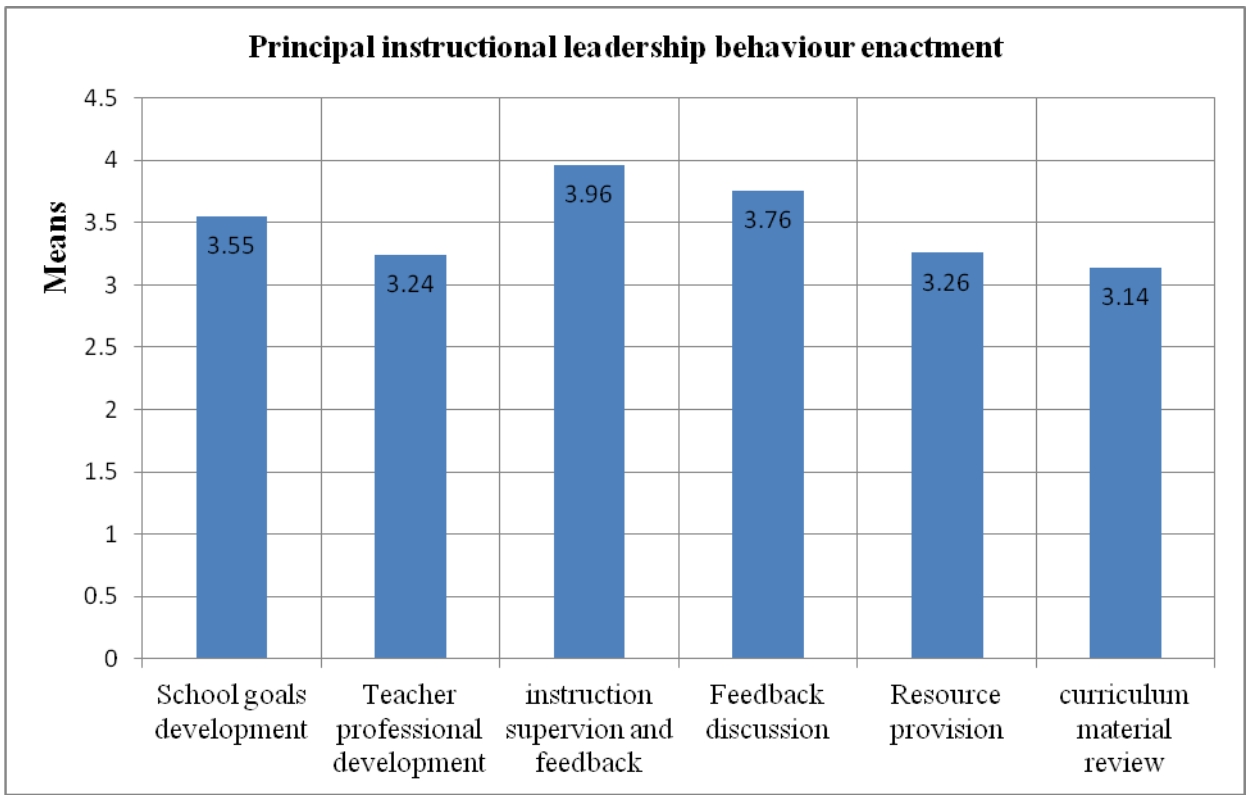

Figure 6. 1: Level of principal instructional leadership behaviour enactment in schools.

According to the teachers, school principals are more active in some instructional behaviours and less active in others. The dominant instructional leadership behaviours are: supervising teaching and learning activities, providing teachers with feedback, and creating opportunities to share information collected during the supervision process.

On the other hand, school principals are not fully engaged in building a professional learning community by supporting teachers and encouraging them to work together for individual and collective learning. School principals are also reported not to play a critical role in reviewing curriculum materials and providing teaching and learning support materials useful to conduct effective teaching and learning in the classroom.

Based on the results of this study, it can generally be concluded that principals do enact various instructional leadership behaviours in secondary schools in the Nyamagabe district moderately.

6.3 Results of the research question two

While the purpose of question one was to investigate teachers' perceptions of their principals' instructional leadership behaviour enactment, the purpose of question two is to identify how teachers perceive their own teaching practices. Instructional practices of teachers were

measured through 22 items, which, in turn were grouped into five major components, namely, 1) *delivering instruction*, 2) *engaging in collaborative learning*, 3) *introducing changes*, 4) *observing each other's classes*, and 5) *planning instruction*.

TIPQ was used to elicit responses to question two and was designed in such a way that teachers expressed their level of agreement with regard to the statements provided in the questionnaire. The survey questionnaire also used a five-point Likert scale and teachers were asked to rate their practices from '*strongly agree*' to '*strongly disagree*'. On the questionnaire, one represented '*strongly disagree*', two represented '*disagree*', three represented '*neuter*', four represented '*agree*' while five indicated '*strongly agree*'. Like in questionnaire one, the scale on the TIPQ was assigned points from five points assigned to '*strongly agree*' to one point assigned to '*strongly disagree*'. The average mean of each practice item (bench mark mean) was three (5+4+3+2+1/5=3) while the maximum and minimum means were five and one, respectively.

In order to capture the perceptions of teachers on their own practices, a description of practices in terms of statistical terms (means and standard deviations) was presented for 22 items grouped into five components of instructional practices of teachers. Mean was taken as an indicator of high or low level of teachers' agreement on each item and standard deviation indicated whether (or not) teachers provided varied responses on the same item and the level of this variation.

Again, a score of 3 was taken as a cut-off mean to indicate instructional practices of teachers that were practiced at an acceptable level. Practices displaying means below 3.00 were categorised as poorly performed while those having 3 and above were rated as acceptably practiced. To be specific, practices that ranged between 4 and 5 were considered to be excellently practiced; between 3 and 3.99 as moderately performed; between 2 and 2.99 as poorly performed; between 1 and 1.99 as very poorly practiced while the practices that scored less than 1 (0.00-0.99) were considered to be almost absent. A ranking of teachers' instructional practices as they are performed in the study is provided below.

6.3.1 Delivering instruction

Delivering instruction practices consist of implementing in the classroom the lesson plans prepared by teachers to help students acquire skills and knowledge during the teaching and learning process. In this study, the delivering instruction component contains seven teacher

practice items and teachers were requested to indicate their level of agreement in relation to the performance of each practice. The results are summarised in Table 6.8 below.

Table 6. 8: Means and standard deviations of delivering instruction.

Item	Mean	Mx	Mn	SD
I use a variety of activities and strategies in classrooms	4.28	0.81	1	5
I create a safe and orderly environment in classroom	4.36	0.86	1	5
I make productive use of time in classroom	4.21	0.85	1	5
I promote a high level of student engagement in classroom	4.28	0.86	1	5
I set clear and achievable lesson objectives in classroom	4.21	0.89	1	5
I monitor student understanding of the content and make adjustments accordingly	4.24	0.89	1	5
I use adequate teaching and learning materials to create active learning among students	4.19	0.89	1	5
Overall score mean	**4.25**	**0.86**	**1**	**5**

Table 6.8 shows means and standard deviations for seven teacher instruction practice items in relation to the instruction delivery. The value of SD (<1) obtained indicates that teachers are homogenous in their responses. The teachers' perceptions indicate that '*creating a safe and orderly environment in classroom*' is the first practice to be excellently performed with the highest mean of 4.36 (SD=0.86). Teachers strongly believe that effective teaching and learning takes place in the classroom when there are no classroom disruptions that can prevent students from enjoying their learning and teachers from teaching effectively.

Results also show that *using a variety of activities and strategies in classroom* (M=4.28, SD=0.81) and *promoting high student engagement in classroom* (M=4.28, SD=0.86) are the other important instructional practices that teachers are likely to emphasise. The lowest practice item, though it is excellently performed, is the *use of adequate teaching and learning materials to create active learn*ing (M=4.19, SD=0.89). Perhaps this is because, as observed in the first question, school principals do not provide their teachers with adequate teaching and learning support materials and this can have an impact on delivering the content in classroom.

In general, the statistical results from Table 6.8 suggest that all instructional practices that comprise the dimension of delivering instruction are all excellently practiced despite some

slight differences observed within them. This suggests that teachers in this study are committed to effectively delivering the content and helping their students learn well as indicated by the overall mean score (M=4.25, SD=0.86) of this important teacher practice.

6.3.2 Engaging in collaborative learning

The second component of teacher instructional practices contains five practice items that refer to teacher cooperative and collaborative learning activities carried out to make instruction more effective and student learning more successful. Table 6.9 presents means and standard deviations computed to indicate the extent to which teachers in the study agree on the performance of each practice.

Table 6. 9: Means and standard deviations of engaging in collaborative learning.

Item	Mean	Mx	Mn	SD
I continuously learn and seek out new ideas about effective teaching and learning in the school	4.10	1.04	1	5
I approach my teacher colleagues when I have a particular problem in my teaching	4.16	1.05	1	5
I engage in discussion with my colleagues about the learning development of specific students	3.95	1.02	1	5
I hold conversations with my colleagues about what can help all students to learn better	4.04	1.01	1	5
I help my colleagues struggling with teaching problems	3.75	1.12	1	5
Overall score mean	**4.00**	**1.04**	**1**	**5**

As indicated in Table 6.9, the computation of means for all teacher practice items demonstrate convincingly that there is a good collaborative atmosphere among teachers as all the means fall in the range of 3.70 and 4.20 on the likert scale. Although teachers' responses tend to diverge (SD>1), results show that teachers work together, share ideas, and engage in professional discussions about the learning development of their students. The dominant practice in Table 6.9 is approaching colleagues and sharing insights on teaching and learning which is ranked as the highest practice performed by teachers (M=4.16, SD=1.05). The results also indicate that teachers continuously learn and seek out new ideas about teaching and learning improvement (M=4.10, SD=1.04). Though assisting struggling teachers in their teaching is ranked as the less performed practice (M=3.75, SD=1.12), the perceptions of teachers suggest that this practice is also performed well because it has the mean which is

greater than the cut-off mean (3.75>3). Overall, the perceptions of teachers are strongly positive towards the engagement in cooperative and collaborative learning and integration of new knowledge and skills into their daily professional practices through different collaborative approaches (M= 4.00, SD=1.04).

6.3.3 Introducing changes

Teachers in the study were required to indicate the extent to which observation feedback provided by both school principals and their colleague teachers helps them to self-evaluate and bring changes in their way of teaching through different practices. Means and standard deviations of teachers' response scores are given Table 6.10 below.

Table 6. 10: Means and standard deviations of introducing changes.

Item	Mean	Mx	Mn	SD
I make sure that students work with concrete or manipulative materials	3.22	1.37	1	5
I encourage students to keep trying even when the work is hard or challenging	3.37	1.36	1	5
I encourage students to carry out independent learning to complete classroom learning skills	2.90	1.42	1	5
I frequently assign students to work in collaborative and discussing groups	3.64	1.34	1	5
Overall score mean	**3.28**	**1.37**	**1**	**5**

Statistics in Table 6.10 above reveal that teachers use feedback to reflect on their practices and develop new teaching strategies to improve the learning experience of students. Though it is not done at an excellent level, improving teaching by assigning students to work and discuss in groups is ranked as the highest performed practice on this dimension (M=3.64, SD=1.34). It is followed by encouraging students to keep trying even in challenging situations (M=3.37, SD=1.36), and making sure that students have concrete or manipulative materials to work with (M=3.22, SD=1.37). On the other hand teachers state that the feedback they receive has little impact on the way they encourage students to conduct independent learning to complete classroom skills (M=2.90, SD=1.42). Overall, the statistics suggested that teachers use feedback as a means of reflecting upon their work and changing the way they conduct their teaching practices. This dimension is performed moderately, as indicated by the overall mean score (M=3.28, SD=1.37).

6.3.4 Observing each other's classes

In their collaborative practices, participants were required to indicate the extent to which they learn from each other through engaging in mutual classroom observations and the extent to which they learn from their school leaders through observing classroom model lessons. Means and standard deviations calculated in Table 6.11 summarise statistically the perceptions of teachers on such collaborative practices.

Table 6. 11: Means and standard deviations of mutual classroom observations.

Item	Mean	Mx	Mn	SD
I observe other teachers' classes and provide feedback	2.00	1.17	1	5
I encourage other teachers to observe my class and provide me with feedback	2.00	1.17	1	5
I observe school leaders' model lessons to improve my teaching performance	1.93	1.25	1	5
Overall score mean	**1.97**	**1.19**	**1**	**5**

Statistics in Table 6.11 indicate that almost all teachers agree that opportunities to conduct peer classroom observations in their schools are limited. Though the value of SD tends to be high, teachers are unanimously of the view that observing their colleagues teaching (M=2.00, SD=1.17) and being observed teaching (M=2.00, SD=1.17) are not frequent practices in schools and are poorly practiced. Teachers also disagree that their school leaders demonstrate model lessons from which they can learn the best practices to use in their own classes (M=1.93, SD=1.25).

In sum, instructional practices such as mutual classroom observations and observing model lessons provided by school leaders are not prioritised in the secondary schools of the Nyamagabe district (M=1.97, SD=1.19). The implication is that teachers are more likely to engage in teaching their own classes than learn from observing how their colleagues teach in other classes.

6.3.5 Planning instruction

To assess the level of collective instruction planning, teachers were asked to give their opinions by scoring on practice items depicted in Table 6.12 below. Again, means and

standard deviations of their response scores were computed to indicate the level of agreement for each practice item.

Table 6. 12: Means and standard deviations of planning instruction.

Item	Mean	Mx	Mn	SD
I engage in joint selection of content, teaching methods and teaching aids	3.22	1.24	1	5
I plan curriculum teaching and learning activities together with my colleagues	3.34	1.25	1	5
I refer to and use both curriculum guidelines and teachers' advice when I prepare my lessons	3.78	1.07	1	5
Overall score mean	**3.44**	**1.18**	**1**	**5**

Statistical results from Table 6.12 indicate that teachers work in teams when it comes to planning and preparing instruction. Though all practices shown in Table 6.12 are not excellently performed, results show that teachers design their lessons using both curriculum guidelines and advice from their teacher colleagues (M=3.78, SD=1.07).

Statistics in the same table also show that curriculum planning is done collectively instead of individually for teachers learn from each other (M=3.34, SD=1.25). The results also show that teachers sit together and select the content, methods and teaching aids to make instruction and learning beneficial to students (M=3.22, SD=1.24). Though planning instruction is not practiced excellently, the overall mean (3.44, SD=1.18) computed from the perceptions of teachers indicates that this activity tends to be a social and collaborative practice rather than being an individual task. Teachers interact and share curriculum skills and such a collaborative approach facilitates increased common understanding on what to do and how to do it to make students' learning more successful in schools.

6.3.6 Overall perceptions of teachers on their own instructional practices

Statistical findings from the previous tables summarise the perceptions of teachers following various practice items depicted in their respective subscales. It was also important for the researcher to summarise perceptions of teachers by comparing means and standard deviations of different subscales that comprise teacher instructional practices and demonstrate the level of performance of each subscale in comparison to others. This summary is given Table 6.13 below.

Table 6. 13: Overall means and standard deviations of teachers' instructional practices performance.

TIP subscales	Mean	SD	Mn	Mx
Delivering instruction	4.25	0.86	1	5
Engaging in collaborative learning	4.00	1.04	1	5
Introducing changes	3.28	1.37	1	5
Planning instruction	3.44	1.18	1	5
Observing each other's classes	1.97	1.19	1	5

Table 6.13 above summarises the overall performance of five teacher instructional practices namely, 1) *delivering instruction*, 2) *engaging in collaborative learning*, 3) *introducing changes*, 4) *observing each other's classes*, and 5) *planning instruction*. Comparing their means, statistical results indicate that instruction delivery and engagement in collaborative learning practices are excellently performed with the mean of 4.24 (SD=0.86) and 4.00 (SD=1.04), respectively. Results suggest that teachers put more effort into effective content delivery in classroom and professional collaboration and discussion with their colleagues to develop themselves and improve the quality of learning for their students.

The other dominant teacher instructional practices but not excellently practiced, according to teachers' perceptions, are instruction planning (M=3.44, SD=1.18) and introducing changes (M=3.28, SD=1.37). They both have means falling into the range of 3 and 3.99. These results reveal that teachers interact in activities related to instruction planning and lesson preparation to enhance teaching skills and effective teaching. The same results show that teachers introduce some changes in their teaching when classroom observations are carried out and when feedback is provided on their work performance.

The results of this study shows that teachers perform poorly when it comes to practices related to mutual classroom observations (M=1.97, SD=1.19) despite their potential contribution to the quality of teaching and learning. These results show that teachers rarely observe each other's classes and model lessons delivered by their school leaders. This suggests that these practices are not prioritised and teachers prefer to engage in teaching their own classes than sharing mutual classroom observational knowledge and skills with their colleagues. The figure below summarises the key instructional practices that teachers perform.

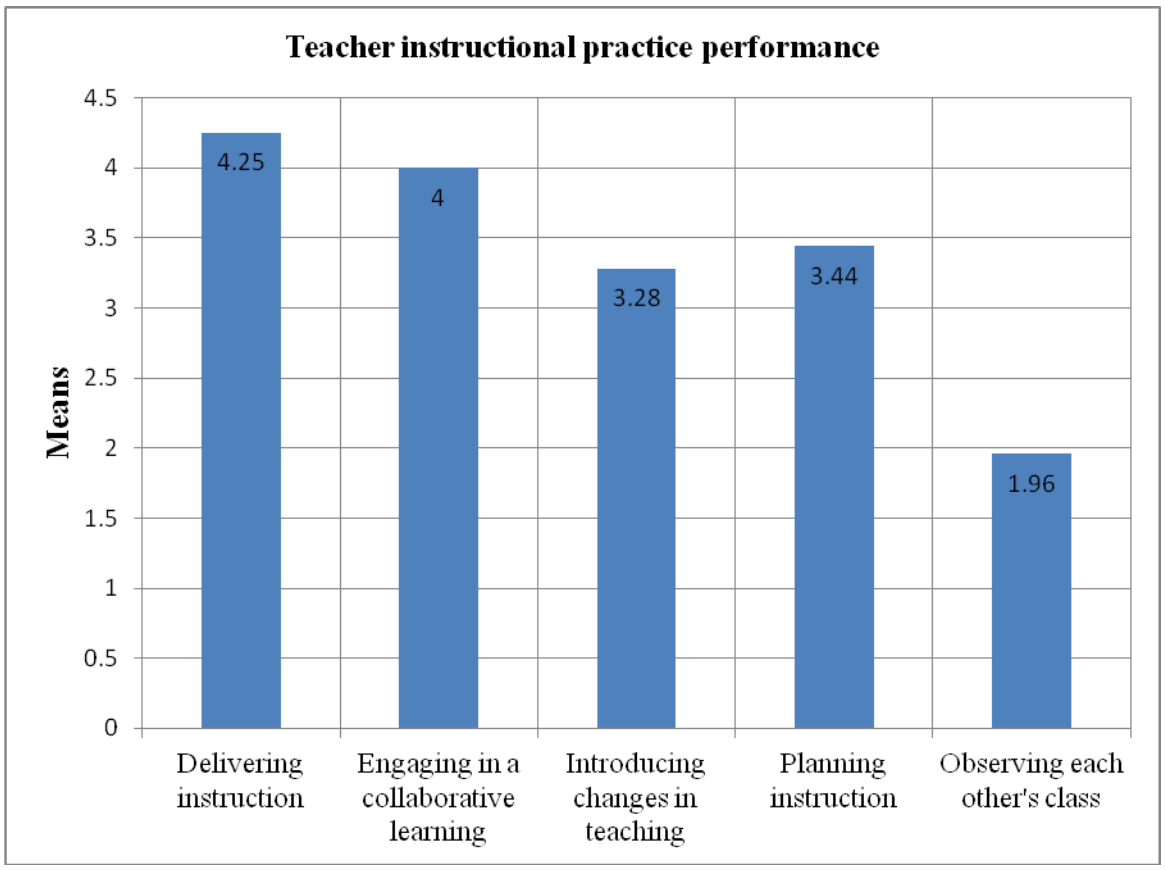

Figure 6. 2: Level of teacher instructional practice performance.

In sum, teacher self-report in the present study shows that teachers are committed to performing various instructional practices including *delivering instruction*, *engaging in collaborative learning*, *introducing changes*, *planning instruction*, and *observing each other's classes*. However, the observing of each other's class is poorly performed.

6.4 Results of the research question three

After indentifying instructional leadership behaviours enacted by school principals and instructional practices performed by teachers in the study, the next step was to establish the nature of the relationship between the two variables to find out the extent to which school principals' instructional leadership behaviours influence the performance of teachers' instructional practices in schools.

The Pearson moment's correlation coefficient (r) is used to determine the correlation and indicate its direction (positive or negative) and its magnitude (strong or weak). According to Pallant (2011, p.134), the value of correlation coefficient ranges from -1.00 to +1.00 and a correlation of 0 indicates no relationship while correlation of 1.00 and -1.00 indicates a perfect positive and negative correlation, respectively. However, as different authors suggest

different interpretations of the *r* value, the researcher used the Cohen's (1988, pp.79-81) guidelines in Pallant (2011, p.134) to interpret the correlations in this study. That is, correlation that ranges between 0.10 and 0.29 is considered as small, correlation between 0.30 and 0.49 as medium while the correlation of 0.50 and above (from 0.50 to1.00) is taken as large or strong. These guidelines apply whether or not there is a negative sign in the front of '*r*' value.

To establish the relationship between the school principals' instructional leadership behaviours and teachers' instructional practices, Pearson correlation coefficient was first calculated between six subscales of school principals' instructional leadership behaviours and five subscales of teachers' instructional practices and then between six subscales of school principals' instructional leadership behaviours and the total of the teacher instructional practices. Lastly, the relationship was established between total instructional leadership behaviours and total teachers' instructional practices. The results are presented in the following sections.

6.4.1 Relationship between school principals' instructional leadership behaviours and teachers' instructional practices

Correlation coefficient was used to identify the relationship between school principals' instructional leadership behaviours, namely, 1) *defining and communicating school goals,* 2) *promoting teacher professional development,* 3) *supervising instruction* and *providing feedback,* 4) *providing resources,* 5) *reviewing curriculum materials*, and 6) *discussing observation feedback* and teachers instructional practices which include a) *delivering instruction*, b) *engaging in collaborative learning*, c) *introducing changes,* d) *planning instruction,* and e) *observing each other's classes.* The correlation is given in Table 6.14 below.

Table 6. 14: Correlations matrix of principals' instructional leadership behaviours for teachers' instructional practices.

	TIP				
	Delivering instruction	Engaging in collaborative learning	Introducing changes	Observing others' classes	Planning instruction
PILB					
Defining school goals	0.288**	0.387**	0.313**	0.180**	0.296**
Promoting TPD	0.160**	0.306**	0.288**	0.308**	0.479**
Supervision and feedback	0.471**	0.531**	0.262**	0.111**	0.312**
Providing resources	0.336**	0.401**	0.204**	0.152**	0.311**
Reviewing curriculum	0.153**	0.294**	0.210**	0.208**	0.451**
Discussing feedback	0.338**	0.338**	0.285**	0.170**	0.283**

** Correlation is significant at the 0.05 level (2-tailed).

Pearson moment's correlation coefficient analysis was used to determine the correlation between school principals' instructional leadership behaviours and teachers' instructional practices.

As Table 6.14 indicates, there is a positive correlation between 'defining and communicating shared school goals' subscale of instructional leadership and teachers' instructional practices towards delivering instruction (r=.288, p<0.05), engaging in collaborative learning (r =.387, p<0.05), introducing changes (r=.313, p<0.05), observing each other's classes (r=.180, p<0.05), and planning instruction (r=.296, p<0.05).

The results also indicate a positive correlation between 'promoting teacher professional development' subscale of instructional leadership and teachers' instructional practices towards delivering instruction (r=.160, p<0.05), engaging in collaborative learning (r=.306, p<0.05), introducing changes (r=.288, p<0.05), observing each other's classes (r=.308, p<0.05), and planning instruction (r=.479, p<0.05).

In addition there is a positive correlation between 'supervising and providing a feedback' subscale of school principals' instructional leadership behaviours and teachers' instructional practices in relation to delivering instruction (r=.471, p<0.05), engaging in collaborative learning (r=.531, p<0.05), introducing changes (r=.262, p<0.05), observing each other's classes (r=.111, p<0.05), and planning instruction (r=.312, p<0.05).

The results in Table 6.14 also reveal a positive correlation between 'providing resources' subscale of instructional leadership behaviours of schools principals and teachers' instructional practices with regard to delivering instruction (r=.336, p<0.05), engaging in collaborative learning (r=.401, p<0.05), introducing changes (r=.204, p<0.05), observing each other's classes (r=.152, p<0.05), and planning instruction (r=.311, p<0.05).

Similarly, a positive correlation is found between 'reviewing curriculum materials' subscale of instructional leadership and teacher instruction practices towards delivering instruction (r=.153, p<0.05), engaging in collaborative learning (r=.294, p<0.05), introducing changes (r=.210, p<0.05), observing each other's classes (r=.208, p<0.05), and planning instruction (r=.451, p<0.05).

Lastly, there is a positive correlation between 'discussing observation feedback' subscale of school principals' instructional leadership and teachers' instructional practices in terms of delivering instruction (r=.338, p<0.05), engaging in collaborative learning (r=.338, p<0.05), introducing changes (r=.285, p<0.05), observing each other's classes (r=.170, p<0.05), and planning instruction (r=.283, p<0.05).

Based on the statistical results summarised in Table 6.14, it is evident that there is a positive correlation (relationship) between all subscales of school principals' instructional leadership behaviours and teachers' instructional practices. This suggests that the more school principals demonstrate instructional leadership behaviours in their schools, the more teachers' instructional practices improve in these schools.

However, not all instructional leadership behaviours of school principals correlate with teachers' instructional practices at the same level. The large significant and positive correlation is only found between 'supervising instruction and providing feedback' subscale of school principals' instructional leadership behaviours and engaging in collaborative learning (r=531, p<0.05) subscale of teachers' instructional practices. This suggests that where teachers describe their principals as more capable of supervising instruction in classroom and providing teachers with constructive feedback, teachers are less isolated and tend to work cooperatively and collaboratively on implementing new advice from their school leaders. Teachers are committed to sharing their expertise and insights about teaching and are open to learning from the effective practices of their colleagues as a result of the school principals' instruction supervision.

Some of the school principals' instructional leadership behaviours that display a medium but significant and positive correlation tending to be higher include *promoting teacher professional development* which correlates positively and significantly with *planning instruction* (r=.479, p=0.05), *supervising instruction and providing feedback* which correlates with *delivering instruction* (r=.471, p=0.05), *reviewing curriculum materials* which correlates with *planning instruction* (r=.451, p=0.05), and *providing instructional resources* which correlates with *engagement in collaborative learning* (r=.401, p=0.05). This correlation indicates a moderate relationship between school principals' instructional leadership behaviours and teachers' instructional practices.

On the other hand, some instructional leadership behaviours of school principals display a small correlational relationship with teachers' instructional practices. For instance, the results in Table 6.14 confirm that there is a positive but small correlation between supervising instruction and providing feedback subscale of instructional leadership and observing each other's classes subscale of teachers' instructional practices (r=.111, p<0.05).

A small significant positive correlation is also found between providing resources subscale of instructional leadership and teachers' instructional practices towards observing each other's classes (r=.152, p<0.05). This suggests that supervising instruction and providing feedback and providing resources by school principals exert little influence on teacher mutual classroom observations in the secondary schools of the Nyamagabe district.

In sum, school principals' instructional leadership behaviours correlate significantly and positively with teachers' instructional practices. This correlation, however, varies from one instructional leadership behaviour to another as statistical results display large, medium and small correlations with teachers' instructional practices.

6.4.2 The relationship between school principals' instructional leadership behaviours and total teachers' instructional practices

In addition to the computation of correlations between school principals' instructional leadership behaviours and teachers' instructional practices scale by scale, the Pearson moment's correlation coefficient was employed to determine the correlation between subscales of principals' instructional leadership behaviours and total teachers' instructional practices, as shown in Table 6.15 below.

Table 6. 15: Correlations matrix of school principals' instructional leadership behaviours for total teachers' instructional practices.

Principal instructional leadership behaviours	Total teacher instructional practices	
	Pearson "*r*"	Coefficient of determination[5]
Defining and communicating school goals	0.425**	18.06
Promoting teacher professional development	0.450**	20.25
Supervising instruction and providing feedback	0.546**	29.81
Providing resources	0.442**	19.53
Reviewing curriculum materials	0.385**	14.82
Discussing feedback	0.447**	19.98

** Correlation is significant at the 0.05 level (2-tailed).

Table 6.15 above summarises the correlational relationship between various dimensions of the instructional leadership behaviours of school principals and the total teacher instructional practices, using Pearson correlation coefficient. Results indicate that there is a large significant positive correlation between supervising instruction and providing feedback subscale of instructional leadership and total teacher instructional practices (r=.546, p<0.05).

All other subscales of school principal instructional leadership behaviours display a medium significant and positive correlation with teacher instructional practices. These include promoting teacher professional development (r=.450, p<0.05), discussing classroom observation feedback (r=.447, p<0.05), providing resources (r=.442, p<0.05), defining and communicating goals (r=.425, p<0.05), and reviewing curriculum (r=.385, p<0.05). The figure below summarises the correlation between instructional leadership behaviours of school principals and instructional practices of teachers.

[5]A coefficient of determination is calculated by squaring the value of Pearson's *r* and multiplying it by 100. This produces a percentage describing the proportion of variation in one dependent variable accounted for by the other independent variable. A coefficient of determination is discussed in more detail in chapter eight.

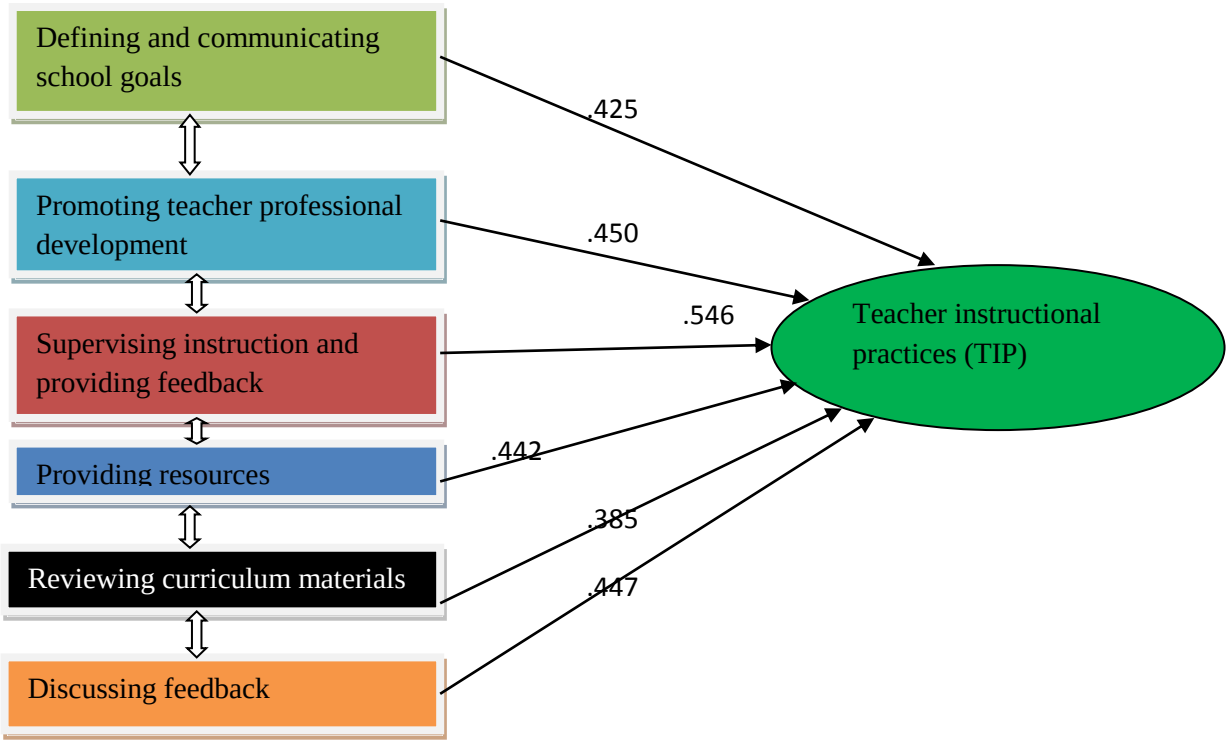

Figure 6. 3: Correlations between six dimensions of principals' instructional leadership behaviours and total teachers' instructional practices.

Overall, all instructional leadership behaviours of school principals in this study display a positive relationship with teachers' instructional practices and the correlation ranges from 0.3 to 0.6 (p<0.05). The results show that all these behaviours influence what teachers do in schools and in the classroom in terms of teaching.

The most influential instructional leadership behaviour is supervising instruction and providing feedback which display a large correlation (r=.546, p=0.05). This suggests that schools where principals observe and evaluate teaching and learning activities and then provide feedback to teachers, teachers' instructional practices tend to improve in those schools. Other instructional leadership behaviours of school principals influence teachers' instructional practices moderately. Based on these results, it may be inferred that principals who focus more on instructional leadership behaviours, especially on supervising instruction and providing feedback, exert a strong influence on teachers' instructional practices in the secondary schools of the Nyamagabe district.

6.4.3 Relationship between total school principals' instructional leadership behaviours and total teachers' instructional practices

To respond to research question three which was aimed at identifying the relationship between instructional leadership behaviours of school principals and teachers' instructional

practices, the Pearson moment's correction coefficient was used to establish the correlation between total school principals' instructional leadership behaviours and total teachers' instructional practices. The results are presented in Table 6.16 below.

Table 6. 16: Correlations matrix of total school principals' instructional leadership behaviours and total teachers' instructional practices.

	Total teacher instructional practices	
	Pearson "*r*"	Coefficient of determination
Total principal instructional leadership behaviours	0.562**	31.58

** Correlation is significant at the 0.05 level (2-tailed).

The null hypothesis (H_0) to be tested here is that there is no relationship between school principals' instructional leadership behaviours and teachers' instructional practices (r=0). The results in Table 6.16 show that, taken together, all instructional leadership behaviours of schools principals have a positive and strong relationship with the teachers' instructional practices; hence the rejection of null hypothesis.

As results in Table 6.16 indicate, *instructional leadership behaviours of school principals correlate positively and significantly with teachers' instructional practices (*r=.562, p=0.05*).* The implication of these results is that school principals who focus on instructional leadership by setting school goals, promoting teacher collaboration and professional growth, supervising instruction and providing feedback, discussing observation feedback, allocating resources to instruction, and encouraging collective instructional planning have an appreciable impact on the teachers' instructional practices.

The results suggest that secondary school principals play a critical role in influencing how teachers learn and how they improve their instructional practices in their daily teaching activities.

Instructional leadership qualities of school principals in the context of Rwanda contribute greatly to the teacher effectiveness in terms of improving his or her teaching practices. It is worth noting, however, that school principals' instructional leadership behaviours described in this study are not exhaustive, hence they are not enough to holistically explain what influences teachers' instructional practices as the correlation is only .562 (p<0.05). It is also important to consider many other factors such as class size, teacher incentives, teacher

qualifications, teacher gender, and teacher-parent relationships which are not tested in this study.

6.5 Results of the research question four

The purpose of research question four in this study is to establish whether there is a statistical significant difference between boarding and non-boarding secondary schools in terms of enacting instructional leadership behaviours. To identify this difference, independent samples t-test statistical technique was used to compare the mean scores of boarding and non-boarding school principals and Cohen's d[6] was calculated to determine the effect size of this difference.

As the Cohen's d value ranges between 0 and 1.00 (Pallant 2011, p.242), the researcher used the Cohen (1988) criteria to interpret the effect size observed in the statistical results. According to these criteria, 0.20 is considered as small effect size, 0.50 as medium effect size, and 0.80 as large effect size. The results are given in Table 6.17 below:

Table 6. 17: Difference between boarding and non boarding school principals in enacting instructional leadership behaviours.

Scales	T-test	Cohen's d score	Mean BS	Mean Non-BS
Defining school goals	$t_{.933}$=229 where *p*=.351	-	39.84	38.87
Promoting TPD	$t_{1.680}$=229 where *p*=.090	-	37.00	35.31
Supervising instruction	$t_{2.630}$=229 where *p*=.009	0.26**	33.03	31.26
Providing resources	$t_{5.041}$=229 where *p*=.000	0.51**	10.89	9.40
Reviewing curriculum	$t_{.385}$=229 where *p*=.701	-	9.54	9.41
Discussing feedback	$t_{.999}$=229 where *p*=.318	-	11.52	11.21
TOTAL PILB	**t_{2152} =229 where *p*=.032**	**0.21****	**141.82**	**135.47**

****** The difference is significant at 0.05 sig. (2-tailed).

The null hypothesis (H_0) to be tested here is that there is no difference between boarding and non-boarding school principals with regard to the enactment of instructional leadership behaviours ($\mu_1=\mu_2$). These results, however, reveal that there is a difference and therefore the null hypothesis has to be rejected.

[6]Cohen's d score: measures the extent or rather the magnitude of the difference which is called '*effect size*'. Effect size is calculated by dividing the difference of means between two groups ($\mu_1-\mu_2$) with the average of standard deviation (SD1-SD2)/2. The value of effect size can be interpreted small (≤ .20), medium (≤ .50) or large (≤ .80) according to Cohen (1988).

As statistical results in Table 6.17 indicate, there is no statistically significant difference between boarding and non-boarding schools only in relation to *defining and communicating shared school goals*, *promoting teacher professional development*, *reviewing curriculum materials*, and *discussing observation feedback* (*p-value* >0.05). This suggests that principals from boarding and non-boarding schools enact these behaviours almost at the same level.

On the other hand, a statistically significant difference is identified between boarding and non- boarding schools in relation to the *provision of instructional resources* (*p*-value < 0.05, Cohen's d score =.51) and *the supervision of instruction and the provision of feedback* (*p*-value=<0.05, Cohen's d score=.26). The results suggest that while the difference for the supervision of instruction and the provision of feedback is medium (Cohen's d=.26), the situation changes when it comes to the provision of resources because the difference is large (Cohen's d score=.51). This shows that principals from boarding schools are more active and supportive in securing and allocating resources necessary to instruction than principals from non-boarding schools. Furthermore, though effect size is found to be medium (Cohen's d=.26), the results reveal that principals from boarding schools engage more in supervising teaching and learning activities and providing feedback to teachers than their counterparts from non-boarding schools.

Overall, when comparing boarding and non-boarding school principals in terms of enacting instructional leadership behaviours, the results reveal a statistically significant difference between both types of schools (*p*-value < 0.05, Cohen's d score =.21) although this difference does not carry much weight. However, the difference should not be neglected because it shows that the principals from boarding schools focus more on instructional leadership in comparison to the principals from non-boarding schools. This difference can thus help to identify specific challenges non-boarding school principals face in implementing instructional leadership in their schools and devise strategies to overcome them.

The overall implication of results in Table 6.17 above is that principals who lead boarding schools are more committed to working with teachers and supporting them in their teaching activities especially in providing resources and supervising instruction than the ones in non-boarding schools. These results, thus, indicate that principals from boarding schools are comparatively better instructional leaders than their counterparts from non-boarding secondary schools in the Nyamagabe district.

6.6 Overview of the chapter

Chapter six presents the quantitative findings of this study. Quantitative data were collected using survey questionnaire and were analysed using different statistical techniques to respond to the first four research questions.

To respond to question one, means and standards deviations were computed to ascertain instructional leadership behaviours enacted by school principals through the perceptions of teachers. The results reveal that principals moderately enact various instructional leadership behaviours including 1) defining and communicating school goals, 2) promoting teacher professional development, 3) supervising instruction and providing feedback, 4) providing resources, 5) reviewing curriculum materials, and 6) discussing observation feedback. Among these behaviours, supervising instruction and providing feedback and discussing feedback are the most enacted instructional leadership behaviours.

With regard to the second question, means and standard deviations were computed to identify how teachers perceive the performance of their own instructional practices. Based on the statistical results, delivering instruction and engaging in collaborative learning are two practices reported to be excellently performed by teachers themselves. Introducing changes and planning instruction are practiced at the moderate level while observing each other's class practice is poorly performed.

To respond to the third question, the relationship between instructional leadership behaviours of school principals and instructional practices of teachers was established. The results indicate that instructional leadership behaviours of school principals correlate significantly and positively with teachers' instructional practices and the correlation is large. Among instructional leadership behaviours of school principals, supervising instruction and providing feedback is the most influential behaviour because it has a large and strong correlation with teachers' instructional practices.

Question four was about establishing whether there is a significant difference between boarding and non-boarding school principals in implementing instructional leadership in their schools. A significant statistical difference is identified between boarding and non-boarding school principals in relation to the provision of resources (large effect size) and the supervision of instruction and the provision of a feedback (medium effect size). Taken together, statistical results reveal that there is a difference between boarding and non-

boarding school principals in relation to instructional leadership implementation although this difference does not carry much weight as it tends to be small. These results seem to suggest that the principals who lead boarding schools are comparatively better instructional leaders than their counterparts from non-boarding schools.

The next chapter presents the qualitative finding of this study. The qualitative data were collected using semi-structured interviews.

CHAPTER 7: QUALITATIVE RESULTS PRESENTATION

7.1 Introduction

To explore instructional leadership of secondary school principals in the Nyamagabe district, the researcher employed explanatory mixed methods design. While chapter 6 presents a quantitative analysis of instructional leadership behaviours enacted by school principals and establishes relationships between these behaviours and teachers' instructional practices, this chapter presents qualitative findings obtained from two case study schools. Data were collected using semi-structured interviews. Key themes were identified in relation to the instructional leadership of principals in the context of two selected schools. All data gathered in this phase were to address the following qualitative research questions:

1. How do principals and teachers perceive instructional leadership behaviours of the principal in secondary schools in the Nyamagabe district?

2. What are the challenges that impede instructional leadership of the principal in secondary schools in the Nyamagabe district?

Findings from the above research questions complement the survey results and were used to elaborate on certain issues raised by participants in this survey.

The interview results presented in this chapter were collected from two secondary schools purposefully selected from 48 schools that participated in the quantitative phase of the study for reasons that were outlined in chapter 5. Two secondary school principals and six teachers participated in the semi-structured interviews, that is, one principal and three teachers from one school.

In line with ethics principles, fictitious names were coded and used to represent all participants and schools in place of the real names throughout the study. The principal of school one (boarding school) was identified as the PA (Principal of school A) and the principal of school two (non-boarding school) was named as the PB (Principal of school B). Teachers of the school one were labelled as TA1, TA2, and TA3 while teachers from school

two were coded as TB1, TB2, and TB3, respectively. Table 7.1below summarises the profile of the participants from the qualitative interview phase of the study.

Table 7. 1: Interview respondents' profiles.

School	Participant	Sex	Age	Qualification	Teaching experience	Service year in the school	Type of school
A	PA	M	55-60	B.Ed.	19	5	BS
	TA1	M	30-35	B.Sc.	8	7	BS
	TA2	F	35-40	B.A	15	5	BS
	TA3	M	40-45	B.A	12	6	BS
B	PB	F	35-40	B.Ed.	7	7	NBS
	TB1	F	45-50	B.A	26	8	NBS
	TB2	F	45-50	B.Ed.	24	8	NBS
	TB3	M	35-40	B.Sc.	10	6	NBS

Table 7.1 above shows that participants in the qualitative phase were made up of four women and four men. The reason to include female and male participants in the study was to understand whether (or not) both types of participants see in the same way instructional leadership behaviours enacted by school principals and challenges that inhibit the success of this leadership.

The presentation of the qualitative interview findings was organised around themes that emerged from the interview data in relation to principals' and teachers' perceptions of the principal instructional leadership and challenges school principals face in the implementation of this leadership.

7.2 Principals' and teachers' perceptions of instructional leadership behaviours of the principal

Various interview questions were given to teachers and principals and similarities and differences among participants' responses were recorded. The researcher asked the questions about the primary activities of the principal in supporting and guiding teachers in their teaching. Teachers were requested to describe instructional support and guidance they receive from their principals, the way they receive it and how much they think it contributes to the improvement of their teaching practices. School principals, on the other hand, were requested to explain the way in which they are involved in the daily activities associated with instructional leadership that assist teachers in their everyday teaching practices. All interview data were analysed along the following themes that emerged in response to the first interview

question: a) setting direction of school, b) building teaching capacity of teachers, c) fostering collaborative relationships with and among teachers, d) securing and allocating resources to instruction and e) monitoring teaching and learning activities.

7.2.1 Principals' involvement in setting the direction of a school

One of the tasks of school principals as instructional leaders is to define the school purpose and direction that guide all teaching and learning activities in the school. What is more important in this process is to include teachers and other stakeholders so that the purpose can be accepted and shared among them. When asked what kind of guidance school principals provide to them, almost all teachers interviewed in the study pointed out that principals establish the direction that indicates what they want schools to achieve and share it with teachers as a school community. During the interview it was observed that teachers understood well where their school was heading, as shown in the comments below:

> *Yes our school has a purpose and a direction and all of us are aware of this. The purpose of our school is to excel in teaching and in learning so that we can maximise academic performance of students at both school and national level. That is what drives all of us here (*TA1).

In a similar vein, another extract from another school teacher showed that teachers understand what their school stands for. TB2 commented:

> *I think the school cannot work well if it has not a direction to follow. The mission of our school is to deliver the quality education in all subjects we teach in the school. Students take different subjects and our mission is to equip them with skills and knowledge useful for their whole life as it is encouraged by the Government of Rwanda*.

Interview findings indicated that teachers had similar views on the fact that their schools are there to make sure that students improve in their learning. This might be an indicator that the purpose of schools was formulated and discussed in conjunction with all school members including teachers. What was interesting in this interview, however, was to find out whether the school principals agree with teachers on the purpose and direction of their schools.

Just like the teachers, school principals emphasised that the purpose of their schools is that of providing quality education among students through effective teaching and learning. PA puts it:

> *The purpose of the school is to fight for excellence in teaching and learning. All teachers are aware that they have to work excellently in their teaching to achieve this purpose. Students are also informed about this purpose as a means of encouraging them to work hard. In few words everyone in school knows what it stands for. What is perhaps more important is to work towards its realisation.*

In the same interview PB agrees with PA and said that the school established the purpose that suits the school needs in terms of student academic achievements. The statements made by teachers and principals indicate that schools seemed to have mission statements that encompass a wide range of roles and responsibilities of each school member to facilitate improvement in teaching and learning.

In response to the question of how the school purpose was established and if teachers were involved in its development process, the views of teachers in both schools differed greatly. While teachers in school B stated that they were not involved in the process of determining school academic goals, their counterparts from school A appreciated the way they were involved in this activity. Strong collaboration in the formulation of school academic goals in the school A can be observed in the statements made by teachers and the principal.

> *There is a particular meeting held in the beginning of each academic year. One of objectives of this meeting is to discuss what we want our school to achieve by the end of the year and develop together strategies to achieve it. New teachers are informed about the purpose of the school and then we move on articulating annual academic goals which will guide us. Each teacher's voice is heard during the meeting and our different views are welcomed and taken into consideration when drafting and finalising the school goal document* (TA 3).

The interview extract above demonstrates that the teacher is satisfied by the way in which teachers are involved in the development of school academic goals. Observations from the interview with TA2 and PA from the same school showed that school leaders provide teachers with an opportunity to participate in the development of school goals as they are the key implementers of the goals in the classroom. A teacher explained the process as follows:

> *Our principal always holds a particular meeting in the beginning of each academic year to define school academic goals and design annual school plan together with all teachers. During the meeting session, we first examine student academic results especially for "O" and "A" level national examination results. After identifying where improvement is needed, we then proceed to set up annual academic goals to fill this gap. We share ideas and views with our school leaders and we collectively decide what must be included in the goals depending on the width of the gap to fill. I mean the level of performance of our students* (TA2).

When asked how school goals are developed in his school, the PA agreed with teachers on their involvement in this process. PA explained the process as follows:

> *Overall mission of schools comes from the Ministry of Education at the central level. On our side we judge and decide what we can accomplish in our school every year. Teachers know that there is a compulsory meeting that is held in January or February each year to frame annual school academic goals and plan a scheme of work. Based on the previous year student academic results, we formulate new school goals. We focus more on the areas that need improvement. Teachers, deputy principal and I decide what to accomplish by the end of the year. It is a collective activity that needs a contribution of everyone in school. Neither principal nor teacher is important on her/his own in this process. We pull together as a school community*.

Although these data highlighted that the overall mission of schools is centrally determined at the ministerial level, the school outlined its own goals to improve teaching and learning. An interesting lesson that can be drawn from above interview extracts in the school A is that collaboration and collegiality are at the centre of the school goal development process. The principal in school A is aware that the contribution of teachers in deciding what the school aims to achieve is of paramount importance for the school. Teachers in turn perceived their principal as a leader who inculcates a sense of collegiality which has a positive effect on their teaching. Cooperation is emphasised in the school.

Unlike teachers' and principal's views about the development of school goals in school A, the situation changed when it came to commenting on how school goals were articulated in school B. The results that emerged from the interview in this school revealed that teachers were not involved in determining school goals although they are aware of them, as one

teacher admits: "*I can't say that our school hasn't goals to pursue. No, it has and we are aware of them although we do not participate in their formulation*" (TB3 commented).

Another teacher from the same school made the following remarkable comment:

> *School academic goals are developed by the principal and the deputy principal. What they do is to inform us (teachers) about them, ask us to confirm to them and work hard for their achievement. We talk about them in staff meetings, in morning assemblies and announcements, and in parent council meetings but we never participate in their formulation* (TB1).

While teachers from school B indicated that the principal did not involve teachers in setting the school goals, the principal from the same school contracted this and explained how the process is conducted.

> *In the beginning of every year we organise a particular meeting to talk about the school mission and formulate annual school academic goals. Every teacher participates in the discussion and I think there is not anyone who is criticised for having different opinions. Their suggestions are considered not only in school goal development but also in other decisions regarding everyday operation of the school* (PB).

From their interviews, teachers and their principal in school B did not agree on how school goals were developed. This suggests that there is lack mutual understanding on how school activities are planned. This also suggests that there is little or no collaboration between teachers and their school leaders. It, however, emerged that both school principals continued to communicate the school purpose and goals to teachers for the purpose of guiding and informing the teaching and learning activities in the classroom:

> *Our principal reminds us of the school academic goals. He wants everyone to always think where the school is heading towards and how to reach there. He regularly tells us that the school priority must remain an excellent student learning through effective teaching. This is what everyone must work toward in our school* (TA2).

Both school principals that were involved in the study emphasised that they always talked about the school academic goals with teachers as a way of reminding them of what was

expected from their teaching and learning activities. In sum, all participants interviewed recognised and observed that having a shared purpose and well communicated school goals stimulate the commitment of teachers to working toward effective teaching in the classroom. The participants considered school goals and purpose as a road map for academic success without which planning and implementing teaching and learning activities is almost impossible.

> *I know teachers play a big role in implementing school goals. That is why we create opportunity to share and remind each other of what our school has decided to achieve. When we have common and shared goals to pursue, everyone works hard to bring them into reality. School goals provide direction and all decisions we make revolve around what we want to achieve or where we want to go* (PA).

The same view was echoed by two teachers as the extracts from both schools show below:

> *You see, when you know where to go you also plan how to reach there. Having a shared purpose and school goals promotes academic focus. Whatever we do we refer to these goals. So they provide us guidance in classroom and make our everyday teaching activities more meaningful* (TB2).

> *I think what is important is to have a common understanding of what our school wants to achieve and how to achieve it. If principal, teachers, and even students know where the gap is then the second step is to fix strategies and work hard to fill it. It is not my own task it is not your personal task. It is our communal task. That is why we consult each other to bring new things in our classes* (TA3).

From the interview findings it is clear that school principals and teachers recognised the importance developing a common purpose and shared school goals. For teachers and principals, a shared school direction provided guidance and clarity on what needs to be achieved both individually and collectively in a school.

One of the advantages of involving teachers in the development of school goals was that they allowed teachers to remain focused on teaching and learning. It increased commitment to hard work and encouraged teachers to maintain high expectations on student achievement. However, while teachers from school A admired their principal for making an effort to collaboratively set the direction of the school, it was evident from school B that the principal

still underestimates the role of teachers in determining this direction. Unfortunately, this contributes to the lack of zeal when it comes to implementing schools goals in the classroom.

7.2.2 Principals' engagement in building the teaching capacity of teachers

Teacher capacity building was one of the major themes that emerged from interview data. Teachers' and school principals' interviews explained how principals engaged in the professional growth of teachers, professional development opportunities offered to teachers and their effect on instructional practices in classroom.

Principals and teachers interviewed stated that there were strategies that were put in place for the professional growth of teachers. However, the opportunities that were available were limited in comparison to teaching needs of teachers. Principals indicated that they did their best to develop teachers' skills and knowledge through various activities. However, financial constraints limit the expansion of such activities. The following emerged from the interview conducted with both principals:

> *One of our preoccupations in this school is to increase teaching capacity of our teachers. When we plan teaching and learning activities we also think of teachers' professional growth. We sometimes conduct small training sessions in holidays but majority of training workshops and seminars are provided by the Rwanda Education Board (REB). This is because all budget allocated to in-service teacher professional development is still managed by REB at the central level. The school has not really the financial means to train our teachers effectively* (PA).

The principal from school B also indicated that in-service professional learning opportunities for teachers were available but they were limited due to e lack of sufficient funds at the school level. She said:

> *Teacher capacity building is emphasised in the school. We have for example English mentors and when we have time and budget these mentors train their colleagues in English. I also call out some NGOs and Churches to fund and train our teachers. Last year arrangements were made and two teachers attended training in learner-centred methodology organised by the Anglican Church, the department of education at Kigeme Diocese. Other few teachers were also trained in English and ICT by one of their colleagues. In sum, we are aware of how professional development improves*

teachers' skills and capabilities in teaching. The only problem we have is a lack of financial means to implement it ourselves.

Principals demonstrated commitment to improving the teaching capacity of their teachers. However, as indicated earlier, the major stumbling block to these efforts is the lack of funds. Like principals, teachers indicated that school leaders were always willing to improve their potential and capacity in teaching despite the scarcity resources in schools. TB3 commented as follows:

School principal and deputy principals sometimes organise training sessions. I remember last year we were trained in ICT and the purpose of this training was to help us (teachers) to use the computer in capturing students' marks, preparing our lessons, and searching topics and books using internet. We also received training in the new curriculum introduced recently. We were trained by our colleagues who had been trained by the REB at national level. This was a good step but not enough when you look at what we need to make teaching and learning more effective in our classes.

Another teacher declared that there was a shortage of professional learning opportunities within the school and most of the time teachers rely on external opportunities that are occasionally offered.

Frankly speaking our school has very few professional development programmes. Majority of in-service activities are occasionally conducted by the REB in science trainings and other partners in Education. For example the training I received last year was organised by the Anglican Church, the department of education. They trained us in learner-centred methodology known in French as 'pedagogie active et participative'. It is the training that focuses on involving students in their learning instead of remaining passive in classroom. This year I had not any training or workshops. I am still waiting for the REB or the Anglican Church for the second session (TB1).

The interview responses in this study showed that teacher's learning opportunities remained few in schools. Formal training seminars or workshops within a school were limited. Observational visits across schools were also reported to be scarce not only because teachers had heavy teaching workloads but also because schools were financially unable to afford

them. The findings demonstrated that schools depended largely on external support and development opportunities especially those offered by the REB at national level. REB opportunities were criticised by both teachers and principals in this study for focusing more on science subjects and not considering the specific needs of different teachers, and for taking place occasionally as teacher learning is an ongoing process.

Despite all these challenges teachers and principals involved in this study acknowledged the contribution of teacher professional growth to the improvement of the quality of teaching and learning in the classroom. In-service professional programmes helped teachers to reflect on their instructional practices and to engage in teaching and learning activities with interest and commitment. Knowledge and skills gained from professional development programme sessions were crucial to teachers in the sense that they enabled them to cope with changes that could take place in instruction. Teachers interviewed explained how professional development impacted on their way of teaching as follows.

> *…you know some of us do not have a background in education. So in service-training I received from the REB made me a professional teacher. I learnt for example how to use audio-visual aids in classroom and this brought many changes in my teaching practices. I no longer depend only on chalk-and-board approach. I also use audio visual teaching aids in my class. This is very helpful to me and to my students (*TA3).

Another teacher explained how professional development was important to her.

> *Few training workshops I attended have been useful and have guided me in my teaching. The training I received in competence-based curriculum has for example taught me to always place a student at the centre of teaching and learning process instead of placing myself at this centre as a teacher. The focus is now what students can do not what I can tell them. With ICT training, I know how to use computer and internet in searching information about the topics to teach. Training is thus important though it is not regularly done in the school* (TB2).

Like their teachers, school principals viewed teacher capacity building as the area that contributed much to the improvement of teaching and learning. With a big number of teachers without a solid background in education, principals interviewed considered in-service training sessions as an opportunity for teachers to reach pedagogical maturity in their

teaching. It is in this regard that school principals, in addition to few in-services opportunities offered by schools, they encouraged teachers to enrol and improve their professional qualifications at different universities and higher institutions of learning across the country. This was taken positively because some teachers, at the time of data collection, were pursuing evening and weekend programmes that offer post graduate diplomas in education. The rationale behind attending these programmes was that teachers with high qualifications will be able to deal with teaching and learning challenges and improve their teaching practices.

In response to the question on how schools ensured that skills and knowledge gained from the workshops and other training sessions were shared among teachers, principals involved in the study indicated that trained teachers are given time to share with their colleagues what they learnt from training workshops or seminars. They often used short holidays to conduct internal training sessions to avoid possible disruption of teaching and learning. Principal A explained the process as follows:

> *As a school principal I have to make sure that teachers share with their colleagues what they learn from workshops and trainings. It is not easy because teachers are always busy with their classes but we sometimes make arrangements and facilitate trained teachers to train their colleagues. An example I can give you is the previous training in competence-based curriculum introduced this year. REB has trained a small number of teachers and our task was to facilitate the trained teachers to train their colleagues who did not attend the REB sessions. I think we did it well*.

The view of PA concerning sharing training workshop skills was also emphasised by teachers who confirmed that schools made arrangements for trained teachers to conduct training sessions for their colleagues. One of them who attended the workshop describes this as follows:

> *I was sent to attend the workshop organised by Anglican Church. It was difficult or even impossible for all teachers to attend this workshop due to the teaching responsibilities. So returning I reported to my school leaders and asked me to conduct a small workshop for the rest of teachers. I accepted it and we made arrangements to train my colleagues. Up to now a half of teachers (13 teachers) have already been trained and they are now practicing learner-centred approach. We are waiting for holidays to train the rest as we have to conduct these sessions only in non-teaching hours* (TB1).

Similarly, another teacher from school A spoke about his experience on sharing workshop knowledge and skills with her colleagues:

> *I hadn't chance to attend the REB training in competence-based curriculum at the national level. However my colleagues who attended it came back and shared with us what they learnt there. Time was very short and we did not cover everything as we were about to start a new academic year. We only learnt what was essential to start implementing the new curriculum. Hope the school will invite us for another session* (TA2).

The findings from the interview above showed that principals in this study put in place strategies for teachers to teach and learn from one another for teaching and learning improvement in schools. Apparently, teachers were encouraged to be role models among their colleagues from whom they could learn many things useful for their own teaching. This was found as a key leverage point for strengthening the teaching capacity of teachers and improving student learning in the classroom. Generally, principals were in support of the teacher capacity building and teachers think that their professional growth is useful to improving their instructional practices in the classroom. However, financial constraints were a big handicap to expand teacher professional development activities in schools.

7.2.3 Principals fostering collaborative relationships with and among teachers

According to the teachers who were interviewed for this study, one of the principals' roles is to engender collaborative relationships with and among teachers. The teachers described how their principals nurtured a positive teaching and learning atmosphere characterised by mutual support for instructional practice improvement. Teachers' responses reflected that school principals, both formally and informally, provided support and encouraged them to work together, share teaching tasks and assist one another in the school. It was also reported that school principals make arrangements for teachers to plan together, discuss instructional issues, and collectively find new solutions to learning problems. Teachers commented on how principal A, for example, fostered collaboration in the school as follows:

> *School principal always encourages us (teachers) to work in teams through the subjects departments. We have different departments based on the subjects we teach. So the principal makes sure that we plan together our lessons and discuss them before we go to classrooms. We have two evening hours every day to do so. The principal*

> *also attends our conversations during tea break and lunch time for just encouraging the most experienced teachers to help their colleagues struggling in their teaching* (TA3).

Another teacher from the same school reported how relationships were cordial in the school as follows:

> *In our school relationships are good. When you have difficulty in your subject (s) or topic(s) to teach you sit down with your colleague (s) and ask them a help. The help may be about the content selection, methodological approaches or teaching aids selection. Whatever it is your colleagues help you to sort out the problem. To help one another is our principle and nobody works on her/his own* (TA1).

Cooperative groups created in school A were also in school B where teachers perceived their principal as supportive and committed to improving cooperation and interaction with and among teachers. One teacher emphasised that:

> *Our principal is always with us when she has time. We plan together annual scheme of work and discuss implementation of curriculum in meetings. She does everything she can to facilitate teachers to work together. She listens attentively to everyone to know what is not working well and find assistance among colleagues. I have nothing to blame her when she is available* (TB1).

In addition to the comments of teachers presented above, evidence from school principals involved in the study demonstrated their commitment to guide, work and discuss with teachers critical issues related to teaching and learning. Collaborative efforts were made to provide teachers with opportunities to share, reflect, and talk about teaching practices collectively. In their interview responses, principals expressed their desire to maintain a positive relationship with and among teachers and keep focused on interpersonal dialogue about teaching and learning. This strategy is essential in the sense that it helps in minimising teacher isolation and fosters the generation of new and collective ideas about effective teaching. Both principals described how they fostered interaction among teachers as follows:

> *We have informal departments and teachers are gathered in these departments following what they teach. I mean sciences, social sciences, mathematics and languages. Each department with similar subjects has its own staff room. This helps me to talk to them and provide them with advice where necessary. It is also a good*

> *opportunity for teachers to exchange information about their subjects and teach each other how to perform better in class. This is what we always encourage them to do* (PA).

It emerged that the principal from school B put in place a mechanism to monitor activities carried out in departments and intervened when support was needed.

> *Each department has its representative. One of his/her roles is to make sure that teachers help one another in their respective departments. S/he produces a monthly report and submits it to the deputy principal. The deputy principal and I analyse this report and decide what to support our teachers following their claims* (PB).

Principals' interview responses also revealed that collaboration with and among teachers took place in various meetings to make annual plans, discuss professional matters and collectively find their solutions. These meetings were convened as opportunities for teachers to come together and share the best practices leading to effective learning and teaching.

The most important activity in these meetings was the review of curriculum materials and reorganisation of the curriculum chapters on the basis of their importance. According to the school principals, this activity was mostly done by the deputy principals and teachers who were at the same time national examination markers and who know better how such examinations are always structured. Principals were not directly involved in the review of curriculum materials because they were not experts in the various subject areas.

According to principals' and teachers' interview responses, the most important outcome of teacher collaboration was that teachers learnt from their colleagues how to improve their own classroom practices.

> *Teachers feel committed to teaching because they share everything with their colleagues. They are for example using a learner-centred approach from one of their colleagues who had been trained in it. They are also sharing instructional resources to make this approach more successful. What I can tell you is that many changes in teaching have been observed because of this collaboration* (PB).

One teacher indicated that collaboration was important for effective teaching:

> *Collaboration is part of our everyday teaching activities. We share information on different things such as lesson plans, student tests and results, teaching aids and*

strategies to use in teaching. This helps us to understand more the content to teach and how to disseminate it to students in our own classes. We always need to learn from one another because some of us know better than others. Collaboration is so important to make our teaching more successful (TA3).

Views expressed by teachers and principals in the study indicated that school principals had a positive attitude towards supporting their teachers through various instructional leadership strategies. School principals created a collaborative environment where teachers come together and learn from each other. Thus teachers appreciated the opportunities that were availed to them to learn from each other, especially on the need for innovation for the purposes of improving teaching and learning in the classroom. The provision of resources also aided the process of implementing the innovations during curriculum implementation.

7.2.4 Principals securing and allocating resources to instruction

Participants also talked about the role of school principals in the provision of teaching and learning resources needed for the dissemination of the curriculum content to students. The term 'resources' or 'materials' used in this study referred to the commonly used resources in schools including textbooks, stationery, lab equipment and chemicals, library resources, electronic materials such as radio, television, projectors, computers and internet and physical resources like laboratories, libraries and classrooms.

Both teachers and principals noted that the provision of the above mentioned resources is one of the important roles of school principals. However, almost all teachers decried the un availability of such resources. Teachers interviewed in school B expressed this concern as follows:

…of course my principal supports instruction. She provides us with different teaching materials like textbooks, pens, notebooks, chalks, maps, and other various materials used in classroom. However I can't say that these materials are enough because many topics are still taught without textbooks and other important teaching aids (TB1).

Another teacher from the same school complained about the scarcity of teaching and learning resources as follows:

> *The provision of instructional materials is poor in this school. Science materials are very few, the school hasn't any laboratory for science subjects and the science kits we are using are few and not well equipped. They are used by teachers in teaching not by students in practical lessons. Students only conduct practices when I take them to our neighbouring school which is at least well resourced. We are really facing a shortage of resources especially science materials and some textbooks* (TB3).

The principal from school B (PB) agreed with her teachers that the scarcity of teaching and resources was, to some extent, linked to the policy of fee free education in her school. She said:

> *Look! This is a day school. It hasn't any other source of fund besides the government. In all schools like this education is free of charge. Students do not pay school fees and majority of them come from poor families unable to financially support the school. We can't compete for example with boarding schools on having resources because they use school fees to have additional resources. So we provide teachers with what we have.*

While the teachers and the principal from school B complained about the scarcity of resources, teachers from school A were satisfied by their principal's efforts to mobilise and gather resources for teaching and learning in his school. It was reported that the principal for school A engaged with school partners to support the school with teaching and learning materials. He was also said to encourage teachers to improvise and develop local and cheap teaching materials and produce syllabi that can be used in the absence of textbooks. One teacher from school A (the TA2) explained this as follows:

> *The principal does the best to help us to become better teachers through the provision of resources we need. Laboratories are there and are equipped though they are not enough in comparison with the number of students to use them. The school has also computer labs, libraries, and even internet to conduct research. We buy raw materials and the school helps us to transform them into teaching aids. The serious problem we still have is the lack of textbooks for the curriculum introduced recently.*

Clearly, the principal for school A was committed to mobilising and allocating resources when it came to supporting instruction in classroom. One of the strategies that he used was to

spend time talking to school partners especially parents to assist the school in addressing the shortage of resources:

> *You know, this is a public and boarding school. We have different partners and one of them is parents whose children are educated here. We also have friends of school. In addition to the government funds, all these partners intervene and support us when we have a problem. For example we have a big generator donated by one of these partners. School fees also contribute a lot to sort out the problem of scarce resources. Another important thing is that we encourage and support teachers to improvise teaching and learning materials and produce syllabi to use in classroom. I can't say that this is enough as we are still facing a problem of few labs and classrooms. On top of that we do not have textbooks for the new curriculum. I mean the competence-based curriculum* (PA).

The shortage of teaching and learning materials, especially textbooks, was endemic in both schools. This affects the way teachers prepare their lessons and the way these lessons are taught. Due to lack of textbooks for the new curriculum, teachers interviewed said that they prepared lessons without any guideline. Some of them used the notebooks borrowed from other schools while others used the lesson notes that they used when they were still at school. Thus teachers disseminated to students content which was not updated and which did not take into consideration the particular needs of students.

The government's decision to introduce a new curriculum without distributing textbooks and other related materials resulted in the shortage of other teaching leaning resources. The other reason for the shortage of teaching and learning resources for the science subjects was that they were very expensive in such a way that the school itself could not afford all of them. They mentioned, for example, the construction of laboratories and the provision of their equipment which were beyond the financial capacity of the schools, especially the day schools including the school B.

Some of the resource shortages were a result of the inability of the school B principal to mobilise resources without necessarily waiting for the intervention from the government. Teachers also expressed disappointment with the principal's decision to keep books in store rooms until they got damaged before they were used by the students.

Despite the shortage of resources in both schools, teachers indicated that the provision of resources had a positive effect on the process of teaching and learning in the classroom. One of the teachers remarked:

> *When they are available, teaching and learning materials are useful in both planning and delivering the lessons. First adequate teaching and learning materials help me to fix lesson objectives and be confident that they will be achieved. Second when I am teaching using textbooks and other appropriate materials stimulates interest in students towards the lessons because they easily understand the concepts. With appropriate teaching aids subjects are taught in concrete manner and different approaches can be used depending on the nature of the lesson or objectives to achieve* (TB2).

A science teacher stated:

> *As a science teacher I can't conduct practices or do experiments without adequate materials. In the labs students for example do themselves experiments and I am there to guide their practices. When labs, equipment, and chemical products are not there this approach is not possible. So, adequate materials help students to actively engage in various learning activities that reinforce the comprehension of the theory taught in classroom* (TA1).

It was evident from the interview extracts given above that teachers were aware of the contribution of adequate teaching and learning resources towards the improvement of teaching and learning. Teachers usually share the limited resources available. The shortage of resources at the investigated schools was, on one hand, linked to the delay of REB in distributing textbooks and other related materials and to the limited financial capacity of schools on the other hand. However, principals and teachers acknowledge the importance of having adequate resources in schools.

7.2.5 Principal engagement in monitoring teaching and learning activities

Monitoring teaching and learning was perceived in this study as one of the essential duties of school principals to promote teacher professional growth. Participants described how and why instruction monitoring was conducted and the influence it had on the instructional practices of teachers. Though the views of teachers and principals differed from one school to another, the general perception was that monitoring teaching and learning activities and

providing constructive feedback encouraged teachers to make positive changes in their teaching.

In response to the question on how instruction monitoring was conducted, interviews from principals and teachers revealed that it was done through direct observation in classes, an examination of pedagogical documents of teachers, meetings to evaluate the academic progress, and walk-through visits around the school. Teacher peer classroom observations were rarely conducted because teachers were always busy teaching their own classes such that there was no spare time to frequently observe other teachers' classes.

When asked to talk about the role of principals in conducting direct observations in classes, there was consensus among teachers that school principals involved themselves in visiting classes and observing how teachers teach and how students learn. Deputy principals were also involved in class observations as this is one of their core responsibilities. One of the teachers described how direct classroom observations were conducted in the school:

> *Classroom observations are conducted by the deputy principal and sometimes by the principal himself. When they get in class, they check different documents including scheme of work, lesson plans, class journals, class registers etc. They focus more on lesson plans and check whether the sequences of the lesson are coherent and if the content is adapted to the level of students. They then follow the presentation of the lesson in class and provide a written feedback before they leave* (TA2).

Another teacher from the same school commented on the way classroom observations were carried out:

> *Both principal and deputy principal are involved in seeing how we teach in classes. Very often I see the deputy principal coming to class but the principal also comes when he has time. Classroom observations can be scheduled or unscheduled. Whether scheduled or not, when the principal or the deputy principal come to my class they follow the lesson presentation and comment on different things like lesson structure, classroom management, teaching approaches, teaching aids, student interaction, mode of assessment etc. They leave a written feedback and we make arrangement to meet and discuss it in detail* (TA3).

The PA commented on how he monitored teaching and learning as follows:

> *I know that monitoring and evaluating teachers is my responsibility. I do not do it everyday but when I have time I go to class and see if teachers are doing what they are supposed to do. My deputy principal and I visit a teacher at least once a term. I know it is not enough but it is at least helpful as we learn about what teachers and students do and what they need to perform better.*

From the interview extracts above it was evident that the principal from school A made an effort to visit teachers and followed up on how teaching and learning activities were performed in classrooms. There was consensus among teachers that the success in the classroom was to some extent attributed to the principal's commitment to follow instruction delivery in classes closely and the advice that he gave to teachers.

In school B the situation was different. Direct classroom observations were conducted by the deputy principal and very rarely by the principal. "*I have never seen the principal coming to observe me in my class. Observations are carried out by the deputy principal. The principal only conducts walk-through visits every morning but never pops in class*" (TB3). School B teachers also indicated that the principal hardly focused her attention on direct classroom visits and could spend the whole term without visiting any teacher in class.

When asked whether she conducted classroom visits and guided teachers in their teaching, the principal from school B pointed out that she had a plan to visit a teacher twice a term but this plan was not always achieved as it was interrupted by unexpected but important activities within and outside the school. She mentioned, for example unexpected meetings convened outside the school, school financial and administrative reports, monitoring new classroom construction, and raising funds for the school feeding scheme, just to name a few.

In addition to formal class visits, the other way of monitoring teaching and learning that was emphasised by the participants in the study was the checking of pedagogical documents of teachers. Teachers interviewed indicated that their pedagogical documents were checked by the principal and the deputy principal monthly and termly to assess how far teaching and learning programmes were covered and what needed to be done to avoid ending the year with untaught topics. An interesting finding was, however, that principals and their deputy principals put more emphasis on senior three (S3) and senior six (S6) teachers than checking pedagogical documents regularly of the entire teaching staff. One teacher from school B explained how documents are collected and checked:

> *Every last Friday of the month we submit our pedagogical documents to the principal or deputy principal when the principal is not around. We submit scheme of work, lesson preparations, attendance registers, class journals, homework notebooks, exercise note books and other documents. They check if subjects are being taught well and if students are attending the class. They provide comments and send them back to us. Teachers from senior three and senior six submit these documents twice a month not once like their colleagues from other levels* (TB3).

A teacher from school A also described the approach that the principal used to monitor classroom teaching and learning:

> *"At the principal's request, we collect our pedagogical documents and take them to his office for a kind of evaluation. It is not done everyday. We do it….. I think once a term. But senior three and senior six teachers submit these documents on a regular basis"* (TA2).

From the two extracts above, the researcher was keen to find out why school principals put more effort on senior three and six teachers instead of checking regularly all pedagogical documents. In response to this question, principals indicated that students from senior three and senior six sit national examinations each year and the district ranks all schools according to their performance. Consequently, they put effort into these particular levels to make sure that all topics were covered and if students were ready to perform well in the national exams for a better position on the district ranking list.

It was also revealed that school principals signed a performance contract with the district to increase the number of students performing well in their exams especially in the national exams. All this justified the concentration that principals put on monitoring teaching and learning at both levels. Principal A explained the purpose of examining the pedagogical documents of teachers and why emphasis was placed on senior three and senior six classes:

> *We check pedagogical documents for all teachers to see whether all activities planned are going smoothly and if there isn't any gap that needs to be filled. Of course a particular attention is paid to senior three and six teachers because students in these classes represent the school in national exams. We have to carefully monitor teaching and learning activities in these levels and advise teachers because we want students to perform well in these exams.*

Participants also talked about their principals' daily walks around schools to informally observe teachers teaching and obtaining an overview of the quality of teaching and learning process. It emerged that principals conducted walkthrough visits and walk around the outside the classrooms to ensure that discipline was maintained and that teachers were in classes and students were learning. Both principals believe that if teachers and students properly utilise the time allocated for teaching and learning without any disruption, good performance in classroom would be achieved.

The PA explained the reason for walking around the school:

> *In addition to formal classroom visits I also conduct walk-through observations twice a day to ensure that everything is in the right place. I sometimes pop in classes and sit in for five minutes to see what is going on in lessons. This helps me not only to know if all teachers and students are in class on time but also where more effort is needed and if there is any urgent problem to sort out.*

One teacher explained how the walkthrough visits were conducted in school A:

> *In the morning and after lunch our principal walks around to ensure that teachers and students are in classes. When you are not found in your class, the principal talks to you on his cell phone and you explain the reason you are not teaching. He never tolerates unjustified lateness or absenteeism of teachers in the school* (TA2).

Walkthrough visits in school B were conducted by the principal and the deputy principal. The PB explained the process as follows:

> *Students at the secondary level attend classes in a single shift from 7 am to 2 pm. So we only go around the classes every morning and talk little to teachers and students to keep in touch with their readiness for teaching and learning. It is through these walk around visits we learn about what is going on in classes and what kind of support the school can provide to teachers and students.*

From the above interview extracts, it can be deduced that secondary school principals in the Nyamagabe district were heavily involved in walkthrough visits to collect precise information about the quality of teaching and learning process. Principals pointed out that walkthrough visits were not meant for judging, evaluating or even intimidating teachers. Rather, they are used to identify aspects which needed improvement in classes so that they

could provide ongoing support to teachers and students accordingly. According to the teachers interviewed, principals' daily walkthrough visits kept them working hard as they always expected advice from their school leaders when they walked around and popped in classes for a short visit.

Since school principals were involved in monitoring and evaluating teaching and learning activities, both formally and informally, the researcher was further interested in finding out whether teachers were given feedback and how this feedback contributed to their teaching. Almost all teachers interviewed expressed satisfaction with the feedback their got and how it was discussed between the supervisor (principal or deputy principal) and the supervisee (teacher).

However, teachers from school B blamed their leaders for not providing enough time to discuss feedback because they were always busy doing other things. In school A, on the other hand, teachers were happy with the way feedback was provided and discussed as described below:

> *After each classroom observation principal or deputy principal opens a discussion on the comments provided. We honestly discuss the lesson plan and presentation and then through the comments we decided what to correct and how to correct it for further improvement. I really appreciate the way we discuss the feedback because my voice is always heard and my suggestions are also taken into consideration* (TA2).

Another teacher added:

> *…yes I get the written feedback. It is an observation sheet containing both positive and negative things observed and suggestions to address what is not working well. In other words principal or deputy principal appreciates what I do well in lass and advises me about what I need to improve and how to improve it. For more details, I go to principal or deputy principal office and we discuss everything observed. We do it in non-threatening way and I am happy with this* (TA1).

Principal A described how he provided feedback to teachers.

> *Of course there is a little time to carry out class visits but when I manage to do it I provide teachers with a meaningful feedback. I am here to assist and guide them not*

to impose on them what to do. We discuss everything and I leave them a room to tell me what they think can be done. The purpose of my feedback is to let them make a self-analysis and reflection and then become conscious of the areas to be improved in their teaching. I think this approach is more supportive than directive.

School B teachers claimed that their school leaders did not discuss issues that they observed in classes or in the pedagogical documents examined. This is because the principal and her deputy principal were always busy and could not find time to discuss feedback with each individual teacher.

However, both principals maintained that they arrange meetings to discuss with teachers the general observations in classrooms, in pedagogical documents checked, and in walkthrough visits conducted. In these meetings, teachers are free to provide their suggestions or ideas on what they thought could improve their teaching and student learning. Principals emphasised that meetings allow teachers and their leaders to engage in self-evaluation on the basis of the progress made and, if needed, put in place mechanisms to raise standards for teaching and learning in schools.

When asked whether the feedback from leaders has an impact on teachers' teaching, teachers and principals noted that the feedback made a positive impact on the instruction improvement. For teachers, regular, clear and constructive feedback was an essential developmental tool that could enable them to grow professionally and introduce some positive changes in their teaching. They put it in this way:

Observation feedback is very useful. You know, when you are teaching, it is not easy to evaluate yourself. But when someone else observes you there is a chance to know what to improve through her/his feedback. For example after being observed and given feedback I realised how important was to use learner-centred approach. Before I used teacher-centred approach and presented everything in a class. Progressively I shifted away from this technique and started including students in their learning. After a certain period of time this approach started producing good results in class. All this was because of the advice from my supervisor (TB1).

Another teacher from school A was positive about the value of effective feedback:

I know majority of teachers feel uncomfortable when they are being observed in classes. For me it is not the case. Observing me and giving me a formative feedback is

> *like a mirror through which I identify where I have to put more efforts in my teaching. In other words it is an opportunity to know my strengths and my weaknesses and how to address those weaknesses. Unfortunately classroom visits are not always conducted in our school* (TA3).

School principals indicated that the monitoring of teaching and learning activities and constructive feedback allowed the school to identify teachers who needed support and design appropriate strategies to respond to these needs. Through the monitoring of the schools, the principals are able to assess whether teaching and learning is on track in relation to what it intends to achieve. Principal A said the following about this:

> *Classroom visits and talking to teachers both help us to diagnose the most serious problems teachers and students are facing in order to design appropriate strategies to address them. Some teachers and students were for example allocated extra-resources as a result of seeing them in class and identifying what they need. This is also an opportunity to make a self-evaluation about the general progress the school is making towards school goal achievement.*

The findings of this study suggest that secondary school principals in the Nyamagabe district valued the monitoring of how teaching and learning activities were carried out in schools. Each principal was reported to have his/her own way of monitoring teaching and learning but the common purpose was to foster the professional growth of teachers rather than discovering what was wrong in their teaching. During the supervisory process, it can be said that principals in this study were strong instructional leaders in the sense that they helped teachers to develop appropriate skills and knowledge useful to enhance student learning. In addition, principals gave teachers the freedom to suggest ways of improving teaching and learning their schools.

However, school principals did not value peer classroom observations where teachers could observe their colleagues be it within the same school or across schools. Teachers relied only on the feedback of their leaders while the advice from their colleagues could potentially make a positive impact on their teaching.

The next section outlines the challenges that school principals experience as they attempt to effectively enact instructional leadership in their schools.

7.3 Challenges that impede instructional leadership of the school principal

The purpose of interviews in this study was not only to find out the perceptions of school principals' engagement in instructional leadership but also to identify challenges facing the principals with respect to instructional leadership in their schools. It is in this regard that participants were asked to describe various factors they thought were impediments to the instructional leadership responsibilities of principals. Principals and teacher participants outlined several factors summarised in the following major themes: a) shortage of teaching and learning resources, b) shortage of professional development opportunities, c) principals' heavy workload, and d) highly centralised education system.

7.3.1 Shortage of teaching and learning resources

Teachers and principals in both schools perceived the provision of teaching and learning resources as an important activity of the principal. However, teachers in these schools expressed concern about the scarcity of teaching and learning resources. Boarding and non-boarding schools experience different challenges though. The scarcity of teaching and learning resources was linked to poor funding by the government of Rwanda where the capitation grant[7] allocated to each student was insufficient to provide teachers with all the required resources. Each student in non-boarding schools was said to be allocated 4,860 Rwandan francs (approximately 5.5 US dollars) per annum while in boarding schools a student receives 21,000 Rwandan francs (approximately 24 US dollars) per year. School principals indicated that this amount of money was too little to spend on various teaching and learning activities including the provision of adequate resources to teachers.

More specifically, the most important teaching and learning resources which were scarce in schools included science laboratories, chemicals and equipment for science subjects, teacher and student textbooks, libraries, and computers and internet for teachers to conduct research and students to learn lessons related to information communication technology (ICT). One science teacher explained how the lack of adequate resources hindered his teaching in school B.

[7] Capitation grant refers to fees allocated to public and subsidised schools by the government to cover the day-to-day running costs. The amount of capitation grant varies according to the number of students and the status of the school (boarding versus day schools).

> *….science materials are very few in the school. We have science subjects to teach but we haven't any laboratory and the science kits we are using are few and poorly equipped. I only teach theory and when it comes to conduct practices I sometimes take my students to the neighbouring school. This is very expensive and I think the school can't afford it everyday. Frankly speaking teaching science is like teaching social sciences in this school. It is only a theory* (TB3).

Another teacher from the same school explained how it was difficult to implement the government policy of integrating ICT in schools without computers and the internet.

> *We do not have computer labs as there isn't any computer here. Computers were distributed among primary schools in One Laptop per Child (OLPC) programme and secondary schools were left out. The optical fibre is 50 meters away from our school but internet is not possible since there are no computers. Everything is taught in theory with a chalk and a board* (TB1).

The two interview extracts above indicated that school B was facing huge problems regarding science and ICT resources. Teachers and the principal from school B indicated that some of the required resources were beyond the financial capacity of the school. Science laboratories and equipment, audio visual teaching aids, and computers and libraries were among the resources that the school could not afford without assistance from government. The school only provided teachers with basic and nonexpensive materials such as pens, chalks, some textbooks, class journals, notebooks and maps.

The interview conducted with teachers and the principal from school A revealed that science and ICT resources were available for students and teachers. The only problem the school had was that these resources were not enough to match the needs of students who need to use them. Hence, the principal said, "*Science and computer labs are there but not enough. We have many students and we need to increase the number of resources".* Science teachers from the same school agreed with the principal and indicated that students go to the labs in many shifts and this disrupts the teaching and learning of other lessons.

Another challenge that was raised by the participants and which was linked to the paucity of resources in schools was the lack of textbooks. This was specifically the case in the competence-based curriculum, the new curriculum that was being implemented in senior one and senior four at the time of data collection. Almost all participants blamed the Rwanda

Education Board (REB) for introducing the new curriculum to teach without distributing textbooks and other related materials for its implementation. The senior four teacher in school A (TA2) lamented.*"…this is the tenth month implementing a curriculum without any textbook. A teacher hasn't any textbook, a student neither, how can we really implement this curriculum"?* Principal B also commented on the delay of textbook.*"Textbooks for the new curriculum are not yet distributed. We all depend on REB about text books. When there is a delay like this, we have no choice except waiting until they are delivered".*

The delayed delivery of textbooks for the new curriculum was also raised by the principal from school A who indicated that schools were requested to implement the curriculum without any textbook. Apparently, teachers and principals interviewed did not know if the REB will distribute textbooks after the curriculum has been implemented. Concerns about critical shortage of textbooks were also expressed in other programmes other than those taught in senior one and senior four. One of the language teachers in school B explained how teaching without enough textbooks was stressful.

> *The issue of textbooks here is almost general. It is not only for the new curriculum. I teach French but I have only three books, two for all students in a class and one for me. Imagine when it is a text to read. I write it down on the chalkboard and when it is too long it can't fit on it. I write and clean, write and clean…..I think you understand how it is stressful and time consuming* (TB2).

Teachers and principals also indicated that the lack of text books comprised the teaching of the history of Rwanda. After the government decision to ban old textbooks of the history of Rwanda due to the spreading of ethnic hatred, the new textbooks with a different content were recommended in all schools. However, at the time of data collection there were no approved Rwandan history textbooks in schools. For the teachers and principals interviewed, this was as a huge challenge that hampered the teaching of the history of Rwanda and the genocide of the Tutsi in particular.

In general, teachers and principals were disappointed and frustrated by the lack of teaching and learning resources in schools. This status of affairs made it difficult for school principals to support teachers as they attempted to improve the quality teaching and learning in classrooms.

7.3.2 Shortage of professional development opportunities for teachers and school principals

The lack of teacher and school principal professional growth opportunities was a matter of concern to teachers and principals who participated in this study. The in-service professional development activities conducted in schools were not enough for the level of professional growth that the teachers and principals needed. As for formal training workshops and seminars, schools relied heavily on the occasional opportunities that were provided by the REB at the national level. The statements below illustrated the concern of teachers about the scarcity professional growth opportunities in their schools:

> *In-service activities in this school are very limited. The school hasn't any particular formal programme to help teachers improve their teaching capacity. We just learn in informal way through interacting with our colleagues (teachers) and our leaders. It is only the REB that formally trains teachers not the school. Unfortunately the REB training is not regular and focuses more on science subjects* (TA2).

The view of TA2 about the scarcity of professional development opportunities in schools A was also echoed by one of teachers interviewed in the school B. She put it like this:

> *Formal training workshops for teachers are rarely conducted in the school. When there is something new that the government wants teachers to learn, the REB organises trainings and calls teachers to participate. Other educational partners; local NGOs, Churches... can also organise training seminars for teachers. What the school does is to encourage and facilitate teachers to attend all those trainings. The school also helps trained teachers to share their experience with the rest of teachers. Nothing else I think the school does to help us grow professionally* (TB1).

The interview data showed that teachers depended greatly on external opportunities than those created by school leaders themselves. The findings of this study indicate that school principals were more active in leading teacher collaborative learning than initiating and sustaining formal learning programmes in their schools.

Professional development opportunities were also needed to deal with the teachers' low proficiency in the English language, which is the current medium of instruction in Rwanda. After Rwanda joined the East African Community and the Commonwealth English speaking countries, there was a shift in 2009 from French to English as a new medium of instruction in

all levels of education in the country (Lackamp, 2016, p.99; Pearson, 2014, p.41). Teachers who grew up in a francophone system struggle a lot with teaching in English. They maintained that they were not prepared enough to enter the new Anglophone system and to be able to use the English language as the medium of instruction. One of the teachers included in the interview explained how English was introduced without prior preparations:

> *I am telling you it is not easy to teach in English. The medium of instruction was French until 2009. Since then we had no enough preparations to move from French to English. I remember we had one training workshop in English but this was not enough to use the language in teaching and learning. We grew up speaking French and the quick shift from French to English was imposed upon us regardless whether we were ready or not* (TB 2).

Another teacher in school A expressed her concern about teaching in the language she has not mastered well:

> *No. I can't say many things. Only know that teaching in English is a burden to many of us. The government has to solve this problem and see how all teachers can master the language. Otherwise we will continue to be ashamed in front of our students* (TA2).

Teachers involved in the study reported that due to difficulties they were facing in teaching using English, the majority of them code-switch and prefer to deliver and explain subject content in the mother tongue (Kinyarwanda). One of them put it in this way:

> *Sometimes I provide explanations in Kinyarwanda to help students and even myself. As I have said, English is not only a challenge for students but also for teachers. Many of us cannot teach in English for the whole period of 40 minutes. We use both English and Kinyarwanda but Kinyarwanda in most cases becomes the predominant language in class. Honestly English is a challenge and it will continue to be a challenge if nothing is done to help teachers to learn and use it* (TA1).

Principals were also concerned by the abrupt policy shifting from French to English without adequate preparation. Principal B reported:

Since there has been a shift from French to English, many teachers found it difficult to teach in English. The government policy has been implemented without prior preparations and trainings for teachers. Of course they use materials written in English but delivering the content in this language can't be 100% for every teacher.

The concern on the teachers' low level of proficiency in the English language was reported by both principals and teachers despite the fact that the Rwanda Education Board deployed English mentors in primary and secondary schools to train teachers to teach in English from 2011 to 2012. Some teachers indicated that these trainings were not useful as they were not designed as per each teacher's needs. The programme was not expansive enough such that some teachers in some parts of the country did not receive the mentorship.

When asked what schools did to develop the teachers' English proficiency and meet other professional development needs, principals maintained that in-service professional development was still centralised at the Rwanda Education Board and that capitation grant schools received was too insufficient to carry out teacher professional development activities in schools. For principals, the school budget was largely spent on other teaching and learning activities while teachers are expected to benefit from professional development opportunities offered by the REB. However, teachers were of the view that this was a lame excuse as the school principals failed to initiate and support some professional development activities which did not require a huge budget such as an English club within a school, peer classroom observations, and/or study trips to neighbouring schools to learn from their colleagues. According to the teachers, these activities are crucial in the sense that they could help them develop teaching competences useful towards their teaching practices.

The lack of professional growth opportunities also affected principals. Though the Ministry of Education was committed to improving the quality of school leadership, principals involved in this study highlighted that they never had training seminars or workshops on leading and managing the curriculum and instruction. As the principal from school B indicated, they were appointed to the principalship position on the basis of their qualifications in education and did not have any preparation on performing instructional roles. She made the following comment:

The issue of limited professional development opportunities is not only a concern for teachers. It is also our concern as school leaders. We have been appointed to this post

based on qualification. Since then we have never undergone specific training or preparations in leading and managing teaching and learning. Our qualification seemed to be enough for everything and I think it is not true. We need specific trainings in leadership for learning to help more our teachers and students in their teaching and learning.

In a separate interview, school A principal (PA) suggested that school principals would effectively help teachers in their teaching if they had received specific training in performing instructional duties. And yet all professional development opportunities provided by the Ministry of Education in conjunction with VVOB focused more on managerial and administrative roles of school principals than on instructional leadership tasks. He made the following remark:

I remember in 2008-2009 we received training in school management and the content focused more on managerial and administrative activities of school principals than their instructional responsibilities. Since that day I have never been trained in instructional leadership. You know things change everyday and training is one of tools that help to cope with those changes. When you do not receive it, things may get worse.

In addition to a lack of specific trainings in instructional leadership roles, principals also expressed their concern about English as a medium of instruction. Like their teachers, principals acknowledged the deficiency in the language and reported a desire for English language training to be able to effectively communicate and interact with teachers as well as students in their learning using this language.

7.3.3 School principal's heavy workloads

One of the challenges that principals face in discharging their duties is heavy workloads. As a result, they do not have enough time to manage some of their core instructional responsibilities. Effort was made to ensure that effective teaching and learning took place but the diversity and the depth of tasks that principals were required to complete everyday hindered effective and efficient performance in relation to instructional leadership roles. Teachers that were interviewed indicated that their principals were not always visible around the school and in classrooms due to heavy administrative duties. Teachers expressed their concern about this issue as follows:

> *Our principal does the best to support us but each and every time I need him for a help I do not see him. I think administrative work takes up much of his time that he should devote to teaching and learning activities* (TA1).

Another teacher said:

> *The presence of our principal to teachers and student is quite limited. Most of time administrative demands interrupt her from focusing on what is happening in classes. I can't blame her, she has multi-tasks to accomplish. So she can't do all of them and be in class at the same time. It is not possible* (TB2).

In addition to office work teachers revealed that principals attended many meetings outside the school which took up a lot of their time which they could devote to instructional duties in schools. An interesting finding in this study is that some school principals assumed other non-educational responsibilities that distracted them from focusing on their roles as instructional leaders. Some of them were reported to be chair persons or members of various committees or commissions at sector, district and even national level. This was indicated by TA3 as follows:

> *It is not a secret because everyone knows it. My principal is a member of the District Advisory Council and a member of board of directors in one bank around here. I think this also takes up much of his time as he has to attend their meetings or training seminars. Fortunately we have the deputy principal but he can replace the principal all the time.*

Teachers' comments above showed that school principals had a lot of work within and outside their schools which distracted them from discharging instructional duties effectively. Student welfare, financial management duties, monitoring new classroom construction activities, and attendance to various meetings within and outside the school were among principals' activities that diverted the principals' attention from focusing on tasks related to curriculum implementation in their schools.

Principals agreed with teachers on the fact that administrative and managerial duties distracted them and diverted their attention away from fulfilling instructional responsibilities effectively. As principal B puts it:

I know I do not accomplish my instructional duties as required. It is not because I am a lazy principal but because of different tasks I am responsible for. Look! I have monthly administrative and financial reports to submit to the District and Sector education officers. I have to make sure that new classrooms are being well constructed, that school feeding programme is going well… I also have to attend unremitting meetings at the sector, district, parish, diocese, and even at the provincial and ministerial level. I can't be in my school everyday even if I wish to.

Being a principal in these days is a challenge. Everything in school comes to you. You are like an adaptor connecting different types of equipment. I do administrative work; I am responsible for student discipline, student welfare, and relationship with the external community. I am also a member of the district advisory council and Umwalimu Sacco committee at the national level. So dealing with all these issues leaves me a little room to coordinate teaching and learning activities in the school (PA).

Much of the work of principals occurs at the beginning of each academic year where they are expected to produce academic and administrative reports, welcome new students and teachers, purchase school materials, process new teachers' salaries and draw up teacher placement at district office. Principals acknowledged that their absence in schools and in class, in particular, makes teachers and students feel abandoned and unsupported. As a result, they delegate some of the instructional leadership tasks to their deputy principals which, in most cases, were not well executed.

Teachers appreciate seeing their principals around schools and being involved in solving teaching and learning challenges. However, as the findings of this study show, school principals struggle to balance their teaching and learning duties with their administrative and managerial responsibilities.

7.3.4 Highly centralised education system

Teachers and principals also indicated that the highly centralised education system of Rwanda made it difficult for them to perform their instructional leadership duties in schools. Teachers and principals interviewed expressed concern about the changes that are initiated centrally by the Ministry of Education and imposed upon the schools without prior consultation. According to the participants, the majority of these changes did not suit the

specific needs of schools. As a result, they dampened the motivation and commitment of both teachers and principals when it comes to implementing the changes. The change from French to English as the medium of instruction was one of the policy changes that were imposed into the education system without prior consultation with stakeholders. This expressed by one of the teachers as follows:

> *The policy of the government to shift from French to English as a new medium of instruction was imposed on us. I can't say that we were ready because many of us had been teaching in French for many years. This policy was like a law. There was no dialogue between the government and teachers. We were afraid at the beginning but we had no choice. I say no choice because it was a policy to be implemented in the whole country* (TB1).

Teachers indicated that the sudden change in the language of instruction has a negative impact on the teachers' teaching practices. Teachers had to struggle translating the content from French to English and many of them skipped some topics due to the low proficiency in this language. It was also revealed that school principals were not proactive in ensuring that the policy was implemented effectively because they too were not proficient in the English language.

Teachers' and principals' dissatisfaction with sudden policy changes was also voiced concerning the competence-based curriculum (CBC) that was introduced to all secondary schools starting with senior one and senior four students. Teachers and principals interviewed reported that the CBC was quite difficult to implement because it had high expectations on the skills of the teachers and lack of appropriate textbooks, and other related instructional resources which were yet to be distributed by the REB. The curriculum was also introduced while the majority of teachers across the country were not yet trained. According to both principals, the curriculum itself was better as it had the potential to develop the students' competencies and critical thinking. The main issue though was that it was imposed on schools without the participation of teachers and principals in its design and without prior training seminars on its implementation.

Principal B explained how the curriculum was imposed on their schools:

> *If you are talking about the competence-based curriculum, we saw it coming and we were asked to implement it. Neither a teacher nor a principal has been consulted at*

the time of its development. I remember, before the commencement of this academic year we had a very short training but this was not enough to help teachers whom majority were not trained.

According to principals and teachers, schools should be given a chance to have a say on policies that affect them and students.

We need to be given a room and provide suggestions about the changes that are taking place in our system. Policy makers should view schools as partners not just as mere implementers of policies or changes from the top. I think collaboration between two sides is very important to facilitate implementation of those policies at the school level (PA).

Almost all participants interviewed in this study were not satisfied by changes that take place now and again without involving or consulting school leaders and teachers as the key implementers of the policies. Such changes inhibit creativity and commitment, which should speed up the implementation of the policies in schools and in classes in particular.

7.4 Overview of the chapter

In order to ascertain instructional leadership behaviours enacted by secondary school principals and how these behaviours influence instructional practices of teachers, the researcher adopted an explanatory mixed methods design with sequential quantitative and qualitative phases. While chapter six presents the quantitative findings, this chapter outlines the qualitative findings obtained from face-to-face interviews. The interview data were collected in two secondary schools and semi-structured interviews were conducted with one principal and three teachers in each school. The qualitative data was required to elaborate on the quantitative findings. The analysis of interview data revolved around the following research questions:

1. How do principals and teachers perceive instructional leadership behaviours of the principal in secondary schools in the Nyamagabe district?

2. What are the challenges that impede instructional leadership of the principal in secondary schools in the Nyamagabe district?

For the first question, school principals were perceived to enact various instructional leadership behaviours that had an influence on teachers' instructional practices in the classroom. According to the participants, the setting of the direction of the school, the building of the teaching capacity of teachers, the fostering of collegiality among teachers, and monitoring teaching and learning activities were among the main instructional leadership behaviours of the school principals that have an impact on teaching in the classroom. The principal in school A was more engaged in instructional leadership roles than his counterpart from school B. The difference between two schools was mostly observed in the setting of the school's direction, securing and allocating resources for instruction, and monitoring teaching and learning activities.

The analysis of interview data also revealed that there were some challenges that prevented school principals from performing instructional leadership roles effectively. Some of these challenges that distracted principals from discharging their instructional leadership duties include the shortage of instructional resources, the scarcity of in-service professional development opportunities, the heavy principals' workload, and highly centralised decisions.

The next chapter is focused on theorising the findings that have been presented in chapters six and seven.

CHAPTER 8: DISCUSSION OF THE FINDINGS

8.1. Introduction

While chapters 6 and 7 present quantitative and qualitative findings separately, this chapter is dedicated to integrate and discuss both types of findings to provide a complete and meaningful picture of instructional leadership behaviours of principals and their relationships with instructional practices of teachers.

Chapter 8 analyses findings from both the survey questionnaire and the interview. This was done because one approach was deemed insufficient by itself for a deep understanding of how instructional leadership is exercised from the perspectives of teachers and school principals. The discussion is structured according to the different major themes that emerged from both types of findings.

8.2. Instructional leadership behaviours enacted by school principals and their influence on teachers' instructional practices

Instructional leadership behaviours of school principals were categorised into five major themes that were used to determine if they had an impact on teacher instructional practices at school. These themes are: defining and communicating school goals, promoting teacher professional development, supervising instruction and providing feedback to teachers, providing instructional resources, and reviewing curriculum materials. In addition to analysing these themes, the chapter discusses some of the challenges that inhibit the capacity of school principals to effectively execute instructional leadership duties in their schools.

8.2.1. Defining and communicating school goals

Stronge, Richard, and Catano (2008, p.4) maintain that if people are not sure of where they want to go, it is also difficult to know if they have reached the destination and what corrective action they can take along the way. This observation suggests that school principals must have a clear view of the direction their schools must take and must have the required skills to mobilise all school members to concentrate their energy towards this direction.

Likewise, Salleh (2013, p.34) and Emmanouil et al. (2014, p.35) argue that the primary task of school principals is to have a clear mission and goals that clarify the roles of teachers and determine the areas on which they must focus their attention to achieve the desired expectations. Taking all these views into consideration, it was found in this study that school principals practiced the role of defining school goals and mission and teachers were found to be the closest partners in the process. Both the survey and the interview findings indicated that defining and communicating school goals was done at a moderate level (M=3.35, SD=1.21) and that the involvement of teachers in the activity varied from one school to another.

Teachers and principals understand the school mission as delivering quality education to all students. This mission is derived from the overall aim of education in Rwanda which is to give all Rwandan citizens skills, knowledge, and values necessary for sustainable socio-economic development (MINEDUC, 2008, p.1).

To have a common mission could potentially enable principals to develop school academic goals which facilitate the achievement of such mission. According to the participants, a clear school mission statement and goals were considered as a roadmap guiding school leaders and teachers towards what they want their schools to accomplish. The key idea was that principals' ability to see and articulate compelling school goals helped to prioritise teaching and learning activities that directly contribute to their effective accomplishment. In the survey and the interview findings, school principals involved teachers in the formulation and the development of school goals in order to tap into their expertise and experience and stimulate their cooperation and commitment during the implementation process.

Quantitative results indicated that many school principals were rated by their teachers as more active in involving teachers in school goal development process. Interview findings from school A indicated that the process of defining school goals was a collective responsibility to ensure that each individual's contribution was considered and the team was responsible for the successful implementation of the goals.

Beauchamp and Parsons (2012, p.46) and Edgerson and Kritsonis (2006, p.3) suggest that school mission and goals need to be developed in a collaborative way in order to gain a sense of consensus and stimulate everyone's energy and commitment toward their effective achievement. Weber's (1996) framework underscored the need for a clearly defined mission and goals whose accomplishment involves dynamic processes and input from all stakeholders

in the school. In this study, principal-teacher team spirit and a collective focus on a common purpose were considered as key features by many school principals to develop effective and achievable school academic goals.

School principals not only involved teachers in the formulation of school goals but were also active in seeking teachers' input in the process. Evidence was found in the interview findings where teachers and principals assessed together student academic results both in 'O' and 'A' levels in order to identify areas of low achievement and to develop school goals accordingly.

The findings of this study suggest that the articulation of school goals was not unilateral but was done collectively by the school principals and teachers. This was in line with the new conception of instructional leadership where, according to Marks and Printy (2003, p.371), effective principals seek out the ideas, insights and expertise of teachers around instructional matters. Such participatory approach increases ownership and spirit of commitment to teachers and allow them to come up with effective strategies for the higher level of accomplishment of the set targets (Gerald, 2012, p.4; Kin et al., 2018, p.438; Quinn, 2002, p.461).

Evidence from both the survey and the interview findings indicated that school principals reinforced communication of school mission and goals to their teachers. Principals made an effort to ensure that school goals were widely communicated and that the work of teachers focused mainly on their achievement. The findings of this study show that various meetings were organised to discuss school goals and their progress for the betterment of teaching and learning in schools. The collective views of teachers and principals were also that informal opportunities were provided to continue reminding teachers of school mission and goals and how to properly translate them into classroom practices.

Morning assemblies, tea break and lunch time were used to informally talk about school goals and remind teachers of the school expectations. In this regard, Gezahegn (2012, p.25), Kin et al. (2018, p.438) and Salleh (2013, pp.34-35) see the communication and discussion of school mission and goals by principals as a means of promoting a sense of personal ownership of teachers and reminding them that instruction improvement in classroom is imperative. Nyagosia et al. (2013, p.180) came up with similar results in Kenya where top performing schools put more emphasis on sharing the school mission and goals as compared to low performing schools. In the top performing schools teachers feel confident and

motivated to provide suggestions about the improvement of school goals and turn their focus on everything they think can bring these goals into reality.

The involvement of teachers in the process of articulating school goals varied from one school to another school. Some school principals were still autocratic and did not value the input from their teachers on defining and developing school goals. In school B, for example, the principal and her deputy principal were the only ones who were responsible for formulating school academic goals. However, Murphy and Louis (1994, p.31) note that the principal should be neither the sole nor the primary determiner of the school vision and goals. Rather, the articulation of the school vision and goals must be a collective and cooperative activity and the role of the principal is to facilitate cooperation from members of the school and stimulate their contribution in both their development and the realisation. Evidence from school B demonstrated that some principals in this study had a misconception about the involvement of teachers in setting the school direction. They still believed that teachers should only be involved in the implementation of school goals and not in their initial development. On this point, Kin et al. (2018, p.438) contend that when teachers are not fully involved in school goal development, the chance to direct their efforts towards school change is relatively low. Findings from school B showed that the principal provided teachers with time to talk about school goals and encourage the integration of these goals into the teacher's daily teaching and learning activities.

8.2.2 Linking defining and communicating school goals with teachers' instructional practices

According to Salleh (2013, p.34), defining, communicating and explaining school goals is one of the crucial roles of school principals as instructional leaders. Having well-defined and shared goals contributes to the improvement of teaching practices in the sense that teachers prioritise teaching activities that are linked to school expectations.

Evidence in this study showed that involving teachers in the development and implementation of school goals had a positive association with teachers' instructional practices. The analysis of inferential data showed a calculated *r* value of.425 ($p<0.05$) which was greater than the tabular '*r'* value of .29 (small correlation in the study). These results suggested that there was a positive and significant relationship between defining and communicating the school mission and goals by school principals and teachers' instructional practices in the study.

The correlational coefficient of determination, according to Greener (2008, p.62) and Pallant (2011, p.134), revealed that 18.06% of the variance in teachers' instructional practices was explained by defining and communicating school goals by principals. The correlation between the two variables was not large but the results indicated that in schools where teachers described their principals as effective in involving teachers in developing and discussing school goals, teachers' instructional practices tended to improve at a moderate level.

Results in this study were consistent with those of Sheppard (1996) and Blasé and Roberts (1994) who found out that defining and communicating school mission and goals by the principal had a significant relationship with teachers' classroom practices. In their study, 57% of variance in classroom innovativeness was explained by principals' effort to focus on school mission and goals. The results indicated that teachers who understood well the school goals used more reflection in classrooms and always adjusted their instructional techniques to address different learning needs of their students (Blasé & Roberts, 1994).

Similarly, though the variance was low, results of this study showed that providing teachers with opportunities to take part in the process of developing school mission and goals increased their commitment to work hard and focus more on their teaching. An analysis of the survey data and evidence from the interview findings demonstrated that teachers who were aware of what the school wanted to accomplish, engaged in peer and collaborative learning to gain additional knowledge and skills necessary to improve instruction (r=.387, p<0.5).

The sharing of the school mission and goals motivated teachers to introduce changes in their classes (r=.313, p<0.5) and plan their lessons together (r=.296, p<0.5). The creation of a safe and orderly environment, the use of a variety of activities and strategies in teaching, and the promotion of a high level of student engagement in their learning were some of the dominant classroom instructional practices that teachers performed as a result of understanding and owning school mission and goals. The only small correlation was found between the development of school goals by principals and teacher peer classroom observation (r=.188, p<0.5). This suggested that involving teachers in developing school goals did not motivate teachers to observe each other and share information about teaching.

Overall, the findings from the survey and the interview reflect the need for school principals to involve teachers in the process of formulating and developing school mission and goals. It was found out in this study that having a well defined and shared purpose was essential in the provision of an atmosphere that motivates teachers to remain focused on teaching and learning in schools.

The role of school principals in involving teaching staff in the development and implementation of school mission and goals was crucial in that it encouraged teachers to make some positive changes in the classroom. It was also found out that some improvement in teachers' instructional practices was a result of their involvement in setting and implementing a collective school purpose. This depends greatly on a cohesive understanding of creating and sharing the future of the school. Thus, defining and communicating school goals is an important part of principals' instructional leadership that has a positive impact on teachers teaching practices.

8.2.3 Principal's engagement in promoting teacher professional growth

Teachers and principals in this study agreed that school principals always emphasised the importance of the professional growth of teachers and used a number of strategies to build their teaching capacity. Fostering the professional growth of teachers was moderately enacted by principals (M=3.24, SD=1.22). However, there was evidence from qualitative findings that school principals in the Nyamagabe district were much more concerned about instructional knowledge and skills of their teachers despite the school financial constraints.

The professional growth of teachers is important and is encouraged and supported by school principals (Gezahegn, 2012, p.25; Fullan, 2014, p.4). According to Kalman and Arslan (2017, p.510) and Wahlstrom and Louis (2008, p.463) successful principals are those who create a culture where teachers continuously grow professionally and expand their knowledge and skills necessary to bring about changes in their practices.

Teachers and principals highlighted the willingness of school principals to develop strategies that encouraged teachers to improve their teaching capacity through various programmes. The findings suggested that school principals supported teachers' professional development activities such as attending and participating at training workshops and seminars outside the school, upgrading of skills and knowledge by means of continuing their studies at higher

education institutions, and the creation of platforms for professional discussions and conversations about effective teaching practices.

The evidence gathered for this study did not show that there were any significant teacher capacity-building in terms of formal trainings and workshops organised within schools. This was largely because of the centralisation of the education system in the country where capacity building of teachers is still in the hands of the Rwanda Education Board. Principals always expected the Rwanda Education Board to develop the professional skills of teaching staff because it manages the budget allocated to this programme. Unfortunately, trainings and workshops organised and provided by the REB were occasional and focussed more on science subjects than on all the other subjects taught in schools. They were also limited because their design did not take into consideration the specific needs of the targeted participants. This could have been avoided if the design had some input from the teachers and the principals.

The fact that teachers depended heavily on external and occasional professional development opportunities is inconsistent with the fact that in order for teacher professional growth to be effective it should be based on local school context needs. According to Kavanagh (2006, p.47), professional development programmes result from a self-evaluation and discussion between teachers and principals where both sides assess teachers' needs in terms of professional growth and then arrange the support accordingly. In addition, teacher professional growth is an ongoing process embedded in the daily work of teachers rather than being an event that takes place occasionally (Glover et al., 2016, p.2; Guskey, 2002, p.388; Ravhuhali et al., 2015, p.59).

From the perspective of teachers and principals involved in this study, teacher professional growth would be beneficial to teachers if it were decentralised at the school level and decided by the school rather than the REB at the central level. This would permit schools themselves to assess particular professional development needs of their teachers and establish learning processes that are most likely to produce essential professional skills and knowledge to address those needs.

Despite limited training and workshops that school principals offered to their teachers within schools, teachers appreciated the effort and time that their principals invest in creating conditions that allow them to collaboratively grow and develop as professionals. Quantitative and qualitative findings suggested that principals encouraged and facilitated teachers to

attend workshops and trainings outside the school. It was also evident in both findings that school principals provided teachers with opportunities to interact and share skills and knowledge gained from those training and workshops.

Data collected through interviews indicated, for instance, that principals helped teachers to share skills and knowledge learnt from learner-centred methodology training provided by the Anglican Church and application of CBC training offered by the REB. This strategy aligns with Harris and Jones' (2017, p.332), Kavanagh' (2006, p.50) and Thomas' (2015, p.2895) arguments that teachers grow in profession when they interact with their colleagues by means of sharing what they know about their profession and about their subject areas. The ultimate benefit from this collaboration is that teachers learn from their colleagues what they need to expand on concerning their professional knowledge and skills to bring about changes in their own classroom instructional practices (Alam & Ahmad, 2017, p.319; Fullan, 2014, p.10). Teachers in this study reported that they gained pedagogical maturity as a result of participating in professional development programmes outside their schools and sharing the gained knowledge with their colleagues on their return to schools.

Another professional development strategy used by principals in this study was collaboration and team work among teachers. Participants pointed out that principals encouraged teachers to work in teams, share experience on teaching and solve some learning problems together. School principals believed that forming collaborative communities among teachers was a significant vehicle for teachers to help each other and share skills that enhance teaching in the classroom. This was mostly done by allowing teachers to plan together their lessons and scheme of work, providing teachers time and space to individually and collectively talk about teaching and learning issues, and offering opportunities to share expertise and experience between the most experienced teachers and the novice teachers in schools. This collaborative approach is consistent with Harris's (2005, p.18) distributed leadership model where school principals empower teachers and encourage them to lead their own teaching by setting time to work and plan together, building teacher networks, and sharing ideas about effective teaching and learning. Emmanouil et al. (2014, p.37) and Louis et al. (2010, p.318) also add that teamwork among teachers decreases the sense of isolation and brings them together with a commitment to learn and improve their instruction.

Collaboration and teamwork is an important strategy that enables teachers to generate new and collaborative ideas about effective practices. Teachers were very appreciative of time and

space that school principals provide to them because they tightened a connectedness between teaching and student learning. Principals and teachers in this study were aware that students' performance would improve if teachers had enhanced the job-related knowledge and skills through various approaches including learning from one other. Principals and teachers saw the collaborative approach as a means of engaging in professional dialogue and conversations that generated new knowledge and skills about effective instructional practices. In this regard, Muijis and Harris (2006, p.970) advocate the development of teamwork among teachers as a possibility or a way of integrating in their instruction new teaching and learning techniques from different teachers with different teaching styles and approaches. In such process, teachers become capable of sustaining their own teaching and learning activities as well as mentoring novice teachers with less teaching and learning experience (Oplatka, 2017, p.519; Thomas, 2105, p.2862).

Despite the advantage of bringing teachers together, teacher collaboration and team work seemed to be developed within schools and not across schools. School principals rarely afforded opportunities to teachers to visit other schools and learn from different or similar context. In this regard, Thomas (2015, p.2859) and Kavanagh (2006, p.47) state that teacher professional development can also be provided in the form of collaboration between teachers from different schools and peer coaching, mentoring and classroom observations can be parts of this collaboration. The main advantage of this is that it is 'live learning' and it provides strong potential for idea transfer (Mestry, 2017, p.271). Quantitative and qualitative findings of this study showed that school principals did not provide opportunities for teachers from different schools to meet and learn from one another. Peer classroom observations within schools were also not prioritised. Heavy workload and lack of funds impeded the arrangement and execution of mutual classroom observations and study tours to learn alongside their colleagues from different school context.

8.2.4 Linking teacher professional growth with teacher instructional practices

According to Loyce and Akinwale (2017, p.33) and Quinn (2002, p. 451), one of the main roles of a principal, as an instructional leader, is the ability to motivate and inspire teachers with the end-goal of positively impacting instructional practice and ultimately student achievement. Taking into account this view, the researcher was also interested in identifying if the promotion of teacher professional growth by principals had an impact on teachers' instructional practice in this study. An analysis of the survey data indicated that there was

significant positive association between professional development opportunities offered to teachers and their instructional practices (r=.450, p<0.05). With the positive 'r' value, these results suggested that the more school principals engaged teachers in their professional growth, the more teachers reflected on their instructional practices and came up with new ideas and skills useful to make the conditions and opportunities for students to learn better.

Statistically, the correlation between principals' engagement in teacher professional growth and teacher instructional practice was moderate but all professional development strategies used by principals were regarded as essential in the sense that they all accounted for 20.25% of variance in teacher instructional practices. This was quite a big variance in our sample (n=231) and it implied that providing teachers with opportunities for professional growth increased their commitment to teaching and helped them to gain skills useful to maintain and improve instructional practices. These findings correspond with those of Coldren and Spillane (2007, p.385) in the Hillside school in USA. They found that the positive changes that took place in instructional practices of the teachers were a result of participating in the teaching and learning networks and workshops.

Malakolunthu et al. (2014, p.708) in Ghana also found that sharing the views and ideas on teaching and learning helped teachers to make adjustments and amendments to their teaching approaches so as to encourage creative engagement of students in their learning. Fostering teacher professional development was important and had a direct and positive effect on various teacher instructional practices both within and outside the classroom.

Teacher-capacity building strategies seemed to have an important effect on teachers' instructional practices. While the correlation between teacher professional growth and instructional delivery was small (r=.160, p<0.05), the correlation tended to be higher with instructional planning (r=.479, p<0.05). This suggests that teacher professional development activities performed in schools have more influence on planning lessons than delivering them in classrooms. Interview data with teachers and principals, however, indicated that teacher professional development programmes offered in schools had a positive and high impact on instructional delivery in classroom. The reason for this slight difference might perhaps be based on a small sample of participants involved in the qualitative phase (n=8) in comparison with a large sample participated in the quantitative strand of the study (n=231).

Quantitative findings showed that the fostering of teacher professional development by principals was an important factor in explaining teacher peer classroom observations (r=.308,

$p<0.05$) and teacher collaborative learning ($r=.306$, $p<0.05$). This suggested that the presence of school principals and their engagement in teacher capacity building created a collaborative learning climate where teachers felt comfortable to approach each other, discuss deficiencies in teaching, and share the best practices. Such collaboration, according to Blasé and Blasé (1999, p.364), results in increased teacher motivation, efficacy and creativity in their methods and approaches of teaching. Though the correlation was small *(*$r=.288$, $p<0.05$), the results showed that teachers introduced some changes in their teaching as a result of access to professional development opportunities in schools. Hence, Harris and Jones (2017, p.331) argue that teacher collaboration and collective inquiry have a positive impact on teaching and learning.

Overall, the findings of this study indicated that school principals were committed to providing teachers with learning opportunities that could sharpen their skills to the dissemination of curriculum content to students despite limiting financial constraints. Principals in the study were aware that the expected results in the classroom could not be attained if teachers were not professionally developed. It is in this regard that various professional learning opportunities were offered to teachers to enhance instructional practices and student learning.

8.2.5 Principals supervising instruction and providing feedback to teachers

The findings, especially those from the survey, revealed that supervising instruction and providing feedback to teachers was an important and dominant instructional behaviour enacted by school principals (M=3.96, SD=1.09), followed by discussing this feedback with teachers (M=3.76, SD=1.12). According to Gongera (2013, p.196), supervising instruction means collecting specific information about what is going on in a classroom and making decisions regarding teaching quality improvement. It is done to establish whether teaching and learning take place satisfactorily, and to identify areas in which teachers and students need more assistance.

Results of the survey showed that principals in the Nyamagabe district performed very well in the area of instruction supervision in their schools. Principals understand that instruction improvement is achievable in the classrooms when there is systematic observation and monitoring of the teaching and learning activities leading to the professional growth of the teachers. This is in line with Esia-Donkoh and Baffoe (2018, p.44) and Sergiovanni's (2009, p.281) view that teacher development and supervision go hand-in-hand, and one of the

responsibilities of school principals is to help teachers to improve their practices and effectively manage teaching and learning through regular supervision.

Principals in the Nyamagabe district secondary schools consider monitoring teaching and learning activities as one of their primary responsibilities to assist teachers who needed help and guidance in their teaching. The nature of supervision across all schools varied from a direct lesson observation in the classroom through walkthrough visits to the examination of teacher's pedagogical documents. The key purpose of each type of supervision was to collect precise information about how well teaching and learning were taking place in schools and to assist teachers to improve instructional abilities for effective teaching and learning.

Findings from the survey indicated that school principals generally enacted the direct instruction supervision excellently. The consensus of teachers and principals who took part in this study was that improvement in classrooms could not take place unless emphasis was put on seeing how teachers prepare and deliver their lessons in classrooms and then advise and support them to achieve this improvement.

Unlike the observation by Bellibaş (2016, p.11) in Turkish schools and Manaseh (2016, p.42) in Tanzanian schools that principals see classrooms as the private zones of teachers and that classroom observations mean that principals do not trust their teachers, observing teachers teaching by school principals in this study rests on the assumption that teachers improve more when information on their performance is collected, compared with the desired expectations, and used to make decisions regarding improvement. The teachers and principals of this study believed that observing teachers in their classrooms was one of the strategies for identifying challenges that teachers and students were facing, and to establish appropriate mechanisms for promoting teacher growth which leads to improved teaching performance and better student learning.

In almost all the schools that were surveyed lesson observations were conducted by principals and/or deputy principals. They visited teachers' classrooms, checked lesson plans and other pedagogical documents and then observed how teachers were delivering their lessons. The ultimate purpose of this activity was to assess teachers' development needs and assist them in enhancing effective teaching and learning (Omemu, 2017, p.42). While the principal of school B highlighted that observing teachers in classrooms was among her priorities, teachers pointed out that the principal was more involved in managerial and administrative work at the expense of monitoring teaching and learning in classrooms. Evidence from the interview

showed that principal B did not regularly make time to observe teachers and identify whether teaching and learning was on good track.

As school B belongs to non-boarding schools, information provided by teachers during the interview corroborated with the quantitative data about instructional supervision. Though the effect size was medium tending even towards small with a low value of Cohen's D ($t_{(2.630)}$ =.26, *p*=.009), quantitative results indicated that the principals from non-boarding schools were generally less active in supervising instruction in comparison with their counterparts from boarding schools. The difference might partly be attributed to the fact that non-boarding schools were poorly resourced and principals were busy searching for resources than focusing on teaching and learning activities. For instance, the principal of school B stated that mobilising funds for the school feeding scheme, attending unexpected meetings, and monitoring the renovation and construction of new classrooms were among the non-instructional tasks that took much of her time. Similarly, Oplatka's (2004, p.435) observation is that, in many developing countries, mainly in Africa, school principals focus more on satisfying basic school resources than promoting quality teaching.

The impact of not monitoring teaching and learning activities in non-boarding schools is noted by Hansen and Lárusdóttir's (2015, p.585) who are of the view that for schools without information about classroom activities it is hard to lead and advise on pedagogical matters. In such situations, it is difficult for school leaders to know where teaching and learning is failing and which teachers need special support to improve their effectiveness in the classroom. It is in this regard that Egwu (2015, p.105) advises school principals to invest considerable amount of time in monitoring teaching and learning and providing constructive criticism and guidance if they want to see their teachers performing better in their job of teaching.

One of the strategies that principals used to monitor lessons was conducting walkthrough visits. The survey and the interview findings corroborated and showed that school principals got out of their offices and walked around schools to observe teachers, students and learn about classroom life. This is in line with Jenkins's (2009, p.36) caution that if principals are to take the role of instructional leader seriously, they need to free themselves from bureaucratic tasks and focus their efforts toward improving teaching and learning. I

Both principals from schools A and B declared that walkthrough visits gave them opportunities to learn about teachers' and students' needs and to develop a school wide picture of how teaching and learning was conducted in schools. In the same way, Blasé and

Blasé (1999, p.361) and Harris et al. (2017, p.214) note that principals, using the informal walkthrough approach monitor instruction, keep information about what is happening in class, provide support, and engage in professional conversation with teachers about instruction. Walkthrough visits are important for school leaders to develop the potentials of teachers which in turn can lead to improvement in instruction and in student learning (Gawlik, 2018, p.552).

Teachers from the two case schools pointed out that walkthrough visits conducted by principals and deputy principals kept them working hard as they knew that school principals were visibly present in schools and ready to see what they were doing in class for additional advice. The collective view among participants in this study was that the walkthrough visits were not seen as judging, evaluating or intimidating teachers but as ways of collecting information about the nature and quality of teaching practice and learning. Walkthrough visits enabled principals to make sure that teachers and students were busy working inside their classrooms, their level of attendance, and if there were disruptive behaviours that could hinder learning and teaching from taking place in a normal way in schools.

All schools surveyed ensured that teachers performed their duty of teaching and that all lessons were taking place effectively. In addition to the direct lesson observations and walkthrough visits, principals and sometimes deputy principals were also interested in examining teacher's pedagogical documents such as lesson plans, scheme of work, class journals, attendance registers regularly to connect to instruction and identify how far curriculum programmes were covered in schools.

However, in Tanzania (Manaseh, 2016, p.39), school principals checked teacher pedagogical documents simply because they were part of the school's external inspection documents. Unlike Manaseh's (ibid.) observation, school principals who participated in this study indicated that they examined documents of teachers with the objective of improving teaching and learning. The main reason for checking documents in Rwanda was to ensure that teachers were on track in their teaching and if it was not the case, to provide feedback and support that could help them (teachers) to work better on their curriculum in classroom. Hence, Coldren and Spillane (2007, p.382) note that the reviewing of teachers' work (e.g. lesson plans) by principals helps in maintaining professional discussions with teachers about teaching and seeking ways of making positive changes for instruction improvement.

Both survey and interview findings showed that school principals collected and checked the work of teachers and students to identify what worked well and what did not. However, information collected from the two case schools revealed that much effort was put on checking pedagogical documents of senior three (S3) and senior six (S6) teachers whose students were candidates to the national examination. This does not mean that other documents were not checked; rather it shows that principals worried much more about teaching and learning of senior three and senior six leavers than teaching and learning of the entire school. The explanation was that each year school principals sign the performance contract with the district to increase the number of students performing well in national examination. Paying more attention to both class levels of teaching and learning was thus to alert teachers to effectively help students to meet the content of national examinations and increase the rate of performance. This strategy was not bad but emphasis must be put on all classroom levels regardless of whether students were or were not candidates for national examinations. This is because the effectiveness of teachers and good performance of students are both needed in every classroom and at each level of learning in the school (Ansari & Malik, 2013, p.61).

8.2.6 Linking principal's instruction supervision with teacher instructional practices

Supervising instruction and providing feedback to teachers are critical instructional behaviours of principals as they develop and strengthen teaching practices. The computation of correlation coefficient displayed a positive and significant relationship between this behaviour and teachers' instructional practices (r=546, p<0.05). The results indicated that principals' supervision of instruction was the most enacted instructional leadership behaviour that influenced teachers' instructional practices as it displays the highest '*r*' value among instructional leadership behaviours investigated in the study.

These results showed that the more principals enacted instructional leadership behaviours especially in the area of monitoring teaching and learning, the more teachers improved in their instructional practices. It was found that 29.81 % of variance in teachers' instructional practices was explained by the supervision of instruction in this study. These results contradicted Fullan's (2014, p.8) argument that principals, as instructional leaders, should focus more in creating favourable conditions for teachers to work together rather than spending much time in classroom working directly with teachers. The results in this study demonstrated that, in addition to the creation of such conditions, principals' direct

involvement in teaching and learning through instructional supervision was necessary to provide teachers with expert assistance in improving instruction in the classroom.

Like other instructional leadership behaviours of school principals, supervising instruction and providing feedback to teachers had a different level of effect on teachers' instructional practices. Statistical results indicated, for example, that supervising instruction and providing feedback to teachers had insignificant influence on mutual classroom observations as the correlation between the two variables was too small (r=.111, p<0.05). However, the situation changed with teachers' engagement in collaborative learning (r=.531, p<0.05) and teachers' instruction delivery in classroom (r=.471, p<0.05). These results suggested that, on one hand, principals' supervision of instruction did not encourage teachers to observe each other' classes and provide feedback. On the other hand, principals' monitoring of teaching and learning influenced teachers to work together, learn from one another, and share expertise and insights about teaching. The teachers also paid a attention to instructional delivery in classroom. They focused on creating a safe learning environment and using various teaching strategies that stimulate active participation of students in their learning as a result of guidance and support provided by their principals during or after the supervision.

The survey results demonstrated that instruction supervision of principals had a significant influence on the teachers' instructional practices. This reflects the effort that school principals put on working with teachers, and effective guidance they provided to help them become the best teachers in classroom. Principals in this study considered supervision of instruction as an important tool to get connected with the daily life of classroom and to talk with teachers about how this can be improved. Similarly, Glanzi (2006, p.54) states that supervision of instruction engages teachers and principals in instructional dialogue that brings improvement in teaching and in students' achievements. Oye (2009) also notes that principals' supervision and interaction with teachers increase teacher reflection and awareness about effective planning and preparation of the lessons for instruction improvement in classroom. By emphasising and accentuating the supervision of instruction, principals were attempting to provide teachers with the much needed support and guidance that would positively and significantly contribute to the improvement of their instructional practices in classroom.

The closest relationship found between principals' instructional supervision and teachers' instructional practices was largely a result of mutual understanding between teachers and principals during the supervision process. Results from both the survey and the interview

revealed that school principals' conducted supervision in a friendly atmosphere and the primary purpose was to promote professional growth of teachers rather than judging, evaluating or spying on them. During the supervision process, principals considered listening carefully to teachers, sharing knowledge about the supervision results, recognising the good work, and providing honest and constructive feedback as the key ingredients to bringing about improvement in teaching practices.

The supervision was also beneficial to teachers because principals emphasised the development of a trustful and respectful relationship where teachers were involved in discussing the feedback and felt safe to provide suggestions they thought could improve their teaching and learning of students.

A collaborative and supportive environment in the supervision process, according to Hansen and Larusdottir (2015, p.585), is vital because it allows teachers to deliberately enhance their teaching practices thought to increase student performance. Egwu (2015, p.105) adds that when supervision is constructive, interactive, and supportive to teacher learning, teachers become excited to perform better on their work. It is in this regard that teachers in this study appreciated the dialogue held after the supervision as it helped them to understand their strengths and their needs (weaknesses). The same dialogue also provided teachers with insights about how to plan and teach better their subsequent lessons to address observed weaknesses.

Blasé and Blasé (1999, pp.133-134) assert that professional dialogue during feedback is crucial because it encourages teachers to become aware of and critically reflect on their learning and professional practices for improvement. Similarly, school principals in this study were reported to hold meetings and discuss classroom observation feedback with teachers. This was an opportunity for the teachers to reflect on their teaching practices and collectively develop skills necessary to improve them. Teachers in this study were considered as partners in the supervision process who were also skilful and able to provide suggestions important to raise the quality of teaching in schools (Jita & Mokhele, 2013, p.134).

According to Anho (2015, p.51), Kavanagh (2006, p.42) and Omemu (2017, p.42), supervision is about providing assistance and support to teachers so that they can become the best that they can be. Results from both the survey and the interview indicated that supervision was the most enacted instructional behaviour of principals and the most influential factor in teachers' instructional practices. School principals in this study were

aware that improvement in classroom is possible when information about teaching and learning activities is available and assessed in order to take actions. Direct classroom observations, walkthrough visits and examination of pedagogical documents were the dominant supervision tools that principals used to collect this information. During this process, constructive criticism, the development of healthy relationships with teachers and the interpersonal and professional dialogue were the key ingredients that helped school principals to exert significant influence on the instructional practices of their teachers.

8.2.7. Principals securing and allocating instructional resources to teachers

The allocation of resources to instruction is one of the key responsibilities of school principals as instructional leaders. According to Fessehatsion (2017, p.140) and Pill (2014, p.366), a good and successful principal supplies teachers with appropriate teaching and learning materials to enable them to deliver the curriculum content effectively. In regard to how school principals of the Nyamagabe district allocated resources to teachers, quantitative findings showed that they were ranked moderate by their teachers (M=3.26, SD=1.10). The fact that the mean is nearly equal to the cut-off mean, this is supported by information collected from interviews that school principals generally provided insufficient teaching and learning resources to teachers.

Nevertheless, it is argued in the literature that quality teaching and learning to be achieved in classroom, teachers need to possess sufficient and appropriate teaching and learning resources. According to Lingam and Lingam (2013, p.2161) and Tuimur and Chemwei (2015, p.225), suitable and sufficient instructional resources bring life to teaching and learning because they stimulate students to actively learn and grasp the concepts more readily and easily. Instructional resources cannot replace teachers but they can help them to concretely clarify the content materials and students to develop skills easily through participating in different learning activities. The lack of required instructional resources on the other hand jeopardises the quality of teaching and learning in the sense that teachers use verbalisation in teaching while students rely mostly on rote learning (Okobia, 2011, p.93).

The survey results in this study revealed that teaching and learning resources were not enough (M=3.19, SD=1.12) and were not always allocated on time (M=3.10, SD=1.05) because both means are nearly equal to the cut-off mean. This corroborated with data collected from the interviews indicating in general that the most available instructional materials in the school B were pens, chalks, some textbooks, maps and other facilities like

classes, chalkboards and desks. School A, however, was reported to have more teaching resources as a result of tuition fees and funds raised by parents and other school partners. Science labs, materials and equipment, computer labs, and libraries were among the main resources in school A although they were not sufficient. School B, on the other hand, depended on the basic resources mentioned above. It did not have a science or computer lab while it had science subjects such as biology, chemistry, and physics and ICT courses to teach.

Teachers' feedback about resources in school B also indicated that the school did not have textbooks for French, religious studies and history of Rwanda. In addition, all the surveyed schools did not have textbooks and other related teaching and learning resources for the competence-based curriculum (CBC) introduced in schools in 2016.

In general, there is serious lack of teaching and learning resources in the secondary schools of the Nyamagabe district. These findings corroborate with findings from many previous studies conducted in Africa and other developing countries that the scarcity of teaching and learning materials is a major challenge for many schools. For instance, Bizimana and Orodho (2014, pp.117-118) in their investigation on the relationship between availability of teaching and learning resources and effective classroom management and content delivery, observed that secondary schools of the Huye district in Rwanda had insufficient resources including laboratories, libraries, computers and audiovisual resources. The only resources that were available in the schools were basic such as chalks, chalk boards, chairs, classrooms and dustbins. Other studies like those of Okobia (2011) in Nigeria, Malakolunthu et al. (2014) in Ghana, Tedla (2012) in Eritrea, Ahmed (2016) in Ethiopia, and Lingam and Lingam (2013) in Fiji also indicated that teachers depended mostly on chalks, chalkboards and textbooks. The most relevant instructional resources such as science materials, equipment and laboratories, computers, libraries and audiovisual materials were not available or were of poor quality.

In this study, textbooks were among the scarce instructional resources in schools. The lack of textbooks for CBC and other subjects such as French, history, and religious studies made it difficult for teachers to prepare their lessons and deliver the content to students effectively. Mupa and Chinooneka (2015, p.128), explaining about importance of textbooks, say that textbooks constitute the most consistent factor in predicting teacher effectiveness towards teaching, as they provide teachers with content, structure and order in the teaching and

learning process. Textbooks also guide teachers in planning their lessons by selecting appropriate content in relation to student learning abilities in classroom. Given the crucial role that textbooks play in teaching and learning, it was evident that the lack of textbooks in secondary schools of the Nyamagabe district put pressure on teachers to search on their own the content to teach and the way to teach it. It was found that teachers preferred to use lesson notes they were using when they were still at school or some textbooks that were not updated. In such a situation, there was a possibility of giving students the content which is not relevant or which is beyond the students' learning abilities.

The scarce teaching and learning resources included science laboratories, materials and equipment. Kibirige and Hodi (2013, p.245) posit that labs and science materials and equipment enable teachers to teach well and students to learn by doing. Teachers explain curriculum materials in a concrete manner and students get opportunities to discover new knowledge or additional information through lab experiments or other learning practices. Science laboratories, materials and equipment were limited in some schools and non-existent in the others. For instance, teachers interviewed in school B stated that they taught science subjects in theory and students were rarely exposed to practice to aid the classroom theoretical knowledge. Only one teacher in this school reported to take students to the neighbouring school to conduct experiments. However, this did not last long because the school could not continue affording to buy chemical products and other materials used by students in the neighbouring school labs.

Many schools, including school B, could not afford to build their own science labs and buy suitable materials and equipment for teachers and students. The majority of the schools, especially non-boarding schools, depend on science kits supplied by the MINEDUC but these kits were few and poorly equipped. As a result, demonstration and teacher-centred work were said to dominate the teaching practices of teachers in those schools rather than encouraging student group work. This is not consistent with the observation made by Rosenshine (2010, p.25) that effective teachers encourage students to learn with and from their peers. Such teaching strategy offers opportunities for students to exchange ideas on their learning and get feedback from their colleagues which, in turn, promotes student engagement in the teaching and learning process.

In addition to lacking textbooks and science resources in schools, the schools lacked other important teaching and learning resources such as computers, internet, projectors, TV

screens, and libraries with supplementary textbooks. Participants in school B confirmed that the lack of these resources hindered teachers from making their teaching enjoyable, pleasant and less stressful. However, It emerged that some schools did not properly use the resources which were already available. This was the case in school B where teachers reported that school leaders keep reading books in a store room for fear that students can damage or steal them.

School principals in the Nyamagabe district were generally not strong resource providers because teachers had limited access to important resources which could boost their teaching. However, a significant difference was observed between schools in terms of allocating resources to instruction. The survey findings showed that teachers from boarding schools were allocated more teaching and learning resources than teachers from non-boarding schools. The computation of independent sample t test ($t_{(5.041)}$ =.51, p=.000) displayed a large statistical significant difference between the two categories of schools (Cohen's d scores=.51). This suggests that principals from boarding schools are more active and supportive in securing and allocating resources to teachers than their counterparts from non-boarding schools.

The above difference was also observed in the interview data in the two case study schools. Principal and teachers from school A (boarding school) stated that their school had science labs, materials and equipment, computer labs and libraries; the resources which are not available in school B (non-boarding school). Teachers from school A indicated that their principal is supportive of their teaching in terms of allocating resources. These results are not surprising because, as Mudulia (2012, p.535) observed in Kenya, boarding schools were more resourced than day schools. The main factors behind this disparity situation were poor funding from government and the low economic status of the home backgrounds of the day students; the factors which were also mentioned by the principal of school B in this study.

Part of the reason for the difference observed between the two types of schools in this study was that principals from boarding schools used school fees to purchase teaching and learning resources for teachers. The analysed interview data further indicated that teachers from boarding schools did not solely rely on the ready-made and purchased teaching and learning resources. Principals were aware that there were relevant materials in school environment. As a result, they financially supported teachers to improvise local and cheap teaching and

learning resources that could be equally used together with other resources available at school.

The lack of instructional resources in non-boarding schools, on the other hand, results from a number of factors. First, education is free in these schools and school principals rely only on government funds, which are generally insufficient. Second, the majority of students who attend non-boarding schools come from poor families. This suggests that parents are financially unable to support schools to get supplementary resources to allocate to teachers. Third, the non-boarding schools receive smaller amounts of the capitation grant in comparison to boarding schools. As a result, non-boarding schools principals are constrained from providing teaching and learning resources more than principals of boarding schools.

Nevertheless, the survey findings and the interview data revealed that all schools studied were generally experiencing shortages of teaching and learning despite the differences observed. The common denominator of this scarcity, according to participants, was insufficient funds allocated to schools regardless of particular needs of each school. It is worth noting that each student from non-boarding school is allocated approximately six US dollars each year while a boarding school student receives nearly 25 US dollars annually. Therefore, school principals find it difficult to provide teachers with appropriate resources as the little amounts are absorbed by other operational costs such as salaries for support staff, paying water and electricity, rehabilitation and repair, office materials, principal transport and mission allowances just to name few. In this regard, Mupa and Chinooneka (2015, p.127) assert that ineffective funding and budget cutbacks play a major role in eroding the standards of teaching and learning. This was also observed by Lingam and Lingam (2013, pp.2166-2167) and Mudulia (2012, p.253), that poor funding is a barrier for schools to have adequate resources and maximise students' learning potential.

8.2.8 Linking available instructional resources with teacher instructional practices

The general observation in this study was that school principals did not have the capacity to allocate enough resources to teachers due to the various reasons discussed above. However the few teaching and learning resources that were allocated to and used by the teachers had a positive effect on their teaching.

The survey results displayed a positive relationship between the use of available resources and instructional practices of teachers with a medium correlation (r=.442, p<0.05). With the

calculation of coefficient of determination, the results indicated that 19.53% of variance in instructional practices of teachers was due to the provision of appropriate teaching and learning resources by school principals. What these results suggest is that the more school principals allocate adequate teaching and learning resources to teachers, the more instructional practices teachers used in their teaching improve.

Similar to the other instructional leadership behaviours of principals in this study, the provision of resources to teachers did not correlate with instructional practices of teachers at the same level. Results showed, for example, that there was a small correlation between the provision of resources and teacher peer classroom observation (r=.111, p<0.05) and how teachers introduced changes in their teaching (r=.204, p<0.05). What this suggests is that the allocation of resources by school principals was not a motivating factor for teachers to observe each other's classes and bring changes in their teaching. However, the little resources in schools encouraged some teachers to share knowledge and skills about teaching and help each other to overcome teaching problems (r=.401, p<0.05). The allocation of resources to teachers contributed also to teacher lesson plan (r=.311, p<0.05) and the delivery of these lessons in classrooms (r=.336, p<0.05).

Overall, the correlation between the provision of teaching and learning resources and teacher instructional practices is medium (r=.442, p<0.05). The main reason is the unavailability of some resources in schools to help teachers plan and deliver their lessons successfully. The lack of science labs, materials and equipment, lack of textbooks and lack of computers, lack of libraries and other relevant resources could explain the little influence teaching and learning resources exerted on instructional practice of teachers in this study. The medium and positive correlation established between the two variables, however, agrees with other study results that the allocation resources to teachers impacts positively on their teaching. The results support those of Bizimana and Orodho (2014, pp.119-120) that the availability of teaching and learning resources in schools has a significant positive impact on teacher's classroom management and content delivery (r=.711, p=.001).

Both principals and teachers in the two case schools noted that the use of instructional resources is important for teaching and learning. A few available resources motivated teachers to fix the achievable learning objectives in their lessons and use various instructional strategies to promote high engagement of students in class. As many resources can easily be

manipulated, seen, heard, or felt, teachers were exposed to a variety of teaching approaches that could stimulate different senses of students and develop skills and concepts more easily.

Teachers and principals also indicated that the provision and use of teaching and learning resources increased cooperation among teachers as they had to share resources available in their schools. Teachers helped each other in both preparing lessons and discussing how well to present these lessons in class. The availability of resources is an important tool that teachers used to minimise disruptive behaviours in classroom that could be associated with boring subjects taught verbally using the chalk and board only.

8.2.9. Principals' participation in reviewing curriculum materials

Among the most important tasks of the principal, as instructional leader, is the area relating to reviewing curriculum and instruction (Hallinger &Wang, 2015, p.21). In this regard, the survey findings of this study indicated that principals' participation in the review of the curriculum materials was almost minimal in the Nyamagabe district (M=3.14, SD=1.30). All activities that constituted this important task were moderately performed with the mean scores nearly equal to the cut-off mean.

According to Ifoema (2013, p.444), the review of curriculum materials refers to the curriculum organisation process where school leaders and teachers jointly formulate and select curriculum objectives, content, and the actions to achieve these objectives. Selecting appropriate instructional resources and using students' results to devise strategies of improving the areas of low achievements are also parts of this process (Lunenburg, 2010, p.3).

School principals in this study knew that one of their primary roles was to work with teachers in identifying the learning needs and objectives of the students. However, the survey findings suggested that principals did not put much emphasis on this task, as they did not sufficiently participate in curriculum organisation and planning.

In Rwanda, all curricula taught in schools are developed at the national level and then together with the directives are handed down to schools to be implemented. In the line with Weber' s (1996) framework, Ifoema's (2014) and Lunenburg's (2010) view, principals at school level are expected to sit down with teachers and align the content with classroom objectives and activities and ensure that all necessary teaching materials are in place. The interview data suggested that principals in the study were effective in some aspects of the

curriculum review and less active in the others. They, for example, supplied teachers with teaching and learning resources and held meetings with teachers at the beginning of each year to plan scheme of work and determine teaching activities to be carried out throughout the year. However, this is all they do, as they leave the actual work of reviewing curriculum materials into the hands of their deputy principals and the most experienced teachers who in most cases were the national examination markers.

Teacher participants appreciated the role of principals in bringing together and involving teachers in the curriculum review. However, it could be much better if principals worked with and guided teachers during the whole process to have the same understanding and interpretation of the curriculum as well as identification of curriculum problems and possible solutions to them. For teachers this is also an opportunity to assess together effectiveness of instructional resources designed to facilitate the content delivery, and plan in advance the supervision activities that can help to determine how well curriculum is being implemented.

Principals' active participation in reviewing curriculum was not observed in this study as they tended to delegate the task to others. Previous studies also indicate that school principals devote little time to activities related to curriculum and get more immersed in administrative and managerial duties (Bhengu et al., 2014; Hoadley et al., 2009; Taole, 2013). Results in this study are consistent with the findings of Ifoema (2013, p.451) in secondary schools of Ambra State in Nigeria that school principals spent much time on planning and preparing budgets, maintaining infrastructure and planning workshops of teachers at the expense of curriculum planning and organisation. Manaseh (2016, pp.42-44), working in the Tanzanian context, also indicated that school principals did not engage in the review of the curriculum materials and left the task to teachers and deputy heads. These principals claimed that the Ministry of Education and Vocational Training did not empower them to undertake such tasks, and as a result, they did not take it as one of their responsibilities.

Principals' participation in the review of the curriculum materials was to some extent limited while this is an important aspect of instructional leadership (Gawlik, 2018, p.550). Manaseh (2016, p.44) notes that school principals as instructional leaders have the responsibility to review the curriculum at the school level to ensure that the teaching and learning materials used by teachers and students are of the high quality. Ifoema (2013, p.445) adds that the quality of instruction depends on multiple factors including the quality of teachers, the soundness of the curriculum, and the appropriateness of the teaching methods. This

emphasises the need for school principals to work with teachers and provide them with information and direction useful for curriculum plan and organisation. The main role of school principals in this process is thus guiding and supporting teachers to choose the relevant textbooks and select appropriate content, strategies and methods. Principals also encourage teachers to talk about classroom activities and share the best teaching practices before the curriculum to be implemented in classroom (Çalıskan &Tabancalı, 2007, p.762).

School principals in this study were not very active in reviewing the curriculum materials due to various reasons. The two case study findings showed that unreasonable workload on school principals kept them away from helping teachers to review the curriculum at the beginning of each academic year. Activities such as teachers' new placement, new teachers' salary processing, and purchasing food items and teaching and learning resources were among activities that prevented school principals from being visibly present and guiding teachers in the curriculum review process. Other previous studies show that school principals do not have much time to devote to curriculum and instruction because they are busy with other day-to-day activities regarding the life of schools. According to Hoadley et al. (2009, p.381), only 17% of principals in South African secondary schools viewed overseeing teaching and the curriculum as their main task. It was found that much time of school principals was spent on administrative work, departmental report, student discipline and classroom teaching. Similar findings were reported concerning Eritrea by Tedla (2012, p.851) where meetings, paperwork, planning, budgeting, student discipline, and office work were the main activities that distracted school principals from dealing with instructional processes. Similarly, it seemed to be difficult for school principals in this study to balance instructional roles against managerial and administrative work. As a result, they ended up being more involved in administrative work than in teaching and learning process.

Lack of sufficient knowledge and skills on the curriculum also emerged from the data as a challenge that made it difficult for school principals to fully engage in reviewing the curriculum materials with teachers. Principals' main concern was about the implementation of competence-based curriculum (CBC) in their schools. The CBC was developed around student-centred teaching methods and was introduced in secondary schools in 2016 to gradually replace the old curriculum that the Government wants to phase out. All school curricula in Rwanda are designed at the national level and handed down to schools to be implemented. Qualitative results of this study showed that neither teachers nor principals were offered opportunities to give input during the CBC development process. Principals

were only involved when the REB called them to participate in the training regarding the CBC implementation at the school level. Qualitative data suggested, however, that principals' training was insufficient to equip them with skills and knowledge adequate to guide and advise teachers about the CBC application in classroom. The curriculum was reported to be difficult for both principals and teachers to understand and implement because it required expertise that the stakeholders did not have and a lot of teaching resources that many schools did not have at their disposal.

One of the challenges that school principals face is that they do not understand the content and objectives of the curriculum. Bush et al. (2010, p.164), for example, found out that one of the factors that impeded teaching and learning in South African schools was the inability of principals and teachers to grasp the new curriculum introduced at the time. Bush et al. (2010) findings echoed those of Ifeoma (2013, p.451) in Nigerian secondary schools that principals failed to instructionally support teachers because they were not properly trained in curriculum management. Similarly, it was also found in this study that the CBC was forced to schools from the top and the REB did not pay a proper attention to the training of school principals and the allocation of appropriate resources to enable successful implementation of the new curriculum. Teachers too, were not sufficiently trained on the application of the CBC in the classroom. As a result, school principals had not enough capacity to guide and support their teachers in the curriculum planning process.

8.2.10 Linking the review of the curriculum materials with instructional practices of teachers

Descriptive statistical results of this study show that secondary school principals in the Nyamagabe District were not much active in the area of reviewing curriculum materials together with teachers (M=3.14, SD=1.30). However, the inferential results indicated that the little time that school principals spent on working with teachers on the curriculum organisation produced a positive effect on teachers' instructional practices.

A statistical positive relationship was found between principals' involvement in reviewing curriculum materials and instructional practices of teachers (r=.385. p<0.05). The correlation between these two variables was moderate and the variance in teacher instructional practice informed by the principals' engagement in the review of the curriculum materials was also low (14.82%). The results, however, suggested that the more school principals engaged themselves in reviewing the curriculum with teachers, the more teachers felt supported and

motivated to share good teaching experience and the best practices essential to disseminate the content to students in class. The results are encouraging because principals' personal engagement in this task inspires teachers to take ownership of curriculum and discuss classroom teaching methods and activities in such a way that instruction becomes more beneficial to students (Goddard et al., 2007, p.882).

The positive effect of the principals' engagement in reviewing the curriculum with teachers was more evident in planning lessons (r=.451, p<0.05) than on other teachers' instructional practices in this study. Principals' participation in the review of the curriculum was found to exert little influence on teacher instruction delivery (r=.153, p<0.05), teacher engagement in collaborative learning (r=.294, p<0.05), teacher introduction of changes (r=.210, p<0.05), and teacher mutual classroom observation (r=.208, p<0.05). The situation changed only when it came to plan lessons where principals' influence tended to be significantly high (r=.451, p<0.05). This suggested that the collective review of the curriculum materials provided teachers with an understanding of the philosophy of the curriculum, the necessary resources needed, and how different parts of the curriculum could follow one another during the lesson plan process to make teaching and learning more coherent and logical in classroom. Likewise, Cullingford (1995, p.168) observed that reviewing and planning curriculum together and discussing its implementation enhances teachers' understanding of the content and equip them with a range of teaching strategies that enable students to learn well in classroom. Sharing ideas on curriculum content organisation, teachers learn how to anticipate and interpret what their students need to do in the teaching learning process. The findings demonstrate that teachers' success lies partly in principals' effort to manage curriculum and in their capacity to guide teachers in its planning and implementation (Çalıskan &Tabancalı, 2009, p.760).

Overall, the correlation between principals' engagement in the review of the curriculum materials and teacher instructional practice was small in comparison with other instructional leadership behaviours of principals (r=.385. p<0.05). This can be explained by the fact that school principals spent little time on organising the curriculum with teachers and did not have strong grasp of the new curriculum that was introduced in their schools. Clearly, there is a need for principals to relinquish some administrative and managerial duties and put curriculum leadership responsibility at the top of their agenda. Regular and systematic training is also important for school principals to acquire knowledge and skills that enable

them to help teachers to cope with curriculum issues related to planning and delivering instruction in the classroom.

8.3. Participants' general perception of principals' instructional leadership behaviours

The survey and the interview data indicated some of the perceptions of principals' enactment of instructional leadership behaviours. The interrelated themes emerged from the study indicated that school principals in the Nyamagabe district did enact various instructional leadership behaviours but at different level. While school principals were rated by their teachers as very active in supervising instruction and providing feedback to teachers (M=3.96, SD=1.09), the same teachers ranked their principals the lowest in the area of reviewing curriculum materials (M=3.14, SD=1.30); an instructional task which is considered as one of the main duties of school principals (Çalıskan &Tabancalı, 2009, p.762; Gawlik, 2018, p.550; Manaseh, 2016, p.44). Other instructional leadership behaviours that were enacted at the moderate level include defining and communicating school goals (M=3.35, SD=1.21), securing and allocating teaching and learning resources to instruction (M=3.26, SD=1.10) and fostering teacher professional growth (M=3.24, SD=1.22). There was general consensus among teacher and principal participants that, despite some challenges related to enacting instructional leadership behaviours, the principals' primary motive was to strengthen teaching capacity of teachers through a collaborative and collegial atmosphere.

The holistic picture of school principals' enactment of instructional behaviours shows that principals' performance was moderate with the overall mean score of 3.48 and standard deviation of 1.17. The level of performance was not excellent but the findings were promising because principals' practice of instructional leadership was relatively high in comparison with other empirical studies conducted in various developing countries mainly in Africa (Ahmed, 2016; Bhengu et al., 2014; Kabeta et., 2013; Tedla, 2012). The findings of this study suggest that principals in the Nyamagabe district practise instructional leadership and teachers' teaching improvement was their primary concern.

Participants from both the survey and interviews revealed that collaborative relationships with teachers were the main instructional leadership strategy that principals used in their schools. This is in line with Lunenburg's (2010, p.2), Marks and Printy's (2003, p.374) and Tedla's (2012, p.848) view stipulating that instructional leadership is today a collaborative effort where school principals forge relationships with teachers and jointly work on improving instruction. School principals must create conditions and opportunities for teachers

to collaboratively work together and discuss instructional matters for improvement in the classroom. The findings of this study show that principals did their best to break the isolation of teachers by involving them in different instructional activities and by creating opportunities to share expertise and knowledge about teaching for the sake of instructional improvement in classroom.

Another inference that can be drawn from the findings of this study is that principals from boarding schools generally focused more of their attention on instructional leadership than their counterparts from non-boarding schools. Though the computation of independent sample t-test established a medium effect size tending towards small ($t_{(2152)}$ =.21, p=.032), this difference should not be neglected because it served as an indicator that principals from boarding schools were relatively more active in instructional leadership than their counterparts from non-boarding schools. The difference was also corroborated by the findings in the two case study schools where the school principal A (boarding school) was more involved in instructional leadership activities than his colleague from the school B (non-boarding school). This difference calls for a particular assistance to principals in non-boarding schools to enable them to discharge their duties that are directly related to teaching and learning. There is also an urgent need for putting in place mechanisms that mitigate challenges preventing all school principals in the Nyamagabe district from engaging in their instructional leadership tasks effectively.

8.4. Challenges that impede instructional leadership of secondary school principals in the Nyamagabe district

Instructional leadership of school principals in the Nyamagabe district was not without challenges. Different views emerged from the interviews conducted with teachers and principals in this study indicated that principals' instructional leadership roles were constrained by many factors originating from both within and outside the schools.

The main challenge that was raised by the participants was limited financial resources. In this regard, participants indicated that the funding from government was insufficient for the procurement of resources that are needed by the teachers and students. Many schools, especially non-boarding schools, rely heavily on government funds and for this reason, they are unable to procure expensive teaching and learning resources such as science labs, materials and equipment, libraries, and computers using the capitation grant allocated to schools. This state of affairs had a negative impact on teaching and learning. In some schools,

teachers taught theory only and students were not exposed to sufficient practicals, especially in science subjects. Lack or insufficient teaching and learning resources was also observed in many empirical studies as a challenge to successful instructional leadership especially in African countries (Bush & Oduro, 2006; Oplatka, 2004). The scarcity of resources in this study was exacerbated by inability of parents to provide a financial contribution to schools for additional resources. This was more observed in non-boarding schools than in boarding schools.

Heavy workloads for school principals were cited as one of the main challenges that militate against efficient discharge of instructional leadership responsibilities. The teachers interviewed stressed that their principals had a lot of work in the office and outside the schools and, as a result, there were not always visible in schools. It was evident that school principals were aware of the lack of sufficient time to fully engage with teachers in all instructional matters. Principals stated that the lack of time was due to other non-teaching duties such as attending meetings outside the schools, mobilising funds for school feeding scheme, monitoring the renovation and construction of classrooms, and solving other emergent issues like handling discipline issues of students in schools. Such managerial and administrative activities were found by other many researchers to block school principals from executing their instructional leadership roles effectively (Bhengu et al., 2014, p.206; Hodley et al., 2009, p.381; Kabeta et al., 2013, p.881; Tedla, 2012, p.851).

The lack of sufficient professional development opportunities for both teachers and school principals also made it difficult for principals to effectively discharge their duties as instructional duties. There was consensus among participants that schools provided teachers with very few professional growth opportunities in their teaching. The main problem was that school professional development programmes in Rwanda are managed by the REB at central level and principals at school level find it difficult to initiate and implement professional development activities without a budget. Evidence of the shortage of teachers' professional development programmes was manifested in the use of English as a medium of instruction in Rwanda. The interviewed teachers stressed that their proficiency in English was low and they needed learning workshops tailored to deal with this challenge. For some teachers, to teach the whole lesson in English was not possible and Kinyarwanda was a predominantly language of instruction in classroom. To grow professionally, teachers depended greatly on the REB seminars and workshops which were occasional and more focused on science subjects than on all subjects taught in schools. Thus, insufficient teacher professional growth

programmes has a negative impact on teachers' task of ensuring that students receive adequate learning (Mizell, 2010, p.18).

Insufficient professional development opportunities also made it difficult for principals to implement instructional leadership in their schools. The findings of this study revealed that principals were appointed to the principalship position on the basis of their qualifications without prior training in leading and managing curriculum in schools. Principals in Rwanda are selected among the prospective teachers and yet Ifoema (2013, p.451) and Wanzare and Da Costa (2001, p.278) posit that these are two different domains that require different skills and knowledge. Gumus and Akcaoglu (2013, p.299) further add that the principal selection and preparation process needs to include pre-service and in-service training with an emphasis on instructional leadership. The principals' limited involvement in the CBC implementation showed that the REB did not put much emphasis on school principals' in-service programmes especially in the area of curriculum management. A few development opportunities offered by the Ministry of Education, in conjunction with the VVOB, focused more on managerial and administrative duties than on principal instructional responsibilities. As a result, principals' capacity to guide and support teachers in their teaching activities was to some extent limited.

A lack of voice in decisions concerning schools was also a significant factor hindering instructional leadership success in this study. Very often principals and teachers were affected by decisions made at the top which they were not part of. This is linked to the structure of education system of Rwanda which is highly centralised and decisions regarding schools are made without consulting implementers at lower levels, that is, school principals and teachers at school level. It was evident in this study that the policy on the introduction of English as a medium of instruction was imposed on schools without prior consultation. The majority of teachers who, for many years, were using French for teaching found it difficult to change to the use of English for teaching and learning. The policy was sudden and teachers were not given preparatory and substantial trainings to facilitate the switch from French to English. It was also difficult for school principals to take a proactive stance to assist teachers in implementing the new policy because they had also the same problem in the English language.

The introduction of the competence-based curriculum (CBC) in schools was an indication of the fact that policy makers at the national level do not recognise the role of the policy

implementers at the school level. The interview findings revealed that neither principals nor teachers were involved in the CBC development process and the curriculum was forced on schools without sufficiently preparing teachers and school principals to implement it. Consequently, principals could not properly support and guide teachers in the application of CBC due to the lack sufficient skills and knowledge about the curriculum. Highly centralised decision-making processes such as this one, according to Kaparou and Bush (2016, p.23), does not allow the flexibility to encourage the sharing of instructional responsibilities in schools. Principals work under pressure exerted by the central authority and tend to accord over-emphasis to administrative and managerial functions with little attention given to instructional tasks (Oplatka, 2004, p.432).

Principals in the Nyamagabe district face numerous challenges that impede their capacity to provide effective instructional leadership in schools. Despite these challenges, however, instructional leadership was viewed as an important leadership approach that has a positive impact on the performance of teachers.

8.5. To what extent do instructional leadership behaviours enacted by school principals influence teacher instructional practices?

School principals in this study were viewed as the key instructional leaders whose main responsibility is to provide teachers with guidance on their teaching. When taken together, all instructional leadership behaviours enacted by principals were found to be influential factors on teachers' instructional practices. The findings of this study revealed that instructional leadership behaviours of principals correlated significantly and positively with teachers instructional practices (r=.562, p<0.05) and, according to Cohen's (1988, pp.79-80) guidelines, this correlation was large (≥.5).

The findings demonstrated a strong relationship between principals' instructional leadership behaviours and teachers' instructional practices. According to Greener (2008, p.62) and Pallant (2011, p.134), the coefficient of determination indicated that 31.58% of variance in teacher instructional practices was explained by principals' instructional leadership behaviours. In other words, 31.58% of the variation in instructional practices of teachers was accounted for by variation in principal instructional leadership. The results suggested that instructional practices of teachers improved more when school principals also made more effort to engage in instructional leadership behaviours such as defining and communicating school goals, promoting teacher professional growth, supervising instruction and providing a

feedback to teachers, securing and allocating resources to instruction, and aligning curriculum materials with student needs. All these behaviours were important as they created confidence in teachers to effectively plan and deliver instruction, share teaching and learning skills and knowledge, observe each other' classes and introduce changes in their teaching. The common denominator behind the above influence was a collaborative relationship that principals built with and among teachers in the schools.

The strong correlation between the two variables in this study supports the observation in previous research by Enueme and Egwunyenga (2008, p.16). The study reported that there is a significant and strong relationship between principals' instructional leadership and teachers' job performance in classroom when school principals possess knowledge and skills about teaching and learning and ability to share such insights with teachers. In Enueme and Egwunyenga' s study (ibid.), teachers' classroom behaviours, attitudes and effectiveness improved as a result of principals' support and guidance in teaching and learning process. The results also agree with those of Quinn (2002, p.461) who observed that active teaching occurs in schools where principals serve as strong instructional leaders with ability to engage teachers in interaction around various instructional matters.

The present findings show that principals who exercise instructional leadership are needed in schools to guide and support teachers to carry out teaching activities that offer opportunities to students to learn. Such principals are important figures in schools as they create conducive conditions for teachers to interact and learn from one other for professional growth. They are also required to set and drive the school's collective purpose and encourage and support teachers to work towards its achievement. The strong correlation evident between instructional leadership of school principals and instructional practices of teachers in this study shows that principals' instructional leadership does not only affect students' learning achievements as it was observed by many researchers in the previous studies (Louis et al., 2010; Lydiah & Nasongo, 2009; Robinson et al., 2008) but also exerts a great influence on instructional practices of teachers in schools.

8.6. Overview of the chapter

Chapter eight discussed the quantitative and qualitative data analysed and presented in this study. The findings revealed that secondary school principals in the Nyamagabe district enact various instructional leadership behaviours including defining and communicating school goals, promoting teacher professional growth, supervising instruction and providing a

feedback, securing and allocating resources to instruction, and aligning curriculum materials with student needs. Principals from boarding schools were found to be more active in instructional leadership than principals from non- boarding schools. In general, all principals do perform instructional leadership behaviours at the moderate level. Several challenges were noted that prevent principals from excelling in instructional leadership and these include the shortage of teaching and learning resources, the shortage of professional development opportunities, principals' heavy workloads, and highly centralised decisions. However, despite all these challenges, instructional leadership of principals was found to positively influence teachers' instructional practices and the correlation was strong (r=.562, p<0.05). This suggests that instructional leadership of school principals in the Rwandan educational context is an important factor for teachers to improve instructional practices that promote student learning in schools.

In the next chapter (chapter 9) which is also the last chapter of the thesis, the researcher proceeds to outline recommendations and conclusions emanating from the analysis and discussion of the data. Chapter 9 summarises the study findings, discusses the contribution and implications of these findings, puts forwards some recommendations and draws a general conclusion.

CHAPTER 9: STUDY SUMMARY, CONTRIBUTION TO KNOWLEDGE AND RECOMMENDATIONS

9.1. Introduction

The main purpose of this study was to ascertain instructional leadership behaviours enacted by secondary school principals and investigate the influence of these behaviours on teachers' instructional practices in the Nyamagabe district of Rwanda. To achieve this purpose, a mixed methods approach was employed and survey questionnaire and semi-structured interviews were sequentially used. The previous chapter (chapter eight) integrates and discusses quantitative and qualitative results to provide a holistic picture of how principals exercise instructional leadership and the level of influence it has on teachers' instructional practices. This chapter provides a reflective summary of the thesis, presents findings in relation to research questions, and discusses the contribution and implications of the findings. The chapter also provides a summary of the key findings, highlights the study limitations, puts forwards some recommendations and draws a general conclusion.

9.2. Reflective summary of the thesis

This thesis comprises nine chapters which together contributed to the analysis and report of the findings of the study.

Chapter 1 was an introductory chapter and was concerned with briefly introducing the context for the study topic and background to the research problem. The same chapter provided a description of the geographical location of Rwanda as a land locked country depending largely on its population for social and economic development. Chapter 1 also described briefly the historical context of education in Rwanda, current educational system in Rwanda, and educational leadership policy in the country. Furthermore, chapter 1 defined the key terms used throughout the thesis. It provided the statement of the problem under investigation, the purpose and objectives of the study, significance and contribution of the study as well as the research questions addressed in this study. Lastly, chapter 1 provided briefly the theoretical and conceptual framework that guided the study, a synopsis of research design and methodology used, and a summary of the literature review.

Chapter 2 was dedicated to discussing theories that underpin the study. Theories such as shared instructional leadership, transformational leadership, transactional and distributed

leadership were discussed to provide the lenses through which the study analyses how school leaders influence the practices of teachers in their respective schools. Unlike traditional instructional leadership that merely focuses on school principal' expertise (Bush, 2013, p.6; Hallinger, 2003, p.330), shared instructional leadership was chosen as it emphasises active collaboration of principals and teachers on curriculum and instruction (Marks & Printy, 2003, p.371; Neumerski, 2012, p.325).

Shared instructional leadership and transformation leadership guided this study because they help in shaping conditions in which teachers and principals mutually engage in collaborative relationships and in which teachers learn from one another on how to improve their practices. Transactional and distributed leadership encompass principals' behaviours that provide insights into how school principals work with teachers and assist them to reach their full potential.

The dimensions of transactional leadership; contingent reward and active management by exceptions (Avci, 2015, p.2760) and those of distributed leadership such as providing teachers with opportunities to plan and work together, encouraging teachers to learn from one another, building teacher networks and fostering professional development (Harris, 2005, p.18) play a key role in explaining how principals and teachers interact around instructional matters. In sum, theories discussed in chapter 2 provided an understanding of how school principals engage in creating conditions and conducive climates that enable teachers to learn together, talk about teaching, and solve some learning problems with the ultimate purpose of improving instructional practices in the classroom.

Chapter 3 dealt with the key concepts that informed and guided this study. First, it presented the background to the study by exploring the concepts of leadership, and leadership versus management. Given the main focus of this study, particular attention was paid to explaining the notion of leadership and management as the two concepts that complement each other in driving schools to academic success (Bush 2007, p.393; Sterling & Davidoff, 2003, p.13 Toor & Ofori, 2008, p.67).

The fact that instructional leadership encompasses aspects that appear in both concepts, an exploration of such concepts provides insights into how school principals play a key role in improving the teaching capacity of teachers for effective learning. The same chapter looked at the principal as an instructional leader. Furthermore, chapter 3 discussed instructional practices of teachers that can be improved when principals engage in curriculum and provide

teachers with all necessary support and guidance. Lastly, the last section of chapter 3 examined the main concepts which formed the conceptual framework of this study. Based on the theoretical framework, the conceptual framework adapted from Lineburg (2010) and Webber (1996) was discussed and linked to the improvement of instructional practices of teachers in schools. The exploration of these concepts helped the researcher gain a deeper and broader understanding of how school principals implement instructional leadership that contributes to the improvement of teachers' performance in their teaching.

Chapter 4 examined existing studies in the areas of instructional leadership. Empirical studies conducted internationally and nationally were examined. Previous studies have generally focused on identifying instructional leadership practices of school principals, their relation with student learning achievements, and challenges principals face. Not much is reported on the link between instructional leadership behaviours of school principals and teachers' instructional practices. This is the gap in knowledge that this study sought to fill.

Chapter 4 also discussed the main challenges that constrain school principals from playing their roles as effective instructional leaders in their schools.

Chapter 5 was concerned with discussing the research methodology and designs employed in this study. The study used a mixed-methods approach and based on its philosophical assumptions chapter 5 started with examining a controversial debated between positivists (quantitative research defenders) and interpretivists (qualitative research defenders) to justify the combination of both paradigms in this study. The major motive behind this combination was to take advantage of each paradigm's strengths to robustly explain how principals exercise instructional leadership and how this leadership contributes to the improvement of teachers' instructional practices in secondary schools in the Nyamagabe district.

Among different mixed methods designs, explanatory sequential design was employed and quantitative phase was firstly conducted followed by the second phase of qualitative analysis. Survey questionnaires were used in the first phase of the study and were distributed among 269 teachers selected from 48 secondary schools in the district. The aim of the survey questionnaire in this study was to identify both instructional leadership behaviours of school principals and instructional practices of teachers to be able to establish the link between these two variables.

To gain a deeper and broader understanding of quantitative numerical results, semi-structured interviews were subsequently conducted with two principals and six teachers in the second phase of the study. Chapter 5 discussed the techniques used to analyse data collected from the survey and case study schools. Issues of validity and reliability were also addressed and the researcher employed Onwuegbuzie and Johnson's (2006, pp.56-60) legitimation framework to render the study findings more valid and reliable. Lastly, chapter 5 discussed ethical issues that were adhered to this study in relation to confidentiality, anonymity, informed consent and participants' right to withdraw. All these issues were taken into consideration during the research process to protect all participants from any physical and/or mental harm and to collect accurate information from them.

Chapter 6 focused on presenting quantitative survey findings. As the researcher employed explanatory sequential design, data collected in the first phase were first analysed and presented before proceeding to the second phase of interviews. Survey questionnaire data were analysed using descriptive and inferential statistical analysis techniques and were presented according to the main themes that emerged from the data.

Chapter 7 presented data that were obtained from the qualitative strand of the study. Semi-structured interviews were conducted with two principals and six teachers from two secondary schools. Participants were asked to provide their own perspectives on the instructional leadership of their school principals and what they considered as impediments to this leadership in their schools. The analysis of qualitative data employed the thematic analysis approach.

Chapter 8 combined and discussed results that emanated from both the quantitative and qualitative phases of the study. The discussion of these findings revolved around major themes that emerged from the data and this discussion was held in relation to theoretical and conceptual framework developed in chapters 2 and 3 as well as empirical studies examined in chapter 4.

Quantitative results established the level of principals' engagement in various dimensions (behaviours) of instructional leadership as well as the level of their influence on teachers' instructional practices. Qualitative findings, on the other hand, refined the explanation of the behaviours and their influence by exploring teachers' and principals' own views on these issues.

Chapter 9 concluded the study by providing a reflective summary of the whole thesis, summarising the findings in relation to research questions and discussing the contribution and implication of the study findings. This chapter also outlined the study limitations, summarised findings, and recommended areas that may require further exploration.

9.3. Summary of the findings in relation to the research questions

An explanatory mixed methods design was employed in this study. Information collected from two sequential phases was merged to answer the following research questions:

1. What instructional leadership behaviours do secondary school principals in the Nyamagabe district enact?
2. What instructional practices do secondary school teachers in the Nyamagabe district perform?
3. What is the relationship between instructional leadership behaviours of principals and teachers' instructional practices in secondary schools in the Nyamagabe district?
4. What is the difference between boarding and non-boarding secondary school principals in enacting instructional leadership behaviours in the Nyamagabe district?
5. How do principals and teachers perceive instructional leadership behaviours of the principal in secondary schools in the Nyamagabe district?
6. What are the challenges that impede instructional leadership of the principal in secondary schools in the Nyamagabe district?

Findings on each of these questions are presented below.

Research question 1: What instructional leadership behaviours do secondary school principals in the Nyamagabe district enact?

Part two of the survey questionnaire asked teachers to rank instructional leadership behaviours enacted by their principals using a response rating scale (see appendix G). Information provided on this question was expanded on by data obtain from interviews in which teachers and principals were probed further on some issues raised in responses to this question.

Both quantitative and qualitative information revealed that principals enacted various instructional leadership behaviours in their schools. Principals predominantly define and communicate school goals, promote teacher professional development, supervise instruction and provide feedback to teachers, allocate resources to teachers and review the curriculum

materials with teachers. However, there was some variation on how principals enacted these behaviours as some of them seemed to be implemented more than others.

Defining and communicating school goals

There is consensus among researchers that instructional leadership of principals involves the setting of school wide goals (Hallinger & Wang 2015, p.28; Salleh, 2013, p.34). Teachers noted that school principals try as much as possible to develop instructional goals that guide academic activities in schools. Teachers in the survey and teachers and principals in interviews were affirmative that principals in their schools were both involved in establishing school goals and in communicating these goals to their teachers for a common understanding of school direction.

Similarly, Stronge et al. (2008, p.5) observed that successful principals are goal-oriented and are able to garner school wide commitment to the attainment of these goals. Despite some principals who were still autocratic, and who did not value teachers' input in the process, the development of school annual goals in this study was largely a collaborative and collective task between teachers and their principals.

Principals in this study were aware that the involvement of teachers in setting and developing goals motivated teachers to successfully translate the goals into their daily classroom practices. Principals' effort to obtain teachers' input during the development of school goals in this study aligns with observations in previous studies such as Jita (2010, p.853), Marks and Printy (2003, p.373), Naicker et al. (2013, p.147) and Niqab et al. (2014, p.81). These studies observe that school principals alone cannot effectively serve as instructional leaders for the entire schools without support from colleagues. Rather, the principal needs to tap into the potential and expertise of all staff members, share their views, and allow them to gain a sense of ownership in all academic aspects that can bring positive change in academic life of school. Involving teachers in developing school goals was thus indicative that school principals in this study were not solely responsible for the improvement of teaching and learning in their schools.

Promoting teacher professional growth

School principals in the Nyamagabe district were active in building the teaching capacity of their teachers. Despite financial constraints that impeded the organisation and implementation of in-service trainings within schools, data collected suggested that principals put in place

some mechanisms aimed at increasing the capacity of teachers in their teaching. One of these mechanisms was to create and establish conditions where teaches felt safe and secured to collaborate, share the best practices, and support and encourage one another to become the best teachers in their classrooms.

Previous studies such as Emmanouil et al. (2014, p.35), Printy and Marks (2006, pp.126-128), and Stronge et al. (2008, p.7) contend that effective principals support a long life learning culture in their schools by creating working conditions that allow teachers to regularly interact, work together, and share teaching practices one another. Printy and Marks (ibid.) add that, in effective schools, teaching is a social practice and interaction with school colleagues is a primary source of teacher learning. There was evidence in the survey and interview data that principals in investigated schools considered teacher collaboration as a significant factor in enhancing teaching skills and knowledge development useful to achieve the predetermined school goals.

School principals were committed to collaboration and peer learning by creating time and space for teachers to plan lessons and scheme of work together, discussing teaching and learning issues with teachers, and encouraging the sharing of expert knowledge and experience between experienced and novice teachers.

Participants in all the investigated schools indicated that their principals created opportunities for their teachers to attend workshops and seminars held outside their schools. As in-service professional programmes were not common in schools, principals appeared to encourage teachers to pursue higher education and attend some workshops and seminars organised by the REB and other partners in education. The principals encouraged teachers to integrate newly learnt skills in their teaching and learning. There was evidence that school principals provided trained teachers with opportunities to organise and conduct workshops in schools and share with their colleagues what they had learnt. Student-centred approach and the CBC training skills were passed down to all teachers and principals in some schools using this approach. On this issue, Desimone (2009, p.182) and Hilton et al. (2015, p.115) assert that teacher learning occurs in many different ways of practice including supporting teachers to attend workshops and share with their colleagues the new learnt skills. Teachers found this strategy to be useful, as they acquired pedagogical skills at work.

Supervising instruction and providing feedback to teachers

An analysis of both survey and interview data indicated that principals in the Nyamagabe district actively engaged in supervising instruction in their schools. School principals considered instructional supervision as an important tool to identify academic areas that needed support and improvement. Kanoma and Zaid (2017, p.145) note that supervising instruction is essential for assisting teachers in improving themselves and their abilities so as to enhance effective teaching and learning.

By supervising instruction, supervisors (i.e. school principals, deputy principals) identify strengths and needs of teachers and then design appropriate support strategies accordingly (Manaseh, 2016, p.41). To help teachers improve instruction, principals in the Nyamagabe district supervised instruction through direct classroom observations, walkthrough visits, and review of teachers' and students' work. As indicated by teachers, the purpose of each type of supervision was not to discover or find faults of teachers in their teaching. The main objective was rather to learn about teachers' and students' needs and be informed about decisions that can be taken to address the concerning issues in teaching and learning. Instruction supervision in the Nyamagabe district was reported to be teacher growth-oriented rather than discovering what was wrong in teaching and/or establishing severe and punitive measures against ineffective teachers.

The findings demonstrated that supervising instruction in the Nyamagabe district by school leaders was beneficial to teachers through the provision and discussion of feedback. The findings of this study showed that the supervision of instruction was done in a friendly environment and regular feedback was given to teachers to learn about their strengths as well as their needs. Principals provided teachers with honest and constructive feedback which could help them to reflect more deeply on their teaching for subsequent improvement. Hence, Bush (2013, pp.10-11) and Wanzare (2012, p.195) note that supervisors must be frank and honest and should be able to give proper and formative advice to raise the standard of teaching and learning in school.

The success of instruction supervision in the Nyamagabe district was largely a result of the opportunities that principals created for discussing feedback with teachers both individually and collectively. This, in many ways, allowed teachers the opportunity to suggest what they thought could improve in their teaching. Dialogue between principals and teachers was important as it encouraged teachers to reflect on their practices and come with insights about

how to plan and teach better in their subsequent lessons (Archibong, 2012, p.62; Blasé & Blasé 1999, pp.133-134).

Allocating resources to instruction

One of the main duties of principals is the allocation of resources to teachers. According to Hanna (2010, p.55), the principal as an instructional leader should provide various teaching and learning support materials to teachers. The availability of such materials encourages teachers to use different pedagogical approaches and help students to learn fast and easier (Lingam & Lingam, 2013, p.2162; Okobia, 2011, p.90).

Similar to other schools, instructional resources commonly used in the Nyamagabe district included school premises, furniture, textbooks, stationery, computers, laboratories and science materials and equipment, libraries, audiovisual materials and other teacher and student created resources that can be used in classroom. Teacher and principal participants concurred that many schools did not have essential resources such as laboratories, libraries, computers, audiovisual materials and some textbooks. Teachers were often supplied with basic resources such as pens, chalks, notebooks, and some textbooks. From the perspective of teachers and principals, the principals were keenly aware of the importance of allocating enough and suitable resources to teachers. However, the capacity to do so was mainly constrained by poor government funding and the inability of the majority of students' families to contribute towards improving resources in schools, especially in non-boarding schools.

Reviewing curriculum materials

Data collected in this study further established that school principals in the Nyamagabe engaged in curriculum management by assisting teachers in planning and selecting appropriate instructional materials to teach. From the perspective of teachers, principals hold regular meetings at the beginning of each academic year for teachers to plan scheme of work together and determine teaching activities for the year. Teachers however, were not satisfied by the way curriculum was reviewed as principals rarely participated in this activity. This was quite inconsistent with Çalıskan and Tabancalı (2009, p.760) and Pilli (2014, p.367) views that note that school principals are curriculum leaders in their schools and are responsible for providing teachers with information about curriculum and guiding them in its implementation. It was indicated by the participants that principals brought together teachers and created opportunities for them to share information about the curriculum. The principals,

however, were not actively involved in helping teachers to select appropriate content and identify objectives and strategies that could facilitate the curriculum implementation in classroom.

Principals' poor performance on reviewing curriculum together with teachers was linked to lack of time and huge workloads, especially at the beginning of each academic year. It was evident from interviews that principals during this period were busy with administrative and managerial duties such as welcoming new students and teachers, new teacher salary processing and purchasing food items and other materials needed in the schools. Lack of profound knowledge about the new curriculum (CBC) was another challenge that constrained principals from taking active part in curriculum review. School principals were not adequately prepared and the training workshops they had from the REB did not help them much to be familiar with concepts and practices prioritised in the CBC. As a result, they could not properly guide teachers in organising the CBC content and aligning it with classroom objectives.

Question 2: What instructional practices do secondary school teachers in the Nyamagabe district perform?

This research question aimed at identifying instructional practices that secondary school teachers perform in Nyamagabe District. The findings of this question helped the researcher in subsequently establishing whether there was a relationship between these practices and instructional leadership behaviours of school principals. Instructional practices of teachers in this study included inside and outside classroom activities that teachers carried out to make instruction more effective in classroom. Based on our data, teachers performed various instructional practices including collaborative and classroom teaching practices.

Concerning collaborative teaching practices, the findings showed that teachers worked together in teams and spent time with their colleagues planning and preparing lessons, discussing instructional matters, and visiting one another's classes for peer learning. Such practices were not directly related to teaching and learning but were of paramount importance for teachers to subsequently improve classroom practices. Westbrook et al. (2013, p.61) note that teacher peer support through formal or informal pairs is an effective approach that enables teachers to learn from one another and to develop new teaching strategies for instructional improvement in the classroom. Teachers who are given the opportunity to jointly observe each other, share lesson plans and assessment practices have a better chance

to integrate new knowledge and understanding of student learning into their existing knowledge of professional practices (OECD, 2013, p.35).

As for teacher collaboration, the findings indicated that teaching in the Nyamagabe district was a collective responsibility rather than an individual task. From the perspective of teachers, it was evident that teachers consult one another in their respective departments and hold discussions that aimed at sharing insights about what could improve student learning. Collaborative learning occurred in the area of planning and preparing lessons where teachers collectively organised the content to teach and matched it with teaching strategies and available resources to meet learning goals in classroom.

Findings showed that experienced teachers were willing to assist novice and struggling teachers in their teaching. However, teacher collaboration in the form of peer classroom observation was not a frequent practice as is required despite the fact that it has a positive impact on improving teaching and learning. Linerburg (2010) and OECD (2013) agree that peer classroom observation helps teachers to identify what works and what does not work in their teaching practices. Peer classroom observation may have a more positive impact on teaching than that from school leaders, who in most cases are viewed as fault-finding supervisors. Teachers rarely observed their colleagues teaching as they were most likely busy teaching their own classes.

Findings of this study further demonstrated that teachers in the Nyamagabe secondary schools conduct classroom practices that are related to classroom instruction delivery. Collaborative teaching practices mentioned above assisted teachers in developing various instructional strategies frequently used in classrooms to disseminate the content to students. The most important classroom practice was the creation of a safe and orderly environment that instils the desire in students to learn.

Gurney (2007, p.9) describes a conducive classroom environment as sine qua non for effective learning to take place in the classroom. Such an environment encourages students to actively participate in their learning without fear. Teachers in the Nyamagabe district create classroom environments where students feel secure and supported to learn. Teachers noted that a safe and orderly environment is important for successful lesson delivery in the classroom.

Teachers in the Nyamagabe district employed a student-centred approach in their teaching. This approach fosters student engagement during the learning and teaching process. With the introduction of the competence-based curriculum in schools, it was found that teachers in the Nyamagabe district tended to gradually shift from teacher-centred approach to learning that values active role and participation of students in the process of acquiring knowledge. In the same vein, Ansari and Malik (2013, p.67) and Sieberer-Nagler (2016, p.168) note that effective teachers place students at the centre of the learning process and encourage them to actively learn with and from their peers in the development of new knowledge. As a result, teachers cease to be the sole source of information/knowledge in the classroom but a guide that supports students to construct their own understandings (Gurney, 2007, p.93). Selecting clear and achievable learning goals, using a variety of instructional strategies, promoting a high level of student engagement in their learning, and monitoring student understanding of the content were among the instructional strategies that the teachers in the Nyamagabe district employed to promote student learning in class.

Question 3: What is the relationship between instructional leadership behaviours of principals and teachers' instructional practices in secondary schools in the Nyamagabe district?

This question was designed to establish whether there was a link between instructional leadership behaviours of principals and teachers' instructional practices in the Nyamagabe district secondary schools. In other words, the purpose of this question was to assess the influence of instructional leadership behaviours enacted by principals on instructional practices performed by teachers.

The results of this study showed that principals' various instructional behaviours impacted positively on the work of the teachers in schools. The most significant influential behaviour of principals was the supervision of instruction and the provision of feedback to teachers. Other principals' instructional leadership behaviours that have a significant influence on the practices of teachers are the promotion of teacher professional growth, the provision of teaching resources to teachers, the development of school academic goals, and the review of the curriculum materials with teachers.

Taken together, the survey results indicated that principals' instructional leadership in this study was positively associated with instructional practices of teachers and this association was strong. This suggested that the emphasis on instructional leadership behaviours by school

principals led to the improvement of practices that teachers performed in teaching and learning process. These results concurred with findings from previous studies that showed that school principals' instructional leadership impacted positively on instructional practices of teachers (Blasé & Blasé, 1998; Enueme & Egwunyenga, 2008; Jita, 2010; Quinn 2002; Sheppard, 1996).

Based on the study results, principals can improve the performance of teachers by sharing the purpose of the school, exposing teachers to various professional growth programmes, giving them opportunities to plan and work together, guiding them in their instruction, and allocating them teaching resources to facilitate curriculum implementation. The most important aspect of this process, as Jita (2010, p.853) and Nawab (2011, p.182) note, is the building and maintaining of collegial and collaborative relationships with and among teachers so that teachers can learn from one another and contribute to the academic success of their colleagues. Results of this study have shown that teaching improvement is a combination of efforts from principals and teachers rather than a result of the efforts of the teachers or the principals alone.

Question 4: What is the difference between boarding and non-boarding secondary school principals in enacting instructional leadership behaviours in the Nyamagabe district?

The rationale for this question was to assess whether there was a significant difference between boarding and non-boarding school principals in implementing instructional leadership in their schools. This question was designed on the assumption that principals from non-boarding schools devote little time to instructional leadership in the secondary school level as they lead and manage schools that accommodate both primary and secondary school levels.

Based on findings from the survey and two case studies, principals from boarding and non-boarding schools were ranked the same by their teachers in relation to enacting some instructional leadership behaviours. Using a sample t- test analysis technique, the results showed that teachers from both types of schools held the similar views about their principals on developing school goals, fostering professional growth of teachers and reviewing curriculum materials. This suggested that all secondary school principals in the Nyamagabe district, irrespective of type of schools, do implement instructional leadership in terms of

developing school goals, building capacity of teachers, and reassessing the curriculum to be taught.

However, teachers from boarding and non-non boarding schools differ from each other concerning their perceptions of school principals on conducting supervision and allocating teaching and learning resources for instruction. The findings showed that principals from boarding schools were more active in performing these behaviours than their counterparts from non-boarding schools. Using Cohen's d technique to determine the magnitude of this difference, results indicated a strong and significant difference between both types of school principals in allocating resources to instruction and a small difference in monitoring teaching and learning.

Two case study results expanded on the survey findings and showed that principals from non-boarding schools were still facing challenges related to the scarcity of teaching and learning resources and insufficient time to closely monitor teaching and learning activities in their schools. To some extent, these results confirm Oplatka's (2004, p.435) assertion that instructional leadership of principals in many developing countries, especially Africa, is impeded by many challenges including the lack of resources and time to focus on teaching and learning. Overall, although the overall effect was not much significant (p-value <0.05, Cohen's d score =.21), the findings on this question demonstrated that principals from non-boarding schools were generally less active in instructional leadership in comparison to their counterparts from boarding schools.

Question 5: How do principals and teachers perceive instructional leadership of the principal in secondary schools in the Nyamagabe district?

Question 5 was set to establish both principals' and teachers' perceptions of instructional leadership of the principal in investigated schools. Perceptions emanated from both principals and teachers revealed that principals were stronger in some instructional leadership behaviours and less active in the others. However, there was general consensus among participants that principals were collaborative and supportive of their teachers. They saw the instructional leadership of principals as that which primarily focused on teaching and learning through the capacity building of teachers. Almost all participants agreed that instructional leadership of schools principals was implemented to enhance individual and collective effectiveness of teachers so that they could do the best in their teaching.

Instructional activities of school principals such as monitoring teaching and learning, providing feedback to teachers, and encouraging teachers to work together were considered as important as to give ample time to teachers to reflect on their teaching practices and subsequently make improvement. Principals' commitment to developing teachers is underscored by Dinham's (2013, p.233) observation that principals who apply instructional leadership must see the biggest concern as developing teachers to enable them deliver instruction effectively. Quinn (2002, p.447) also emphasises that instructional leadership behaviours of principals are critical to teachers' learning and must be implemented to guide and support them in their teaching. It was evident in this study that principals and teachers appreciated the time and effort that principals invested in facilitating teachers' professional growth.

Teachers further appreciated the commitment of principals to facilitating the development of a supportive and collaborative working environment in which teachers learnt from one another and shared the best practices. Results from survey and interview data suggested that principals made effort to bring teachers together and foster a mutual sense of school purpose through developing shared school goals to pursue in their teaching. This was reinforced by the time and means that the principals provided to teachers to plan and work together and discuss issues related to teaching and learning.

Principals also made sure that they were visibly present in schools, observed how teachers teach, and openly discussed with teachers the feedback. Principals' instructional approach in this study reflected Jita's (2010) finding in South Africa where effective teaching and learning of sciences and mathematics in successful schools resulted from a collaborative relationship between principals and teachers and among teachers themselves. School principals in this study believed that creating conditions that allow collaborative activities to take place in schools would be a great strategy for empowering teachers to improve their teaching practices.

In sum, principals and teachers in this study perceived instructional behaviours of principals to be important as they offered opportunities for teachers to improve their practices. However, there were some instructional leadership behaviours that participants would want to see improved as they can have a positive impact on teaching. Principals and teachers concurred that in-service professional development programmes were scarce at school level and due to heavy workloads; teachers did not have sufficient time to engage in peer

classroom observations both within and across schools. This was exacerbated by poor access to adequate teaching and learning resources, especially in non-boarding schools. Principals and teachers felt that all this impeded effective implementation of instructional leadership in schools.

Question 6: What are the challenges that impede instructional leadership of the principal in secondary schools in the Nyamagabe district?

Quantitative findings showed that almost all instructional leadership behaviours in this study were moderately performed with means varying between 3 and 3.99 and standard deviation ranging between 1 and 1.25. This question was designed to subsequently seek views of principals and teachers on the challenges school principals faced and which constrained their ability to excellently perform instructional leadership duties in their schools.

The interview findings indicated that there were various challenges which made it difficult for school principals to fully engage in their instructional leadership roles. Those challenges included inadequate provision of teaching and learning resources, principals' heavy workloads, insufficient professional opportunities for principals and teachers and lack of voice in some decisions regarding schools. Almost all these challenges were found by other researchers as a barrier to successful instructional leadership of school principals especially in African countries. For instance, Bhengu et al. (2014) in South Africa, Ifoema (2013) in Nigeria and Kabeta et al. (2013) in Zambia demonstrated that school principals faced numerous challenges including lack of resources, lack of proper training, an increase of daily responsibilities, and irregular daily disruptions. It was found in this study that many challenges of principals were mainly linked to inadequate school funds. With insufficient government funding it was found that principals could not purchase or procure all the needed teaching and learning resources such as labs, materials and equipment, computers, textbooks and other related teaching and learning materials. The same budget was also too tight for school principals to organise in-service trainings including study tours to update teaching skills of teachers and their own leadership skills. Failure to execute such activities complicated further the role of school principals in providing effective instructional leadership to teachers as well as to students in this study.

The lack of voice in decisions regarding schools was another area of concern among principals and teachers in this study. This was linked to the centralised educational system in Rwanda where principals and teachers possess little power over policies and reforms that

occur in education. It was, for example, found that the sudden introduction of both English and the CBC in schools hampered principals' efforts in trying to help teachers in their teaching as they were not involved in the preparatory process of these changes.

To some extent, principals in this study appeared to work in top-down and directive approaches in which they had to implement the government policies with little scope to provide their own views and suggestions on the development process of these policies. Such a unilateral model is a big challenge and demotivates principals and teachers in their efforts to engage in sharing instructional responsibilities in their schools (Kaparou & Bush, 2016, p.23).

The top-down leadership approach was evident in some teachers' and principals' professional development programmes. These programmes were managed at the central level and it was only the government which had to announce professional development opportunities for all schools. As a result, in-service trainings at school level did not happen and as a result, principals and teachers found it difficult to update their leading and teaching skills.

Principals' heavy workloads was another challenge observed in this study. In addition to managerial and administrative duties, some principals were also found to execute other tasks not directly related to leading and managing schools. Being members of different local and national committees reduced the amount of time that principals could use working with teachers on instructional matters in schools. As shown by Bhengu et al. (2014, p.207), Taole (2013, p.78) and Wanzare and Da Costa (2001, p.281), a heavy workload on principals is a barrier in their endeavours to effectively discharge their instructional leadership responsibilities in schools.

9.4. Contribution and implication of the study findings

The primary purpose of conducting this research was to explore instructional leadership implemented by school principals and how it affects instructional practices of teachers in secondary schools of the Nyamagabe district, in Rwanda. Findings reported in this study are expected to contribute to different scholarly aspects including the field of instructional leadership, policy and practice, as well as methodological aspect.

9.4.1 Contribution of the findings to the field of instructional leadership

Hallinger (2005, p.227) reviewed empirical studies conducted on instructional leadership over the past 25 years (1980-2005) and revealed that important contributions have been made

by researchers almost entirely in the United States, North America, Europe, and Austral Asia on this subject. A large body of empirical studies on instructional leadership have been done in developed countries more than in developing countries, particularly in Africa. Van der Merwe and Schenck (2014, p.2) make the same observation and stipulate that context-specific instructional leadership practices that prevail in countries on the African continent have been less reported. Conducting this study in Rwanda is an attempt to fill this gap in knowledge. This study is an attempt to shed light on context-specific instructional leadership behaviours of school principals that contribute to the improvement of teachers' instructional practices in secondary schools.

Instructional leadership in Rwanda has not been examined and the majority of studies conducted so far in other African countries focused largely on highlighting challenges that prevent school principals from being effective instructional leaders. Unlike those studies, findings of this study did not only outline challenges school principals faced but also revealed the salient instructional leadership behaviours of school principals that generate improvement in teachers' instructional practices.

What this study brings to local and international literature is an alternative look on both areas; instructional leadership of school principals and instructional practices of teachers. Emphasis was placed on how principals implement instructional leadership that impacts on instructional practices of teachers. Within the Rwandan context, school principals' behaviours such as setting school goals, boosting teacher professional growth, supervising instruction, allocating resources to instruction, and examining curriculum to teach were found to be positively associated with practices of teachers both inside and outside classroom. Principals and teachers being aware of these behaviours can jointly make an effort to improve school working conditions that bring about positive changes in teaching and learning.

This study adopted a mixed methods approach to provide insights into how instructional leadership behaviours enacted by school principals exert influence on teachers' instructional practices. Many previous studies have established the link between instructional leadership of school principals and student learning achievements. From these previous studies huge gap was observed because they focused on principal-student direct relationship with less emphasis on how principal's leadership contributes to the performance of teachers in a school. This study was conducted in response to Blasé and Blasé' s (2000, p.131) and Louis et al.' s (2010, p.315) calls for more research into the effect of leaders' behaviours on

teachers' motivation and teaching. The main aim of this research was to contribute in filling this gap by providing an understanding of how instructional leadership behaviours of school principals are also of paramount importance for teachers to deliver high-quality instruction. Being aware that teachers' instructional practices are influenced by school leaders' behaviours can encourage principals to model such behaviours and ensure that they are generating quality classroom instruction. Thus, the study findings are complementary to the existing literature on the impact of instructional leadership on student learning achievement by demonstrating that instructional leadership of school principals is also critical to teachers' performance in school and in classroom in particular.

Practically, results of the study demonstrated that principals who implement instructional leadership can also borrow other types of leadership aspects to respond to the school contextual needs. Principals in this study appeared to create conditions that allow teachers grow by engaging them in different instructional activities, discussions, and professional dialogue both individually and collectively. The creation of these conditions and the establishment of relationships with and among teachers are part of transformational and distributed leadership. Aspects of instructional and transactional leadership came in when school principals defined and shared goals with teachers, supervised the implementation of these goals in classroom, recognised good performance of teachers, and advise them about remediating their weaknesses. Findings of this study contribute to emerging research that school principals who exercise instructional leadership can also employ other leadership approaches to enhance quality teaching in schools (Marks & Printy, 2003, p.377, Sharma, 2012, p.17; Valentine & Prater, 2011, p.20; Wieczorek & Manard, 2018, p.4). Similarly, Mulford (2008, p.48) is of the view that successful leaders adapt and adopt other leadership practices to meet the changing needs of circumstances in which they find themselves. He adds that different leadership practices are inevitable in schools which move towards changes. The present findings show that instructional leadership is a blend of different leadership aspects that together contribute to effective teaching and learning in school. For this reason, instructional leadership cannot be discerned to be effective to the exclusion of other types of leadership notably transformational, transactional and distributed leadership in case of this study.

9.4.2 Contribution of the findings to policy and practice

This study provides important contributions for educational practitioners including school principals, policy makers and other educational administrators interested in developing leadership that contributes to improvement of quality teaching in Rwanda. The majority of previous studies focused on relationship between principal instructional leadership and student academic achievements. This study in addition has demonstrated that instructional leadership of school principals is also significant to affect the performance of teachers in their teaching.

Results of the study may help to make school principals more aware that there are instructional leadership behaviours they can model to support and guide teachers in their teaching. Based on the study findings, principals can help teachers in their teaching by defining and sharing a purpose of schools, developing teacher capacity building, supervising instruction and providing interactive and meaningful feedback to teachers, allocating resources to instruction, and aligning curriculum content with instructional goals. Principals, however, need to acknowledge that such behaviours become effective and influential in teachers when there is a collaborative atmosphere that promotes collective and shared work around instruction. Principals being more aware of specific behaviours that directly assist teachers in their teaching can strive to improve working conditions allowing teachers to improve more in classroom and students to have a great opportunity to learn. Despite numerous challenges facing principals in this study, strong and positive relationship found between instructional leadership of principals and instructional practices of teachers was an indicative that focusing on instructional leadership by principals can be a way of making improvement in teachers' instructional practices.

The study also calls upon educational policy makers and other educational administrators to provide support to school principals so that they can establish effective instructional leadership in their schools. Results of this study can be useful for policy makers and other educational administrators to learn about specific behaviours of principals that are critical for teachers to perform well as well as challenges inhibiting ability of principals to productively assist and support teachers in their teaching. Awareness of this can then encourage policy makers to develop a particular policy to address both the challenges and reinforce the best practices of principals. Qualitative findings suggested that challenges facing school principals were mainly linked with inadequate funding and lack of voice in decisions regarding schools.

The results can therefore serve as a guide for policy makers to think of how financial resources allocated to schools especially non-boarding schools can be improved. This may solve a problem of lack of adequate teaching and learning resources and scarcity of in-service professional development opportunities at school level.

Results of the study have the potential to make policy makers reflect on how top-down and bottom-up leadership approaches can be combined and reconciled to allow schools to have a say on policies and reforms that occur in education. This can be a remedy for teachers' and principals' complaints about now and again changes introduced and imposed on schools without a prior consultation. The combination of top-down and bottom-up leadership approaches may also allow principals and teachers to have a voice in planning and executing in-service professional development programmes criticised for being unilaterally decided by the REB at central level.

Lastly, information presented in this study can be useful for policy makers to design a policy that relieves some responsibilities of school principals to enable them to focus more strongly on instructional duties. The fact that school principals in this study have a heavy workload including non-principalship responsibilities, this can leave principals with more time to visibly be accessible to teachers and students and handle together all issues related to teaching and learning.

9.4.3 Methodological contribution

The main methodological contribution of this study was the combination and employment of quantitative and qualitative approaches as a mixed-methods research design. Evidence from empirical studies demonstrated that qualitative (case) studies and quantitative studies in the area of instructional leadership were often carried out in isolation and in parallel ways (Antoniou & Lu, 2018, p.636; Hallinger, 2010, p.288).

Another possible way of exploring instructional leadership of secondary school principals in Rwanda and its influence on instructional practices of teachers was to combine both quantitative and qualitative approaches using survey questionnaires and case study interviews. The use of these two approaches was informed by McMillan and Schumacher' (2010, p.395) and Nudzor's (2009, p.120) suggestions that the use of different methods in data collection would complement each other and at the same time ensure that any weaknesses of one method may be overcome by the strengths of the other method.

To add semi-structured interviews to the survey questionnaire in this study helped to elaborate on quantitative numerical data collected in the first phase of the study. This allowed participants to freely express their views about instructional leadership of the principal and barriers they thought would make it difficult to implement it, something which was not possible while completing the survey questionnaire. Results of this study therefore can contribute to alleviate the tension existing between positivists and interpretivists that either quantitative or qualitative approach is suitable to conduct research in social sciences including education. The combination of quantitative and qualitative approaches in this study may also be useful to overcome the problem of generalisability which is related to qualitative studies and at the same time the problem of de-contextualisation, which is linked with quantitative research studies.

9.5 A reflection of the study findings

The primary focus of this study was to ascertain instructional leadership behaviours enacted by school principals and investigate the influence these behaviours have on instructional practices of teachers. First, it appeared that principals enacted different instructional leadership behaviours that together contributed to improvement of teachers' practices in schools. As a result, the study has generated results contributing towards the development of a model summarising how instructional leadership behaviours of school principals in the Nyamagabe district are linked with instructional practices of teachers in schools. The major themes discussed in chapter eight have been reiterated to briefly explain instructional leadership of school principals and how it produces positive effect on teachers' teaching performance in schools.

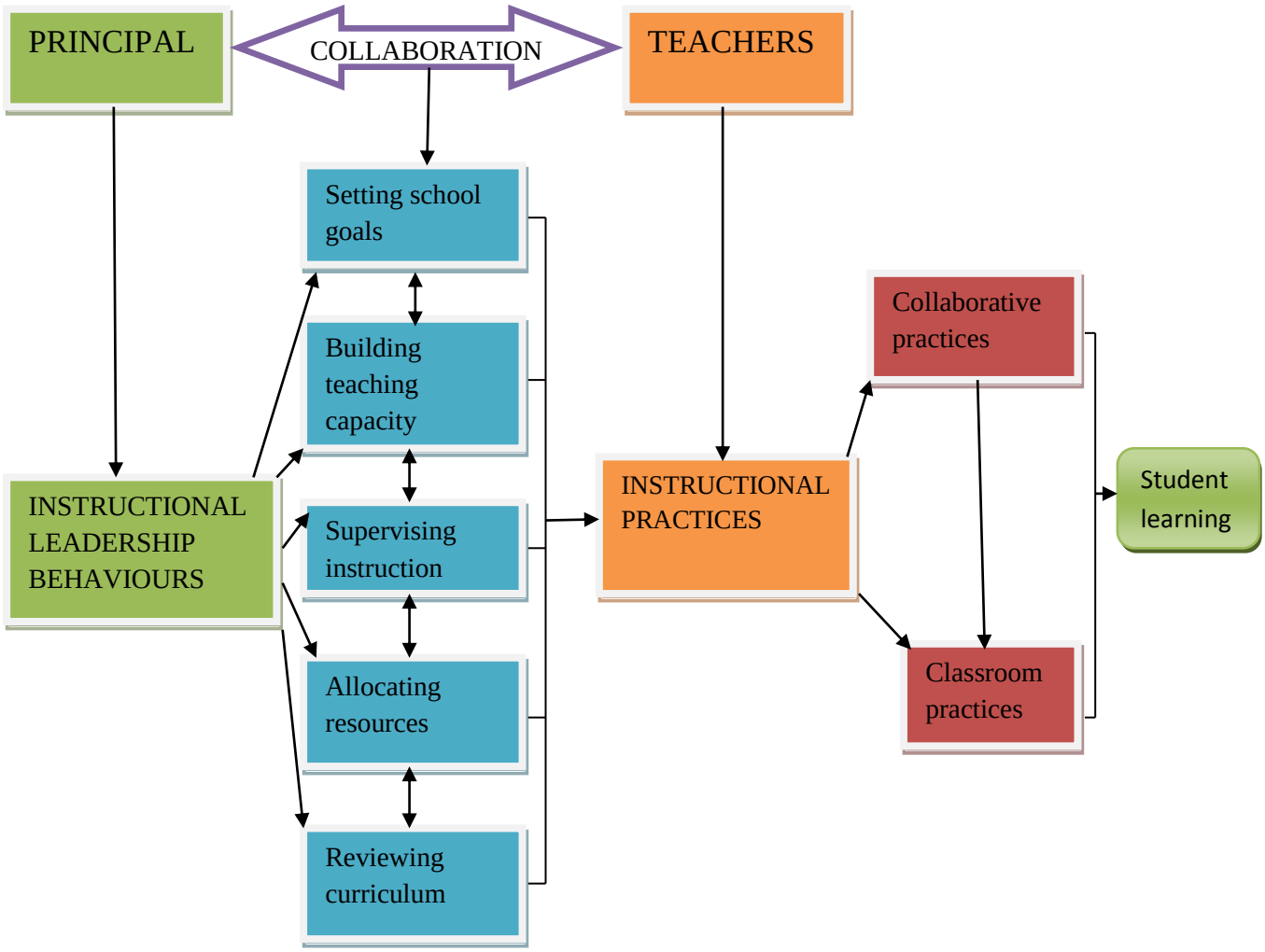

Figure 9. 1: An emerging model of principal's instructional leadership influence on teacher instructional practices in secondary schools of the Nyamagabe district, Rwanda.

It was found in the study that school principals were goal-oriented leaders. They invested effort and time in developing annual school goals and encouraging teachers to take part in the process. The principals' strategy of including teachers in the goal development process is in tandem with findings from Kin et al. (2018, p.438), Robinson (2007, p.9) and Webb (2005, p.83) who say that effective instructional leaders engage other school members in setting the purpose of school and stimulate their commitment and energy for its achievement. By holding meetings with teachers to define annual school goals, analysing students' data to identify areas that need improvement, and regularly reminding teachers about school purpose, school principals were attempting to increase teachers' goal ownership and stimulate their commitment towards effective implementation and accomplishment.

The study has demonstrated that school principals in the Nyamagabe district nurtured the professional growth of their teachers. Despite challenges related to insufficient teacher

professional development programmes at both school and national level, principals in this study considered teacher professional growth as an important factor affecting teaching and learning. It is in this regard that principals played a significant role in encouraging teachers to upgrade their skills through different ways and share these skills with their colleagues for the purpose of improving teaching. In supporting teachers' professional growth, principals were also active in creating conditions that facilitate teachers to talk about teaching, interact and learn from one another. School principals in this study understand that teachers' competency improves also when they talk to each other and share the best practices for the sake of instructional improvement in class (Gumus & Akcoaglu, 2013, p.291; Stronge et al., 2008, p.6).

Another role of school principals which was dominant in this study was the monitoring the performance of teachers and providing a support. Although a difference was observed between boarding and non-boarding school principals in performing this role, the general observation was that all principals made sure that teachers were doing the right things in their classrooms and interactive and constructive feedback was provided to enhance their professional growth. It was found in this study that classrooms were not the private zones of teachers, but school premises with open doors for everyone wishing to provide suggestions about improving teaching and learning. There was consensus among teachers that the monitoring of teachers' performance was not a fault finding exercise, but was meant to discuss with them how their level of performance in classroom could be enhanced and/or improved. In doing so, encouraging and constructive supervision approach was more used than judgmental or critical approach.

It appeared in the findings that school principals performed the instructional role of allocating resources to instruction. However, due to financial constraints most school principals provided teachers with basic teaching and learning resources and many schools in this study were in need of adequate teaching resources such as laboratories, book libraries, computers and some textbooks. The scarcity of teaching and learning resources was more evident in non-boarding schools than in boarding schools. Education in non-boarding schools is free of charge and majority of students come from poor families which are unable to financially support schools of their children to have additional resources. In general, boarding and non-boarding schools had shortage of adequate teaching and learning resources and financial constrains were always a barrier to the proper provision of such resources.

Data from this study also established that principals attempted to play their role as curriculum leaders. It was clear from the findings that principals were committed to bringing teachers together and collectively interpret curriculum and translate it into meaningful information to present to students. As one of school principals' roles is to ensure that students receive appropriate teaching (Coldren & Spillane, 2007, p.371; Valentine & Prater, 2011, p.23) principals in this study organised and held staff meetings to look at curriculum and select content and strategies that match with academic goals to be achieved. During these meetings teachers were provided time to plan together their lessons in subject-specific teams. This was an opportunity to collectively share information and ideas about curriculum and support each other in their instructional planning. It was revealed in the study however, that principals were not much active in this instructional task. Principals felt that there was no sufficient time to work with teachers as they were also busy doing other administrative and managerial duties. Principals also received inadequate training particularly in the new curriculum (CBC) in such a way that they could not properly guide and assist their teachers in its interpretation. Findings showed that understanding the CBC was almost difficult for principals and their role in providing effective support to teachers was to some extent compromised by insufficient knowledge and skills they had on the new curriculum.

Secondly, instructional leadership of school principals displayed some significant influence on instructional practices of teachers despite the many challenges that principals had to deal with. It emerged from the findings that principals' different instructional behaviours directly affected practices of teachers and played a major role in promoting their professional growth. This instructional influence by principals was possible because of collaborative relationships developed between principals and teachers and among teachers themselves. Such relationships carried a great importance in the sense that they encouraged teachers to work in teams, share some responsibilities, and get instructional support from their peers and school leaders. Results agreed with Neumerski (2012, p.325) who observed that the quality of the principal-teacher and teacher-teacher relationships is the important factor in determining the leader's influence over classroom teaching. From the findings of this study, it was the school principal who created conditions under which teachers collaborated and this fits in central role of school principals which is supporting and helping teachers to collaboratively interact and learn from one another (Lunenburg & Lunenburg, 2010, p.2; Muturi, 2014, p.5). Principals in this study were collaborative and this was found to be indispensable.

The third and the last inference that can be drawn from the findings was that school principals were exposed to numerous challenges that worked against their efforts to provide effective instructional leadership. As results show, secondary school principals in the Nyamagabe district faced both intra and extra-school constraints impeding instructional leadership. Similar to findings from other African countries (Ahmed, 2016; Hoadley et al., 2009; Isaiah & Isaiah, 2014; ifoema, 2013, Kabeta et al., 2013; Tedla, 2012), the findings of this study show that inadequate teaching and learning resources, insufficient trainings for both teachers and principals, principals' heavy workload, and a centralised educational system are the main challenges that are making it difficult for principals to serve as effective instructional leaders in their schools.

9.6. Limitations of the study

The main purpose of this study was to ascertain instructional leadership behaviours enacted by school principals and establish relationship between these behaviours and teachers' instructional practices in the Nyamagabe district, in Rwanda. The purpose was achieved and study results showed that principals performed various instructional leadership behaviours having a significant and positive relationship with instructional practices of teachers. However, like other studies, this study could not be conducted without any limitations.

First, the study findings were based on principals' and teachers' perceptions of instructional leadership of the principal from survey questionnaire and semi-structured interviews. The use of other supplementary data collection technique as suggested by Quinn (2002, p.462) would perhaps provide additional insights on how instructional leadership is implemented in secondary schools in the Nyamagabe district. Conducting observation which was not possible due to time and financial constraints for example would probably contribute to deeper and broader understanding on how school principals interact and collaborate with teachers around instructional issues on a daily basis than using only survey questionnaire and interviews.

Secondly, the sample was selected using a non-probability sampling method in the quantitative phase of the study and was restricted to secondary schools of one district (Nyamagabe) among thirty districts of the country. This may make it difficult to generalise the findings as being representative of the situation across the country. It is worth recalling that the Nyamagabe district is located in rural area. Therefore, in other districts which this study did not cover including few districts of urban area, principals may possess different strategies to implement instructional leadership that cannot be found in the Nyamagabe

district. Despite this however, given the scarcity of empirical studies on instructional leadership of school principals in Rwanda, results of this study may serve as a baseline for educational stakeholders in the country eager to develop and sustain instructional leadership in schools. The main reason for this is that majority of secondary schools in Rwanda are located in rural areas and are functioning under similar conditions implementing prescribed policies and practices issued by the central office; the Ministry of Education. These findings may therefore be relevant to other schools throughout the country although they belong in one district.

Lastly, another limitation involved the selection of participants. Due to time and financial constraints, only teachers and principals were selected to take part in the study. Other school members that have not been selected i.e. parent-teacher association (PTA) representatives, students and deputy principals in some schools may possess important information that would contribute to understand better how instructional leadership of principals is exercised in schools.

9.7. Recommendations

This study revealed that some forms of instructional leadership existed in the Nyamagabe district secondary schools. The study also showed that some aspects of instructional leadership activities were more implemented than others. However, as almost all instructional leadership behaviours of school principals displayed significant positive relationship with instructional practices of teachers, the researcher put forward some important recommendations to improve instructional leadership in schools of the Nyamagabe district as well as in other schools throughout the country. The recommendations made were specifically related to policy-makers, school principals and future research.

9.7.1 Recommendations for policy-makers

It was found in the study that various instructional leadership behaviours enacted by school principals had a positive effect on instructional practices of teachers. Given the core purpose of schooling which is teaching and learning (Bush, 2013, p.6), policy-makers have an important role to play in improving the capacity of school principals in their attempts to be effective instructional leaders. Based on challenges observed in the study, policy-makers should, for example, review and redefine roles and tasks of secondary schools in Rwanda. In doing so, they can alleviate some of their responsibilities as a way to enable the incumbents to put more emphasis on teaching and learning in their schools. Activities such as monitoring

classroom construction and renovation, mobilising and collecting money for school feeding schemes, purchasing school materials, attending many meetings outside schools and handling discipline issues in schools can be confined to supporting staff to provide principals with enough time to deal with instructional issues. Non-principalship responsibilities should also not be assigned to school principals to maximise their time allocated to curriculum management in their schools.

Insufficient teaching and learning resources and in-service trainings for both teachers and principals were among the challenges facing principals in this study. Redefinition of roles and tasks of school principals mentioned above should be coupled with a policy developed to empower schools in terms of provision of regular trainings and teaching and learning resources needed to deliver curriculum effectively. This can be done through increasing funds allocated to schools and designing adequate and sustainable continuous professional development programmes in schools with a special attention on improvement of effectiveness of teachers in their teaching and school principals in their leading.

The findings of this study revealed that teachers and principals were affected by decisions taken at a central level regarding schools. Principals and teachers frequently complained about policies and changes imposed on them and the use of English as a new medium of instruction and introduction of the CBC were part of these complaints. Recommendation that can be made here is that policy-makers should develop a policy that enhances collaboration and cooperation between the central office and schools and perhaps include schools in decision-making process so that they can provide suggestions on changes and policies before their implementation. This would increase schools' ownership of these policies and commitment to implement them rather than seeing them as an external burden.

9.7.2 Recommendation for school principals

The success of principals' instructional leadership in this study lies primarily in collaborating with teachers in activities that relate to teaching and learning. This was indicative of the fact that the principal alone cannot perform all instructional activities and lead the school to expected academic achievements. School principals should strive to cultivate a culture of sharing instructional leadership activities and tap into the expertise and experience of teachers in this process. This can contribute to increase a sense of ownership among teachers and commitment to the improvement of teaching practices in classrooms (Goddard et al., 2007, p.881).

Findings of this study established that in-service professional development opportunities were necessary to help teachers update their existing teaching knowledge and skills and enable them to cope with curriculum changes that take place in education. Given that trainings provided by the REB were occasional and focused mainly on science subjects, school principals should negotiate with the REB staff and design together regular and adequate development programmes for all teachers regardless subjects they teach. Such programmes will be more effective if principals continue creating and supporting a long life learning community in their schools where teachers interact and share the best practices regarding effective teaching and learning.

The study revealed instructional leadership behaviours of school principals that affect positively instructional practices of teachers in schools. From this revelation, principals should continuously make a self-evaluation on how they model these behaviours to guide and support teachers in their teaching. Such self-evaluation may contribute to identify areas in which principals have shown weaknesses and what kind of actions needed to address these weaknesses for the sake of providing the best instructional leadership in their schools. The above recommendations are summarised in the following model indicating how instructional leadership of school principals in the Nyamagabe district can be improved to help teachers to reach their full potential and students to have opportunity to learn.

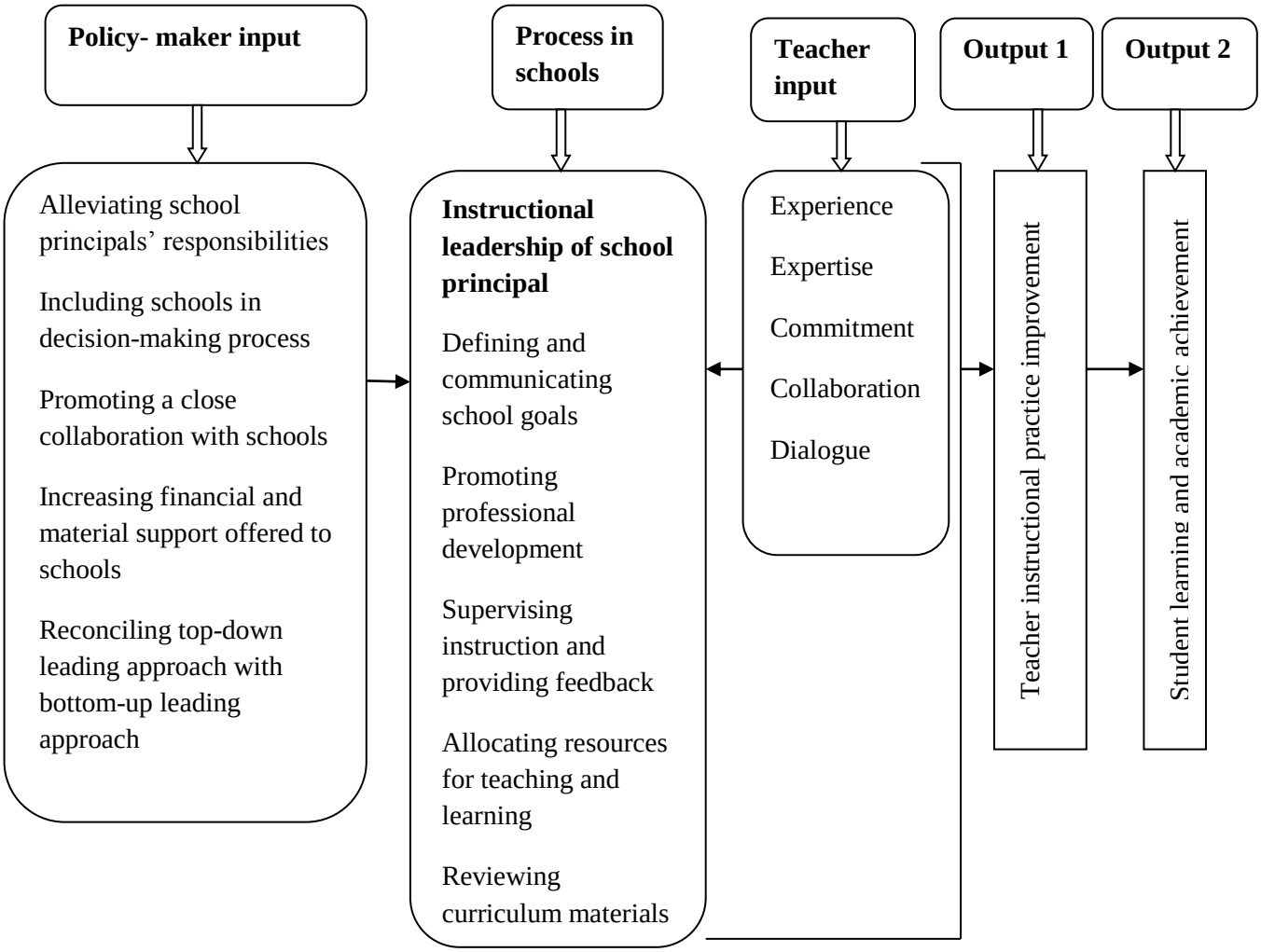

Figure 9. 2: Proposed model to improve instructional leadership in secondary schools in the Nyamagabe district.

9.7.3 Recommendations for further research

Instructional leadership in African countries is still under-researched and studies in context-specific settings are still needed (Van de Merwe & Schenck, 2014, p.2). Given that Rwanda is located in Africa and that instructional leadership remains unexplored in this country, it would be valuable for Rwandan and international researchers to conduct different studies on instructional leadership in the context of Rwandan educational system and contribute to existing knowledge about the role of school principals as instructional leaders. Based on findings of this study, the following future studies were suggested.

This study has restricted to the sample drawn from secondary schools of one district among 30 districts of the country. It looked at instructional leadership of school principals from the perspective of principals and teachers using survey questionnaire and semi-structured interviews. Based on this approach, the researcher suggests a similar and larger study to be

conducted. This study should include a lager sample size randomly drawn from all districts of the country, other methodological techniques i.e. observation, document analysis, focus group, and other school members i.e. students, deputy principals, and parent-teacher association (PTA) representatives. This may contribute towards having an in-depth understanding of instructional leadership of school principals and its contribution to instructional practices of teachers in Rwanda.

Again, the study's purpose was to ascertain instructional leadership behaviours enacted by school principals and establish a link between these behaviours and instructional practices of teachers. The fact that teacher is the most important factor affecting student learning (Dinham, 2013, p.226), future study would be needed to go beyond the scope of this study and deeply investigate instructional practices of teachers and their influence on student learning achievements.

Hallinger (2011, p.138) and Neumerski (2012, p.328) state that more studies on instructional leadership are needed in different school settings. Therefore, future research could look at instructional leadership of principals in primary (elementary) schools in the Nyamagabe district and other districts throughout the country. This would be a good step towards establishing the impact of specific school contexts on the effective implementation of instructional leadership in schools in Rwanda.

9.8. General conclusion

The key purpose of this study was to ascertain instructional leadership behaviours enacted by school principals and investigate the influence these behaviours exert on instructional practices of teachers in secondary schools of the Nyamagabe district, in Rwanda. The study employed an explanatory mixed methods design. The quantitative phase was first used to determine the level of existence of instructional leadership in schools and its influence on teachers' instructional practice. The qualitative phase was aimed at explaining some of the issues raised in the first strand of the study. Survey questionnaire and semi-structured interviews were the data collection techniques used and teachers and principals were selected as the key participants in the study.

Based on the findings, the study concludes that some amount of instructional leadership existed in secondary schools of the district and principals enact various instructional leadership behaviours that contribute to teachers' instructional practice improvement. While

many previous studies were interested in establishing the relationship between principals' instructional leadership and students' learning achievements, this study has demonstrated that instructional leadership of school principals was critical to improvement of instructional practices of teachers both inside and outside classroom. In the context of investigated schools, results showed that the principal who worked as an instructional leader is needed in school and is the one who shapes favourable working conditions of teachers and affects the quality of their performance in teaching. Principals' instructional leadership behaviours such as defining and communicating school goals, promoting teacher professional growth, supervising instruction and giving feedback, allocating resources to instruction and reviewing curriculum materials with teachers played a key role in improving the performance of teachers in their teaching. The results are consistent with other researchers' findings that instructional leaders make a significant difference in students' outcomes through the focus of teachers and the quality of instruction (Elmore, 2008, p.42; Louis et al., 2010, p.330). From these results, the assumption was that when principals focus attention on improving the teaching capacity of teachers, students' performance in classroom may also improve.

The cornerstone which was behind the success of principals' instructional leadership in this study was the creation of collaborative and interactive atmosphere in which teachers shared and owned their school goals, talked about teaching and learning, learnt from one another and shared the best practices for classroom improvement. Principals in this study were aware that building collaborative relationships would facilitate teachers to consult and seek advice from one another about what could improve their teaching. The results support Printy's (2008, p.7) view that principals when creating opportunities and conditions for teachers to interact around instructional matter, the chance that teaching in classroom improves is greater. Collaboration in this study was useful leadership strategy for school principals to empower teachers to play an active role in completing their tasks of teaching.

Results of the study revealed that principals from boarding schools were relatively more active in implementing instructional leadership than their counterparts from non-boarding schools. The difference was mainly observed in allocating teaching and learning resources to teachers and in supervising instruction. The results however, established that there is still a long way to go to develop and maintain effective instructional leadership in both types of schools. Results outlined various challenges that call for careful and correct solutions to assist principals in providing a highly productive instructional leadership in their schools. Among those challenges were cited the scarcity of teaching and learning resources, insufficient

trainings, heavy principals' workload, and a lack of voice in central decisions regarding schools. There is no doubt that if these challenges were carefully addressed, principals' instructional leadership influence on teachers' instructional practices would be improved much better. It is worth concluding that instructional leadership of school principals in the Nyamagabe district looks promising in comparison with other previous studies conducted in African countries. The level of school principals' engagement in instructional leadership tasks is relatively high and teachers' performance in their teaching to some extent depends on the quality of instructional leadership provided in schools. Although the findings of this study may not be generalised across the country, they can at least serve as a roadmap for other secondary school leaders wishing to develop instructional leadership that potentially produces a positive and significant influence on instructional practices of teachers in their schools.

APPENDICES

APPENDIX A: ETHICAL CLEARANCE FROM WITS SCHOOL OF EDUCATION

Wits School of Education

27 St Andrews Road, Parktown, Johannesburg, 2193 Private Bag 3, Wits 2050, South Africa. Tel: +27 11 717-3064 Fax: +27 11 717-3100 E-mail: enquiries@educ.wits.ac.za Website: www.wits.ac.za

23 June 2015

Student Number: 416595

Protocol Number: 2015ECE010D

Dear Innocent Sibomana

Application for Ethics Clearance: Doctor of Philosophy

Thank you very much for your ethics application. The Ethics Committee in Education of the Faculty of Humanities, acting on behalf of the Senate has considered your application for ethics clearance for your proposal entitled:

The Influence of Instructional Leadership Behaviours of Principals on Teachers' Instructional Practices in Rwanda: A Case Study of Selected Secondary Schools in the Nyamagabe District

The committee recently met and I am pleased to inform you that **clearance was granted**. However, there were a few small issues which the committee would appreciate you attending to before embarking on your research.

The following comments were made:

- Risks are not only financial, they are also psychological. You need to discuss the possible psychological issues (e.g. supposing the teachers are critical of their principal or they feel "bullied" by her/him?) and mitigation. There is also discomfort in the interviewing process.
- 6.2 Learners: learner and school codes can be used, but such codes need to be changed so that the actual codes are not used in the thesis or subsequently.
- In the consent forms, why are you referring to a test? Surely you are using a questionnaire. Please remove the reference to "test"
- In the teachers information letter, you need to make it absolutely clear that their responses will not be passed to the Principal

Please use the above protocol number in all correspondence to the relevant research parties (schools, parents, learners etc.) and include it in your research report or project on the title page.

The Protocol Number above should be submitted to the Graduate Studies in Education Committee upon submission of your final research report.

All the best with your research project.

Yours sincerely,

M Mabeta

Wits School of Education

011 717-3416

Cc Supervisor: Prof Felix Maringe

APPENDIX B: MINEDUC PERMISSION TO CARRY OUT RESEARCH IN RWANDA

REPUBLIC OF RWANDA

Kigali, ..11/12/2015
N°...334.2../12.00/2015

MINISTRY OF EDUCATION
P.O.BOX 622 KIGALI



Re: Permission to Carry out Research in Rwanda - No: MINEDUC/S&T/337/2015

The Permission is hereby granted to **Mr. Innocent Sibomana**, Ph.D student, School of Education, University of Witwatersrand, Johannesburg, South Africa, to carry out research on: **"The Influence of Instructional Leadership Behaviours of Principals on Teachers' Instructional Practices in Rwanda: A Case Study of Selected Secondary Schools in the Nyamagabe District".**

The research will be carried out in Nyamagabe District, Southern Province. The researcher will use different methods for data collection. Those include Questionnaires, Interviews and non-participant observation. He will need to interview Head teachers as well as Teachers form forty five (45) selected secondary schools.

The period of research is from **14th December, 2015 to 13th December, 2016**. It may be renewed if necessary, in which case a new permission will be sought by the researcher.

Please allow the **above mentioned researcher**, any help and support he might require to conduct this research.

Yours sincerely,

MINISTRY OF EDUCATION
GASINGIRWA Marie-Christine, PhD
Director General of Science,
Technology & Research

Marie-Christine GASINGIRWA, Ph.D
Director General of Science, Technology and Research

REPUBLIC OF RWANDA

Kigali, ...11/12/2015
N°....3348./12.00/2015

MINISTRY OF EDUCATION
P.O.BOX 622 KIGALI

Mr. Innocent Sibomana
Ph.D student
School of Education
University of Witwatersrand
Johannesburg-South Africa
Email:sibinnocent75@gmail.com

Dear Mr. Sibomana,

RE: Approval to Conduct Research in Rwanda under the Project Title: "The Influence of Instructional Leadership Behaviours of Principals on Teachers' Instructional Practices in Rwanda: A Case Study of Selected Secondary Schools in the Nyamagabe District"

I am pleased to attach a copy of research clearance, which has been granted to you to conduct research on the above title.

I wish to remind you that the research clearance number should be cited in your final research report. The research should be carried out under affiliation of the University of Rwanda-College of Education (UR-CE), under supervision of **Dr. Claudien Ntahomvukiye**, School of Education, UR-CE.

You are requested to submit the progress report after six months and the final report after completion of your research activities to the Ministry of Education of Rwanda.

I wish you success in your research.

Yours sincerely,

MINISTRY OF EDUCATION
GASINGIRWA Marie-Christine, PhD
Director General of Science, Technology & Research

Marie-Christine GASINGIRWA, Ph.D
Director General of Science, Technology and Research

Cc.

- Hon. Minister of Education
- Hon. Minister of State in Charge of Primary and Secondary Education
- Permanent Secretary, Ministry of Education
- Dr. Claudien Ntahomvukiye, School of Education, UR-CE

APPENDIX C: LETTER TO THE NYAMAGABE DISTRICT MAYOR

University of the Witwatersrand, Johannesburg

Wits School of Education

Division of Education Leadership and Policy Studies

16 December 2015

The Mayor of Nyamagabe District

Southern Province

RWANDA

RE: Conducting a research in the Nyamagabe District

Dear Sir,

Referring to the instructions from the Ministry of Education on how to conduct research in Rwanda, I am writing to submit my authorisation letter to carry out research in secondary schools of Nyamagabe district.

My name is Innocent Sibomana and I am a PhD student in the Division of Education Leadership and Policy Studies at the University of the Witwatersrand in South Africa. My research project is entitled '*The Influence of Instructional Leadership Behaviours of Principals on Teachers' Instructional Practices in Rwanda: A Case Study of Selected Secondary Schools in the Nyamagabe District*'.

The aim of this study is to ascertain instructional leadership behaviours enacted by secondary school principals and investigate how these behaviours influence teachers' classroom practices in schools. In doing so, I intend to use the questionnaire in the first phase of the study and interviews in the second strand of the same study.

The research is for the purpose of fulfilling the requirements for the PhD degree in Education. Participants will be the school principals and teachers from secondary school in the district. All names of participants and identity of the schools will remain anonymous and all information will be treated confidentially.

Attached is a permission letter issued by the Ministry of Education to conduct this research in secondary schools of the district.

Yours sincerely,

Innocent Sibomana

Contact details: Nyamagabe District, P O Box 36 Nyamagabe-Rwanda. Cell (+250) 782500794/ (+250) 725679040/ (+27) 786386606, E-mail: sibinnocent75@gmail.com

APPENDIX D: LETTER TO THE PRINCIPAL INVITING THE SCHOOL

Dear Sir/Madam, 18th January, 2016

My name is Innocent Sibomana. I am a PhD student in the School of Education at the University of the Witwatersrand in South Africa. I am conducting research on '***The Influence of Instructional Leadership Behaviours of Principals on Teachers' Instructional Practices in Rwanda: A Case Study of Selected Secondary Schools in the Nyamagabe District'.***

My research involves an investigation on school principal's provision of instructional leadership with the aim of improving the day-to-day instructional practices of teachers. I intend to use questionnaires and interviews in two different phases. The questionnaires will be completed by teachers in the first phase of the research while interviews will subsequently be conducted with the school principal and few teachers selected among those who will participate in completing the questionnaires.

Together with above explanations, I am writing to invite your school to participate in this research. Should your school participate; I will specifically seek the permission of each participant in the interview to audiotape the whole conversation during the interview process. If your school accepts to take part in this study, the names of the research participants and identity of the schools will be kept confidential at all times and in all academic writing about the study. Your individual privacy will also be maintained in all published and written data resulting from the study. All research data will be destroyed after three years after completion of this project.

Find attached, a letter issued by the Ministry of Education (MINEDUC) authorising me to conduct this research in secondary schools of Nyamagabe District.

Please let me know if you require any further information.

Yours sincerely,

Innocent Sibomana

Contact details: Nyamagabe District, P O Box 36 Nyamagabe-Rwanda. Cell (+250) 782500794/ (+250) 725679040/ (+27) 786386606, E-mail: sibinnocent75@gmail.com

APPENDIX E: TEACHER INFORMATION SHEET FOR QUESTIONNAIRE

25th January, 2016

Dear…… ……., teacher at…….secondary school

My name is Innocent Sibomana and I am a PhD student in the School of Education at the University of the Witwatersrand, Johannesburg, South Africa.

I am doing research on '***The Influence of Instructional Leadership Behaviours of Principals on Teachers' Instructional Practices in Rwanda: A Case Study of Selected Secondary Schools in the Nyamagabe District'***. The research is for the purpose of fulfilling all the requirements for PhD degree in Education.

My research involves completing a questionnaire. The questionnaire will include three sections. The first section will involve questions in relation to the general information about the school. The section two includes a set of actions which describe instructional leadership behaviours of principals. The last section deals with actions regarding instructional practices of teachers. To complete the questionnaire you will only need to tick in the appropriate box before each statement. It will take approximately one hour and you are free to choose the language that you feel comfortable to use. You may also refrain from responding to any question in the questionnaire.

The reason why I have chosen you is because you possess relevant information regarding my research. I was wondering whether you would mind if I invite you to take part in this research and kindly provide information that will help me to conduct it effectively.

If you accept to participate in the study, you will not be advantaged or disadvantaged in any way and you will not be paid for the participation. The participation is voluntary and there are no foreseeable risks when you choose to take part in it. You also have the right to withdraw from the study at any time without any repercussion.

For anonymity and confidentiality, your names and identity of your school will be kept confidential at all times and in all academic writing about the study. Information you will provide will not be passed to your principal or to anyone else who is not concerned with the study. Your individual privacy will also be maintained in all published and written data resulting from the study.

All raw research data including the filled questionnaires will be destroyed within 3 years after the completion of the project. Data and results will be reported in my thesis and will also be published in academic journals.

Please let me know if you require any further information.

Yours sincerely,

Innocent Sibomana

Contact details: Nyamagabe District, P O Box 36 Nyamagabe-Rwanda. Cell (+250) 782500794/ (+250) 725679040/ (+27) 786386606, E-mail**:** sibinnocent75@gmail.com

APPENDIX F: TEACHER CONSENT FORM FOR QUESTIONNAIRE

Please fill in and return the reply slip below indicating your willingness to be a participant in my voluntary research project called: '***The Influence of Instructional Leadership Behaviours of Principals on Teachers' Instructional Practices in Rwanda: A Case Study of Selected Secondary Schools in the Nyamagabe District***'.

I, _____ give my consent for the following:

Circle one

Permission to complete a research questionnaire

I agree to complete a research questionnaire. YES/NO

Informed Consent

I understand that:

- information I will provide will be kept confidential and safe and that my name and the identity of my school will not be revealed;
- Information I will provide will not be passed to my principal;
- I do not have to answer every question and I can withdraw from the study at any time;
- information I will provide will be used for the sole purpose of the project;
- all the data collected during this study will be destroyed within 3 years after the completion of the project.

Signature_____Date_____

APPENDIX G: TEACHER SURVEY QUESTIONNAIRE

Dear participant,

My name is Innocent Sibomana and I am a PhD student at the University of the Witwatersrand, Johannesburg, South Africa. I am conducting research on '***The Influence of Instructional Leadership Behaviours of Principals on Teachers' Instructional Practices in Rwanda: A Case Study of Selected Secondary Schools in the Nyamagabe District'.*** The research is for the purpose of fulfilling all the requirements for PhD degree in Education.Please take time to complete the questionnaire below**.**

Your responses are voluntary and confidential. If there is a question you do not wish to answer, simply skip it. I hope you will answer as many questions as possible. No individual teachers or their schools will be identified in any reports. Your responses will also not be passed to your principal.

*Nitwa Sibomana Inosenti (**cell phone +250782500794**) nkaba ndi umunyeshuri muri Kaminuza ya Witwatersrand mu gihugu cya Afurika y'Epfo. Ndi gukora ubushakashatsi **ku buryo imiyoborere y'umuyobozi w'ikigo cy'ishuri igira ingaruka ku myigishirize ya mwalimu mu mashuri yisumbuye mu Rwanda**. Ubu bushakashatsi bugamije kungeza ku mpamyabushobozi y'ikirenga mu Burezi (PhD) ariyo mpamvu nagusabaga mbikuye ku mutima kumfasha gusubiza ibi bibazo. Niba hari ikibazo utifuza gusubiza gisimbuke ariko ibyiza ni uko wasubiza ibibazo byose. Gusubiza ni ubushake kandi ibisubizo byawe bizagirwa ibanga. Umwirondoro wawe ndetse n'uw'ishuri ntaho uzagaragara muri ubu bushakashatsi. Ibisubizo utanga kandi umuyobozi wawe ntazigera abibona.*

PART I: BACKGROUND INFORMATION/ Igice cya I: Amakuru yihariye

Please provide the following information by ticking in the appropriate box/*Gerageza gutanga aya makuru ushyira akamenyetso ko gukuba (X) mu gasanduka kaberanye n'igisubizo.*

a) Type of school/imiterere y'ishuri:

Boarding school/*ikigo gicumbikira abanyeshuri* ☐ , Non-boarding school/ *abanyeshuri biga bataha* ☐

b) Your gender/igitsina cyawe

Male/*gabo* ☐ Female/*gore* ☐

c) Your age/*imyaka yawe iri hagati ya…na … .Shyira akamenyetso ka X mu gasanduka bijyanye*

What is your age group? 20-30 ☐, 31-40 ☐ , 41-50 ☐ , 51-60 ☐, 61+ ☐

d) Working experience/*uburambe bwawe mu kazi k'uburezi (andika imyaka mu gasanduka*)

How long have you been working as a teacher/*Umaze imyaka ingahe uri umurezi*? ☐

How long have you been working in this school/*umaze imyaka ingahe wigisha muri iki kigo*? ☐

How long have you been working with the current principal in this school/*umaze imyaka ingahe ukoranan'umuyobozi w'iki kigo*? ☐

e) The highest educational degree you hold/*impamyabushobozi yaweisumba izindi (shyira X mu gasanduka kajyanye n'impamyabushobozi yawe)*

Secondary certificate/ *amashuri yisumbuye* ☐, Diploma A1/*Icyiciro cya I cya kaminuza* ☐

Bachelors A0/ *icyiciro cya II cya kaminuza* ☐ Masters/*Icyiciro cya III cya kaminuza* ☐

PhD/*impamyabushobozi y'ikirenga* ☐, other (please specify) indimpamyabushobozi……

PART II: *PERCEPTIONS OF TEACHERS ON PRINCIPAL INSTRUCTIONAL LEADERSHIP BEHAVIOURS/UKO ABARIMU BABONA IBIKORWA BY'UMUYOBOZI W'ISHURI MU GUSHYIGIKIRA IMYIGIRE N'IMYIGISHIRIZE MU KIGO AYOBORA.*

The response options range from 1 to 5 as follows: 1 (never), 2 (rarely), 3 (sometimes), 4 (frequently), and 5 (always). Please read each statement carefully and tick frankly in the appropriate box that best indicates how often your principal demonstrates each behaviour.

Hitamo igisubizo kibereye ukurikije uko ubona umuyobozi w'ishuri akora ibikorwa bikurikira. Umubare 1 uhagariye "nta narimwe bikorwa", 2 "bikorwa gake cyane", 3 "bikorwa rimwe na rimwe", 4 "bikorwa kenshi", 5 "bikorwa buri gihe". Shyira akamenyetso ko gukuba (X) mu gasanduka kabugenewe ku mubare ubona uhuye n'igisubizo wahisemo.

N0	**Item**					
Defining and communicating school academic goals/G*ushyiraho intego z'ishuri no kuzimenyekanisha.*		**1**	**2**	**3**	**4**	**5**
1	My principal defines school academic goals together with teachers and other school leaders/***Umuyobozi w'ishuri afatanya n'abarimu ndetse n'abandi bo mu kigo gushyiraho intego ishuri rigenderaho*.**					
2	My principal is receptive to input from teachers in defining school academic goals/***Mu gushyiraho intego z'ishuri umuyobozi w'ishuri aha agaciro ibitekerezo n'ibyifuzo by'abarimu*.**					
3	My principal works with teachers and use data on student performance to define school academic goals/ ***Imitsindire y'abanyeshuri ni kimwe mu byo umuyobozi w'ishuri n'abarimu bagenderaho mu gushyiraho intego z'ishuri.***					
4	My principal works with teachers to define school academic goals in terms of teachers' responsibilities/***Umuyobozi w'ishuri afatanya n'abarimu gushyiraho intego z'ishuri zishingiye ku nshingano za buri munsi z'umwalimu***.					
5	My principal works with teachers to define school academic goals that are easily translated into classroom objectives/***Umuyobozi w'ishuri afatanya n'abarimu gushyiraho intego z'ishuri zoroshye kugeraho binyuze mu ntego zihariye z'amasomo mu ishuri.***					
6	My principal employs multiple strategies to promote individual commitment to school academic goals/***Umuyobozi w'ishuri yifashisha ingamba zitandukanye mu gutuma buri wese yitangira kugera ku ntego z'ishuri.***					

7	My principal provides teachers with the opportunity to discuss school academic goals/***Umuyobozi w'ishuri aha urubuga abarimu bakungurana ibitekerezo ku ntego ishuri rigamije kugeraho.***					
8	My principal holds meetings to discuss school academic goals with teachers/ ***Umuyobozi w'ishuri akoresha inama abarimu bakaganira ku ntegoz'ishuri.***					
9	My principal informally discusses school academic goals with teachers/***Umuyobozi w'ishuri aganira n'abarimu ku ntego z'ishuri n'ikindi gihe afite umwanya.***					
10	My principal keeps on reminding teachers and other school members of school academic goals/***Umuyobozi w'ishuri ahora yibutsa abarimu n'abandi bagize ishuri intego ishuri rigamije kugeraho*.**					
11	My principal refers to the school's academic goals when making curricular decisions/***Umuyobozi w'ishuri yifashisha intego z'ishuri mu gufata ibyemezo birebana n'imyigire n'imyigishirize*.**					
Planning and coordinating curriculum/ ***Gutegura no guhuza ibikorwa bijyanye n'integanyanyigisho***		**1**	**2**	**3**	**4**	**5**
12	My principal participates actively in the review of curricular materials/***Umuyobozi w'ishuri afatanya n'abarimu mu gusesengura integanyanyigisho zitangirwa mu kigo.***					
13	My principal participates in selecting curriculum content, resources and teaching methods/***Umuyobozi w'ishuri afatanya n'abarimu mu gutoranya amasomo azigishwa, uburyo azigishwamo, imfashanyigisho n'ibikoresho bizakenerwa.***					
14	My principal encourages teachers to use student evaluation results in selecting curriculum content, resources and teaching methods/***Umuyobozi w'ishuri ashishikariza abarimu kwifashisha ibyavuye mu isuzumabumenyi ry'abanyeshuri mu gutoranya amasomo azigishwa, uburyo azigishwamo imfashanyigisho n'ibikoresho bizakenerwa.***					
Supervising instruction/*Gukurikirana imyigishirize n'imyigire*		**1**	**2**	**3**	**4**	**5**
15	My principal conducts formal classroom observations/**Umuyobozi w'ishuri asura abarimu mu mashuri yabo mu gukurikirana uko bigisha.**					
16	My principal reviews teacher's work when supervising instruction in classroom/ ***Umuyobozi w'ishuri asuzuma imitegurire n'imitangire y'isomo iyo asuye umwalimu uri kwigisha***.					
17	My principal ensures that classroom objectives of teachers are consistent with the stated goals of the school/U***muyobozi w'ishuri agenzura ko intego zihariye z'isomo zijyanye kandi zifite aho zihuriye n'intego ikigo cyihaye kugeraho***.					
18	My principal conducts walk-through observations/***Umuyobozi w'ishuri akunda***					

	kugendagenda mu kigo agenzura uko imyigire n'imyigishirize ihagaze.					
19	My principal plans supervision activities together with teachers/ **Umuyobozi w'ishuri afatanya n'abarimu gutegura ingengabihe n'ibikorwa byo gukurikirana imyigire n'imyigishirize mu kigo**.					
20	My principal encourages interaction and cooperation during the supervisory process/**Umuyobozi w'ishuri yubaka ubwumvikane n'imikoranire myiza mu bikorwa byo gukurikirana imyigire n'imyigishirize mu kigo**.					
Providing observation feedback to teachers/**Kwereka no kuganira ku ishusho y'imyigishirize ya mwalimu nyuma yo kumusura**		**1**	**2**	**3**	**4**	**5**
21	My principal provides teachers with feedback following classroom observations/ ***Umuyobozi w'ishuri aha umwalimu ishusho yerekana uko imyigishirize ye yagenze nyuma yo kumusura.***					
22	My principal provides teachers with honest, open and constructive feedback/ **Umuyobozi w'ishuri aha umwalimu yasuye i*shusho y'imyigishirize nyakuri, itabogamye kandi imufasha kurushaho kunoza uko yigisha.***					
23	My principal provides teachers with opportunity to discuss classroom observation feedback/***Umuyobozi w'ishuri aha urubuga umwalimu bakungurana ibitekerezo ku ishusho y'imyigishirize ye nyuma yo kumusura mu ishuri***.					
24	My principal values teacher input during post-classroom observation discussions/ ***Umuyobozi w'ishuri aha agaciro ibitekerezo n'ibyifuzo by'umwalimu mu gihe bungurana ibitekerezo ku ishusho y'imyigishirize ye***.					
25	My principal points out specific strengths and weaknesses in teacher's instructional practices in post-observation feedback/***Umuyobozi w'ishuri nyuma yo gusura umwalimu amugaragariza aho afite imbaraga nyinshi ndetse n'aho afite intege nke mu myigishirize ye.***					
26	My principal organises in-service activities based on classroom observation feedback to improve teacher teaching skills/***Umuyobozi w'ishuri ategura ibikorwa bigamije kongerera abarimu ubushobozi bwo kwigisha ashingiye ku byavuye mu isurwa ryabo mu ishuri.***					
Promoting teacher professional development/*Kongerera umwalimu ubushobozi*		**1**	**2**	**3**	**4**	**5**
27	My principal works with teachers to make a plan for professional development activities/***Umuyobozi w'ishuri afatanya n'abarimu mu kugena ingengabihe n'ibikorwa bigamije kongerera abarimu ubushobozi.***					
28	My principal encourages teachers to take responsibility for their own growth/ ***Umuyobozi w'ishuri ashishikariza abarimu gufata iyambere mu kwiyongerera ubushobozi.***					

29	My principal supports professional development activities initiated by teachers/ ***Umuyobozi w'ishuri afasha kandi agashyigikira ibikorwa bitekerejwe n'abarimu ubwabo bigamije kubongerera ubushobozi***.					
30	My principal ensures that in-service activities (workshops, trainings, conferences) attended by teachers are consistent with teachers' needs/ **Umuyobozi w'ishuri yita kandi akagenzura ko a*mahugurwa ahabwa abarimu ashingira ku byo bakeneye ngo banoze imyigishirize yabo.***					
31	My principal provides teachers with the opportunity to share ideas or information from in-service activities/***Umuyobozi w'ishuri aha abarimu urubuga bagasangira ubumenyi bavana mu mahugurwa n'ingendoshuri***.					
32	My principal actively supports the use in the classroom of skills acquired during in-service training workshops/***Umuyobozi w'ishuri afasha abarimu mu gushyira mu ngiro ubumenyi bungukiye mu mahugurwa.***					
33	My principal creates ongoing opportunities for teachers to engage in discussion about teaching practices/***Umuyobozi w'ishuri ashyiraho urubuga ruhoraho rufasha abarimu kungurana ibitekerezo ku myigishirize yabo.***					
34	My principal provides time to meet with individual teachers to discuss instructional issues/***Umuyobozi w'ishuri ashyiraho uburyo bwo guhura na buri mwalimu bakungurana ibitekerezo ku bibazo birebana n'imyigire n'imyigishirize.***					
35	My principal encourages instructional collaboration among teachers/***Umuyobozi w'ishuri ashishikariza abarimu kurangwa n'imikoranire myiza ituma bahora bungurana ibitekerezo ku myigishirize yabo.***					
36	My principal encourages teachers to help one another in improvising some local teaching materials/ ***Umuyobozi w'ishuri ashishikariza abarimu gufashanya mu kwikorera imfashanyigisho zimwe na zimwe.***					
37	My principal encourages teachers to participate in observational visits to other schools to improve their teaching skills/***Umuyobozi w'ishuri ashishikariza abarimu gusura ibindi bigo by'amashuri no kubyigiraho mu rwego rwo kurushaho kunoza imyigishirize yabo*.**					
	Providing instructional resources/*guha abarimu ibikoresho nkenerwa*	**1**	**2**	**3**	**4**	**5**
38	My principal provides teachers with instructional resources that they ask for/***Umuyobozi w'ishuri agerageza kubonera abarimu ibikoresho bibafasha kwigisha neza iyo babimusabye.***					
39	When teachers need resources, they are made available to them on time/ ***Igihe cyose abarimu bakeneye bibasha kwigisha neza babibonera ku gihe.***					
40	My principal provides ample resources for the work of teachers/***Umuyobozi w'ishuri abonera abarimu ibikoresho bihagije bituma babasha kwigisha neza.***					

PART III: ***TEACHER INSTRUCTIONAL PRACTICES/ IMYIGISHIRIZE YA MWALIMU***

The response options range from 1 to 5 as follows 1 (strongly disagree), 2 (disagree), 3 (neuter), 4 (agree), and 5 (strongly agree). Please express your level of agreement with regard to each statement by ticking in the appropriate box.

Hitamo igisubizo kimwe ku bisubizo bitanu bigenewe buri kibazo ukurikije uko wemeranywa na buri nteruro. Umubare 1 uhagarariye "kutabyemera na busa", 2 "kutabyemera", 3 "kwifata", 4 "kubyemera", 5 "kubyemera cyane". Shyira akamenyetso ko gukuba (X) mu gasanduka kamwe gusa.

N0	*Item: Teacher collaboration/**imikoranire myiza hagati mu barimu***	***1***	***2***	***3***	***4***	***5***
1	I engage in discussing with my colleagues (teachers) about the learning development of specific students/ ***Nungurana ibitekerezo n'abarimu bagenzi banjye ku cyafasha abana bafite ibibazo byihariye mu myigire yabo***.					
2	I continuously learn and seek out new ideas about effective teaching and learning in the school/***Nihatira gukomeza gushakisha icyatuma nongera ubumenyi ku myigire n'imyigishirize myiza muri iki kigo.***					
3	I feel comfortable to approach my colleagues for new instructional ideas/ ***Numva nisanzuye mu kwegera abarimu bagenzi banjye no kubasaba ibitekerezo bimfasha kurushaho kunoza imyigishirize yanjye***.					
4	I help my colleagues who struggle with teaching problems/***Mfasha abarimu bagenzi banjye bafite ibibazo mu myigishirize yabo.***					
5	I hold conversations with colleagues about what can help all students to learn best/***Nungurana ibitekerezo n'abarimu bagenzi banjye ku cyafasha abanyeshuri bose kurushaho kwiga neza.***					
	*Planning and preparation/**Gutegura amasomo***	***1***	***2***	***3***	***4***	***5***
6	I frequently plan curriculum activities together with my colleagues/***Mfatanya n'abarimu bagenzi banjye kurebera hamwe uko integanyanyigisho igomba gutangwa muri iki kigo.***					
7	I select curriculum content, teaching methods and teaching aids together with my colleagues/***Mfatanya n'abarimu bagenzi banjye gutoranya amasomo yo kwigisha, uko agomba kwigishwa, imfashanyigisho n'ibikoresho bikenewe.***					
8	When I design my lesson, I frequently refer to and use both information from the curriculum guides and advice from my teacher colleagues/***Iyo ntegura isomo nifashisha amabwiriza ngenderwaho ari mu dutabo duherekeza integanyanyigisho ngakurikiza n' inama mpabwa n'abarimu bagenzi banjye.***					
	*Classroom content delivery /**Gutanga amasomo mu ishuri***	***1***	***2***	***3***	***4***	***5***

9	In classroom, I use adequate teaching resources to create active learning for my students and meet my objectives/***Mu gutanga amasomo nifashisha imfashanyigisho ziboneye mu gufasha abanyeshuri kugira uruhare mu myigire yabo no kugera ku ntego z'isomo.***					
10	When I am teaching I create a safe and orderly classroom environment that is organised and engages students in learning/***Iyonigisha ngerageza kuzana umwuka mwiza mu ishuri utuma abanyeshuri bakurikira isomo ryanjye bashishikaye***					
11	I select clear and achievable instructional objectives in classroom/***Iyo nigisha mpitamo intego z'amasomo zumvikana kandi zoroshye kugerwaho.***					
12	I promote high level of student engagement in classroom/ ***Iyo nigisha ngerageza gufasha buri munyeshuri gushishikarira isomo ryanjye.***					
13	I use a variety of activities and strategies to help students be interested in class/ ***Iyo nigisha ngerageza gukoresha uburyo bwo kwigisha butandukanye kugira ngo mfashe abanyeshuri gukunda isomo ryanjye.***					
14	I make productive use of time in classroom/ ***Mu gihe nigisha ngerageza kubyaza umusaruro igihe ngikoresha neza.***					
15	During each lesson, I monitor students' understanding of the content and make adjustments accordingly/ ***Mu gihe nigisha ngenda nsuzuma uko abanyeshuri bumva isomo ryanjye bigatuma nkosora ibitagenze neza.***					
Peer classroom observation and feedback***/Gusurana mu ishuri***		***1***	***2***	***3***	***4***	***5***
16	Each year, I observe school leaders' model lessons to improve my own teaching performance/**Buri mwaka n*kurikira isomo ntangarugero ritangwa n'abayobozi b'ishuri ngo ndusheho kwigisha neza.***					
17	Each year, I observe my colleagues teaching and provide them with a feedback/ **Buri mwaka nsura abarimu bagenzi banjye nkanabaha inama zo kunoza imyigishirize yabo**.					
18	Each year, I encourage other teachers to come and observe my class and provide me a feedback about teaching improvement/**Buri mwaka nshishikariza abarimu bagenzi banjye kunsura no kumpa inama zituma ndushaho kunoza imyigishirize yanjye**.					
19	Observation feedback I received helped me to more assign students to work in collaborative and discussing groups/**Gusurwa byatumye ndushaho gushyira abana mu matsinda atuma bungurana ibitekerezo ku isomo mba ndi gutanga.**					
20	Observation feedback I received helped me to always make sure that students work with concrete or manipulative materials in class/**Gusurwa byatumye ndushaho kwita ko abanyeshuri bafite imfashanyigisho**					

	ziboneye bigiraho.					
21	Observation feedback I received made me to encourage students to carry out independent learning to complete classroom learning skills**/Gusurwa byatumye nshishikariza abanyeshuri kwishakira ubumenyi bwakuzuzanya n'ubwo bahabwa mu ishuri.**					
22	Being observed and observing my colleagues teaching both made me to encourage students to keep trying even when the work is hard or challenging/**Gusura no gusurwa byatumye ndushaho gushishikariza abanyeshuri kongera umuhate kabone n'ubwo isomo ryaba rikomeye**.					

If there is anything else you would like to tell me about your principal support and your own teaching practices, please enter your comment here/ *Habaye hari ikindi kintu wifuza kumbwira ku bufasha uhabwa n'umuyobozi w'ishuri kugira ngo wigishe neza cyangwa ku myigishirize yawe wacyandika hano*……..

……

……

……

Thank you for taking your time to complete this questionnaire. I greatly appreciate your contribution to the study.

Urakoze k'ubwo gufata umwanya wawe ugasubiza ibi bibazo. Utanze inkunga ikomeye kuri ubu bushakashatsi.

APPENDIX H: PRINCIPAL INFORMATION SHEET FOR INTERVIEW

16th October, 2016

Dear……., Principal of ……secondary school.

My name is Innocent Sibomana and I am a PhD student in the School of Education at the University of the Witwatersrand, Johannesburg, South Africa.

I am doing research on *'**The Influence of Instructional Leadership Behaviours of Principals on Teachers' Instructional Practices in Rwanda: A Case Study of Selected Secondary Schools in the Nyamagabe District'***.** The research is for the purpose of fulfilling all the requirements for the PhD degree in Education.

My research involves responding to interview questions. The interview will include open-ended questions which will focus on instructional leadership behaviours of school principals and their impact on teachers' instructional practices in the school.

To respond to the interview questions will take approximately one hour. Interview responses will be taperecorded with your consent and you will be free to choose the language that you feel comfortable to use. You may also refrain from responding to any question during the interview process.

The reason why I have chosen your school is because it has potential persons especially the principal who has relevant information regarding my research. I am, therefore, inviting you to participate in this research and kindly provide information which can help me to successfully complete it.

However, you will not be advantaged or disadvantaged in any way and you will not be paid for participating in this study. Participation is voluntary and there are no foreseeable risks when you choose to take part in it. You also have the right to withdraw from the study at any time without any repercussion.

For anonymity and confidentiality, your names and identity of your school will be kept confidential at all times and in all academic writing about the study. Your individual privacy will also be maintained in all published and written data resulting from the study.

All raw research data including interview transcripts and audiotapes will be destroyed within 3 years after the completion of the project. Data and results will be reported in my thesis and will also be published in academic journals.

Please let me know if you require any further information. I look forward to your response as soon as is convenient.

Yours sincerely,

Innocent Sibomana

Contact details: Nyamagabe District, P O Box 36 Nyamagabe-Rwanda. Cell (+250) 782500794/ (+250) 725679040/ (+27) 786386606, E-mail: sibinnocent75@gmail.com

APPENDIX I: PRINCIPAL CONSENT FORM FOR INTERVIEW

Please fill in and return the reply slip below indicating your willingness to be a participant in my voluntary research project called: ***'The Influence of Instructional Leadership Behaviours of Principals on Teachers' Instructional Practices in Rwanda: A Case Study of Selected Secondary Schools in the Nyamagabe District'***.

I, _____ give my consent for the following:

Circle one

Permission to be audiotaped

I agree to be audiotaped during the interview. YES/NO

I know that the audiotapes will be used for this project only YES/NO

Permission to be interviewed

I would like to be interviewed for this study. YES/NO

I know that I can stop the interview at any time and do not have to answer all the questions asked. YES/NO

Informed Consent

I understand that:

- information I will provide will be kept confidential and safe and that my name and the identity of my school will not be revealed;
- I do not have to answer every question and can withdraw from the study at any time;
- I can ask not to be audiotaped;
- information I will provide will be used for the sole purpose of the project;
- all the data collected during this study will be destroyed within 3 years after completion of this study.

Signature_____ Date_____

APPENDIX J: PRINCIPAL INTERVIEW QUESTIONS

INTRODUCTION

Hello, my name is Innocent Sibomana and I am a PhD student at Wits University in Johannesburg (South Africa). First, I would like to thank you for participating in this interview. The interview is in line with my PhD research and the main purpose is to find out instructional leadership behaviours enacted by principals and investigate the extent to which these behaviours influence teachers' instructional practices in secondary schools of Nyamagabe district. Before we begin I would also like to let you know that your name and the identity of your school will remain anonymous and that information you will provide will be kept confidential and be used only for sole purpose of the research. You will however need to sign a consent form at the beginning and grant me a permission to record your responses. The interview will take approximately one hour. Please feel free to stop me at any point and ask questions that may arise. Do you have any question before we begin? I am now going to switch the recorder on and be ready to start.

SECTION A: General information

Type of school:…….. Working years as principal in this school:…..

Gender:……. Working years as principal in general:……

Age group…… Highest degree:…….

SECTION B: Interview questions

I. Principals' perceptions of their instructional leadership behaviours

1. Can you please tell me briefly about this school and your role in it?
2. One of the school principal's roles is to assist teachers to perform well in their teaching. What instructional guidance do you provide to your teachers? How often do you provide it?
3. If you provide teachers with instructional guidance A, B, C, D… (already mentioned in the interview question two response) in which way do you provide each instructional guidance? Why do not you provide the guidance E, F, G, H… (found in the survey but not mentioned in the interview question two response)?
4. How useful do you think each guidance is in terms of improving instructional practices of teachers in this school?

5. As a school principal, how can each guidance you provide to your teachers be improved to increase the quality of teaching and learning in your school?

6. In your view, what else do you think contributes to the improvement of instructional practices of your teachers in the school?

II. Challenges that impede instructional leadership in the school

1. Instructional leadership cannot be implemented without any challenges. What challenges do you face which prevent you from guiding effectively your teachers in their instructional practices?

2. To what extent do you think these challenges affect the way teachers carry out their teaching activities in your school? How can they be overcome to make teaching and learning more effective in your school?

3. What else would you like to add to the information you have provided in this interview?

Thank you for your participation!

APPENDIX K: TEACHER INFORMATION SHEET FOR INTERVIEW

16th October, 2016

Dear……, Principal of ……secondary school.

My name is Innocent Sibomana and I am a PhD student in the School of Education at the University of the Witwatersrand, Johannesburg, South Africa.

I am doing research on *'**The Influence of Instructional Leadership Behaviours of Principals on Teachers' Instructional Practices in Rwanda: A Case Study of Selected Secondary Schools in the Nyamagabe District'*.** The research is for the purpose of fulfilling all the requirements for the PhD degree in Education.

My research involves responding to interview questions. The interview will include open-ended questions which will focus on instructional leadership behaviours of school principals and their impact on teachers' instructional practices.

To respond to the interview questions will take approximately one hour. Interview responses will be taperecorded with your consent and you will be free to choose the language that you feel comfortable to use. You may also refrain from responding to any question during the interview process.

The reason why I have chosen your school is because it has potential persons especially experienced teachers who possess relevant information regarding my research. I am, therefore, inviting you to participate in this research and kindly provide information which can help me to successfully complete it.

However, you will not be advantaged or disadvantaged in any way and you will not be paid for participating in this study. Participation is voluntary and there are no foreseeable risks when you choose to take part in it. You also have the right to withdraw from the study at any time without any repercussion.

For anonymity and confidentiality, your names and identity of your school will be kept confidential at all times and in all academic writing about the study. Information you will provide will not be passed to your principal or to anyone else who is not concerned with the study. Your individual privacy will also be maintained in all published and written data resulting from the study.

All raw research data including interview transcripts and audiotapes will be destroyed within 3 years after the completion of the project. Data and results will be reported in my thesis and will also be published in academic journals.

Please let me know if you require any further information. I look forward to your response as soon as is convenient.

Yours sincerely,

Innocent Sibomana

Contact details: Nyamagabe District, P O Box 36 Nyamagabe-Rwanda. Cell (+250) 782500794/ (+250) 725679040/ (+27) 786386606, E-mail: sibinnocent75@gmail.com

APPENDIX L: TEACHER INFORMED CONSENT FOR INTERVIEW

Please fill in and return the reply slip below indicating your willingness to be a participant in my voluntary research project called: ***'The Influence of Instructional Leadership Behaviours of Principals on Teachers' Instructional Practices in Rwanda: A Case Study of Selected Secondary Schools in the Nyamagabe District'*.**

I, _____ give my consent for the following:

Permission to be audiotaped	**Circle one**
I agree to be audiotaped during the interview.	YES/NO
I know that the audiotapes will be used for this project only	YES/NO

Permission to be interviewed	
I would like to be interviewed for this study.	YES/NO
I know that I can stop the interview at any time and do not have to answer all the questions asked.	YES/NO

Informed Consent

I understand that:

- information I will provide will be kept confidential and safe and that my name and the identity of my school will not be revealed;
- Information I will provide will not be passed to my principal;
- I do not have to answer every question and can withdraw from the study at any time;
- I can ask not to be audiotaped;
- information I will provide will be used for the sole purpose of the project;
- all the data collected during this study will be destroyed within 3 years after completion of this study;

Signature_____ Date_____

APPENDIX M: TEACHER INTERVIEW QUESTIONS

INTRODUCTION

Hello, my name is Innocent Sibomana and I am a PhD student at Wits University in Johannesburg (South Africa). I would first like to thank you for participating in this interview. The interview is in line with my PhD research and the main purpose is to ascertain instructional leadership behaviours enacted by principals and investigate the extent to which these behaviours influence teachers' instructional practices in secondary schools. Before we begin I would like to let you know that your name and the name of your school will remain anonymous and that information you will provide will not be passed to your principal. It will be kept confidential and be used only for the purpose of the research. You will however need to sign a consent form at the beginning and grant me a permission to record your responses. The interview will take approximately one hour. Please feel free to stop me at any point and ask questions that may arise. Do you have any question before we begin? I am now going to switch the recorder on and be ready to start.

SECTION A: General information

Type of school:…….. Working years as teacher in this school:…..

Gender:……. Working years as teacher in general:……

Age group…… Highest degree:…….

SECTION B: Interview questions

I. Teachers' perceptions of their principal's instructional leadership behaviours

1. Can you please tell me briefly about your work in this school?
2. One of the school principal's roles is to assist teachers to perform well in their teaching. What instructional guidance do you receive from your principal? How often do you receive each guidance?
3. If you remember very well, in which way do you receive each instructional guidance from your principal? Why do you think your principal does not provide you with the guidance E, F, H… (mentioned in the survey but not stated in the interview question two response)?
4. How useful do you think the guidance you receive from your principal is in terms of improving your instructional practices in this school?

5. In your view, how can each guidance you receive from your principal be improved to increase the quality of your teaching in the school?

6. What else do you think contributes to the improvement of your instructional practices in this school?

II. Challenges that impede instructional leadership in the school

1. What are the challenges (if any) you think prevent your principals from effectively guiding you in your instructional practices in this school?

2. In your view, to what extent do you think these challenges affect the way you conduct your teaching activities in the school? How can they be overcome to make teaching and learning more effective?

3. What else would you like to add to the information you have provided in this interview?

Thank you for your participation!

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