

Teacher Specialisation and Pupil Performance in Selected Primary Schools of Kaputa District: Exploring the Benefits, Challenges and Implications.

By

Brighton Lumya

A dissertation submitted to the University of Zambia in collaboration with Zimbabwe Open University in partial fulfillment of the requirements for the award of the degree of Master of Education in Educational Management.

The University of Zambia

Lusaka

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APPROVAL

This dissertation by **BRIGHTON LUMYA** is approved as partial fulfillment of the requirements of the award of the Master of Education in Educational management of the University of Zambia.

Supervisor's Signature

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Programme Coordinators Signature

.....

ABSTRACT

The purpose of this study was to explore the benefits, challenges and implications of teacher specialization in primary schools as way of improving performance in Kaputa District. In recent years, there have been a number of innovations and reforms aimed at making education relevant to the needs of the society. The purpose of bringing this issue onboard is the recognition that specialisation teaching has a potential to improve quality of teaching. This study therefore seeks to explore the benefits, challenges and implications experienced by teachers of specialisation classes. The study used qualitative research approach, case study research design with a sample of fifteen (15) participants of which 3 were headteachers and 12 class teachers. The finding of the study on the implications of teacher specialization at primary was seem to suggest that there was more of subject sharing than subject specialisaion since teachers were teaching subjects they did not specialize in. Further, on the benefits experienced by specialisation teachers, the study found that teachers have time to research on a specific subject and there is wider subject coverage for a specific subject. The study also showed the challenges associated with teacher specialisaion at primary school such that pupils in most of the cases had problems with adjusting to the demands such as completion of tasks given from different teachers on time due to low attaining of concepts especially at grade 5, 6 and 7. The study further established that even though there is an indication of teacher specialization being done in primary schools, teachers indicated being frustrated by the model used as it was just subject sharing rather than subject specialization. The study recommended that when the government through the ministry of general education is deploying specialized teachers, equality must be considered in rural schools where shortage of teachers is being experienced most. Additionally, primary school certificate be phased out by employing more teachers who are well qualified and those affected be allowed to pursue Diploma or any higher education with relevancy in subject specialisation.

Key Words: Benefits; primary school and teacher specialisation

DEDICATION

This dissertation would not have been completed without the valuable contributions of my lovely wife Matildah and my children namely: Blessings, Violet and Vanessa. They encouraged me to work hard and allowed me to be away from home during the time of my study. Your coming on earth brought strength to my soul such that I have always strived hard to give you the best in your life time.

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ACRONYMS AND ABBREVIATIONS

DEBS	District Education Board Secretary
MDGS	Millennium Development Goals
MoE	Ministry of Education
SDGs	Sustainable Development Goals
UK	United Kingdom

CHAPTER ONE: INTRODUCTION

1.0 Overview

This chapter presents the background to the study and defines the problem that the study addressed. It states the purpose, objectives and research questions that the study answered. The chapter further reflects on the significance, delimitations or scope of the study, theoretical framework, operational definition of terms, and provides the summary of the chapter.

1.1 Background

Primary education in Africa has witnessed major reforms in different areas. There have also been attempts to transform education in line with Millennium Development Goals (MDGs) that relate to education. It is not by coincidence that at least one of the eight MDGs is concerned with issues related to education. For example, MDG number 2 is stated as: Achieve universal primary education. The MDG had the target of ensuring that children complete a full course of primary education, (David 2011). The 1994 Revised National Policy on Education for Botswana proposed that the society of Botswana needs specialist subject teachers who are competent, knowledgeable and skilled to prepare learners who are educated and informed who would face 21st century challenges without hesitation. ‘Subject specialist’ teaching has long featured in primary education in many African countries more especially Namibia and also in some European countries. Teachers themselves have been highly supportive of the assistance they receive from these types of specialist (Planel 1998).

Teachers are the core influential aspect in students’ learning and performance. Other essential contributors may include but are not limited to the school attended, the social and economic level of the pupils’ families, as well as the pupils’ abilities and characteristics. However, the most powerful and influential contributor to the pupils’ academic performance will always remain to be the teachers. Accordingly, highlighting the importance of teacher’s qualities and credentials as they shape and define the pupils’ futures is a non-debatable topic. Effective teachers have many characteristics that recognize their quality. These characteristics include content knowledge, teaching experience, training and credentials, and overall academic ability (Policy Studies Associates, 2005). It is common knowledge world over that quality education relies heavily on, among many other things, it’s shaping by school managers and teachers entrusted with that

responsibility. This entails that the school managers and teachers are pivotal of any country's entire education system. The rationale the Zambian government has adopted on teacher education is that until the teacher is properly prepared, the desired end in the field of teaching and learning process cannot be achieved. Teacher education, in the Zambian context, refers to the policies and procedures designed to equip prospective teachers with the knowledge, attitudes, behaviors and skills they require to perform their tasks effectively in the classroom, school and wider community (Chishimba, 1996). The shaping of teachers to develop such desired qualities depends on how they were prepared and oriented into the teaching profession long before they left Colleges of Education. In Zambia, Initial Teacher Education (ITE) is also known as Pre-Service Teacher Training (PSTT) and takes place largely or exclusively in tertiary institutions or institution of higher education.

Teacher education is an important component of any educational system charged with the training of teachers to acquire the knowledge and skills needed to lead in the classroom (Lamb, 1995; Roberts, 1998). The education system in Zambia has, however, been performing this task within the limits of training teachers as generalists. In other words, a trainee upon completing the Diploma programme, which is the minimum requirement for teachers in primary schools, would be expected to teach all subjects. Even if teachers were prepared to teach all subjects in primary colleges, they do not have deeper understanding or mastery in all these subjects (McGee & Fraser, 2008). Good teaching demands that teachers know a lot for example, the subject content knowledge and the pedagogical knowledge. Much of the current research posits that specialist teachers bring a number of important dimensions to a subject. Hennessy, (2000) for example, argues that specialist teachers bring greater confidence to the classroom, while Wilson et al (2008) contend that subject specialists use their specialized content knowledge to empower students to produce a higher quality of work.

Having a sound subject knowledge base is important for teaching, if pupils are to be challenged in their learning, rather than just busily engaged. If teachers lack subject-related knowledge they may fail to teach learners to the expected standards (Ashley, 2010; Bamford, (2006). Without substantive subject knowledge, it could be difficult for teachers to develop learning goals, monitor progress, and plan future steps, or to be effective teacher and evaluators of teaching and learning, (McGee et al., 2008).

This entails that all primary school teachers should be intellectually sound to teach learners with diverse interests and capabilities because they are the central point of learning in a classroom situation. Ministry of Education (MOE, 1996) states that the quality and effectiveness of any education system largely depends on the quality of its teachers as they are the single most important resource and determinant of success in meeting the education system's goals. It is worth noting that the teaching methodology of a teacher influences students interest in particular subjects (Curry, 2012).

There are developments in several countries in the developing world where there have been movements from the traditional mode of training teachers to specialized mode of training teachers. Much emphasis in teacher education has been on the training duration. As such, in Zambia for example, there have been changes from 2 year training to 3 or 4 years training period. Emphasis has also been on the number of terms trainee teachers have to spend on teaching practice and the terms they spend resident at college. In Zambia, the commonly adopted mode of training primary school teachers in teachers' colleges for the primary school teacher trainee, there has not been much in terms of preparing the teachers for subject specialization. The curriculum at Colleges of Education that prepare primary school teachers remains predominantly generalistic. This means teachers who are in primary schools have no specialist knowledge in the subjects they handle and have continued to be generalists (Mumpuka, 2009).

The introduction of subject specialization policy at primary school is a directive from the Ministry of general education. The policy has directed primary schools with enough teachers (human resource) and learning infrastructure to introduce subject specialization while schools with few teachers to continue with generalist teaching. As the circular dated on 5th April, 2019 from MOGE directs, subject specialization is not much basing on the subjects that a teacher was trained in but the area of interest and strength. In addition, the subjects are grouped in the way they are supposed to be handled for instance the teacher taking Home economics is not allowed to take creative and technology studies (Snook, 2012). It is seen as the way of just reducing the number of subjects that a teacher must handle. It is important to take note of the various stakeholders in the new development.

Further, there is need to consider the role of teachers' colleges in the new paradigm as well as the cost implications of re-training teachers who are still having primary certificates. Are they to

continue training primary school teachers in all the primary school curriculum subjects? Alternatively, there may be need to adopt the secondary school training institutions approach in which student teachers specialize in the teaching of two subjects.

The arrangement now in primary schools has changed and some primary schools are now following the subject specialization system which for all along had been a preserve for the secondary school (MOGE, 2019). Many authors have written on the benefits of specialization, for instance, Kapfunde (2000), and Bailey (2017) observes that, at school level, subject specialisation provides an opportunity for a teacher to specialise in doing that single task which ensures efficiency in production. In this regard, subject specialisation is credited with improving quality of education and efficiency in education production. Specialisation entails breaking each job into smaller tasks that are manageable. Since teacher specialisation in education fits well into one of the principles of the scientific management theory, teacher specialisation also aims at improving education production. According to Kasher (2005) specialisation involves intentional narrowing of practice which contributes to competent delivery of service in education.

The focus of both Kapfunde (2000) and Kasher (2005) on specialisation is on the improvement of teaching and learning which were the major goal for headteachers and teachers towards subject specialisation at primary. As noted above, teacher specialisation at primary school is a form of division of labour. As such, it is envisaged to increase education production as each teacher can concentrate on what he or she is good at. This helps the teacher to develop expertise in the area of focus. Specialisation in education is expected to improve efficiency, output and outcomes. It is expected to increase both teacher and pupil performance. This should then contribute to high pass rates as indicators of high output in schools. If this argument holds true, we should then expect an improvement in the performance and quality of the passes in primary schools that have adopted the specialisation model when compared with those that still follow the generalist model.

Finally, Pine (2012) made an interesting observation about education systems in China and the United States, noting that elementary schools in China have subject specialists while the US elementary school teachers are generalists. The specialists in China specialise on both, the subject and on how to teach the said subject. A notable disadvantage of the Chinese model is that the relations between the teacher and the pupil is impersonal, which may be detrimental to the

development of young children. The system does not allow the teacher time to know and understand his or her children better. Dealing with young children goes beyond the call of duty. The teacher has to find time to study strengths, weaknesses and needs of the children. The American system of education provides for this.

1.2 Statement of the problem

A teacher who had spent more time studying one subject in depth was likely to have a comprehensive understanding of the subject matter (content) in that area and hence more likely to be able to unpack it or present it to a learner in most progressive ways than perhaps one who had spent less time. Peace (2012) revealed that deeper understanding of the content was required from teachers who were able to answer content questions and not just have knowledge in pedagogical practices. The situation, however, in the schools was that all teachers were trained in the same way as generalist teachers but some schools identified teachers' areas of strength and allocated classes to them to teach based on such factors. The performance of learners in such schools had not yet been analysed and conclusive.

The MOGE (2019) in its circular had meanwhile encouraged 'specialization' wherever teachers were available. This pronouncement was made because it was seen as an integral part of quality learning and teaching in various subjects and disciplines. It was hoped that this measure would supplement other measures for improved learner performance at primary school level when staffing levels are good and when teachers are well qualified in various subject areas which can help teachers to deliver the lessons with vast knowledge. However, despite of all the efforts concerning teacher specialization at primary, what were not known, however, were the benefits, challenges and the implications of subject specialization that might be countered. The study, in this regard therefore, explored the benefits, challenges and the implications of subject specialization from key stakeholders in selected primary schools.

1.3 Purpose

The purpose of this study was to explore the benefits, challenges and the implications associated with teacher specialization at primary school.

1.4 Research objectives

1.4.1 General objective

Conduct an assessment on the benefits, challenges and the implications of teacher specialisation at primary.

1.4.2 Specific objectives

1. To establish the benefits experienced by subject specialisation teachers at primary in selected schools in Kaputa district.
2. To establish challenges experienced by subject specialization teachers at primary in selected schools in Kaputa district.
3. To explore the short and long term implications of teacher specialisation in kaputa district.
4. To propose recommendations on the strategies that could make teaching and learning successful within the context of subject specialisaion at primary in selected schools in Kaputa district.

1.5 Research questions

The study was guided by the following research questions;

1. What are the benefits experienced by subject specialisation teachers at primary in selected schools in Kaputa district.
2. What are the challenges experienced by subject specialization teachers at primary in selected schools in Kaputa district.
3. What are the short and long term implications of teacher specialization in Kaputa District.
4. What strategies can be used to make teaching and learning successful within the context of subject specialisaion at primary in selected schools in Kaputa District.

1.6 Significance

The study might add to the number of studies already conducted in the past about benefits and challenges of teaching by subject specialization at primary. The findings of the study may enable curriculum planners to identify the short and long term implications of teacher specialization at primary as a way of improving pupil performance and to seek possible solutions to such implications. If challenges in teaching by subject specialization at primary are identified and

addressed, teaching and learning by subject specialization at primary classes would be improved. Furthermore, the study would generate awareness and interest among other researchers and the findings of the study might be useful to open up areas for further studies.

1.7 Delimitations

The study was carried out in only three primary schools in Kaputa District of Northern Province. That is, Kafuma primary, Mantapala and Kaputa primary school. These schools are convenient to the researcher in terms of their geographical location. Therefore, the results might not be generalizable to all schools in Kaputa district due to the size of the sample. These schools are chosen because they were the first to introduce subject specialization in Kaputa District.

1.8 Theoretical framework

A theoretical framework is a general set of assumptions about the nature of phenomena. It is a reasoned set of propositions, which are derived from and supported by data or evidence (Kombo and Tromp, 2006). A theory is also defined as a set of propositions which together describe and explain the phenomenon being studied (Punch, 2006). The study was guided using the Scientific Management Theory which was advocated by Frederick W. Taylor and Max Weber. These scholars advocated for a hierarchical structure in organisations, division of labour, rules to control the behaviour of members, impersonal relations and career orientation Weber, (1947). Subject specialisation is therefore based on the principle of division of labour. The idea of subject specialisation allows teachers to focus on one or two subjects. They are able to reach a wide range of pupils in their subject area. As noted by Kapfunde (2000), at school level subject specialisation provides an opportunity for a teacher to specialise in doing that single task which ensures efficiency in production. In this regard subject specialisation is credited with improving quality of education and efficiency in education production. Specialisation entails breaking each job into smaller tasks that are manageable. Since subject specialisation in education fits well into one of the principles of the Scientific Management Theory as postulated by Taylor and others, subject specialisation also aims at improving education production. According to Kasher (2005) specialisation involves intentional narrowing of practice which contributes to competent delivery of service in education. The focus of both Kapfunde (2000) and Kasher (2005) on specialisation is on the improvement of teaching and learning.

As noted above subject specialisation at primary school is some form of division of labour. As such, it is envisaged to increase education production as each teacher can concentrate on what he or she is good at. This helps the teacher to develop expertise in the area of focus. Specialisation in education is expected to improve efficiency, output and outcome. If that is the case specialisation in education is expected to increase both teacher and pupil performances. This should then contribute to high pass rates as indicators of high output in schools.

Bailey, Curtis and Nunan (2001) raise very important arguments about the role of subject specialisation in schools. For them subject specialisation improves performance of the teacher, school and pupil. This comes about as subject specialisation gives the teacher a strong grounding in the area of specialisation. Such grounding makes the teacher relevant, effective, and efficient as the teacher becomes knowledgeable in the subject area and an expert on subject matter. If this argument holds true, we should therefore expect an improvement in the performance and quality of the passes in primary schools that have adopted the specialisation model when compare with those that still follow the generalist model in Zambian primary schools. As such, the system is able to provide for such, which contributes to the total development of the child. Therefore, if this can be adopted by Zambian primary schools, expect an enhancement in the performance and quality of the passes in primary schools (Glaser, 2011).

In conclusion, the primary school stage, like all levels of development is very critical in the development of the child and it cannot be relied heavily on scientific management theory but also on psychodynamics theories. Pupils should be handled with great care. Nash, Stock and Harper (1990) identify five developmental stages that are common with most psychologists. These are the infancy, early childhood, middle childhood, adolescence and adulthood stages. All the stages are characterised by domains that contribute to development and change in the individual. Such developmental domains include the physical developmental domains, cognitive developmental domain, and psychosocial development domains. The development of the different domains is the responsibility of the family, community and the school. The middle childhood stage mostly covers children between the ages of 6- 12 years. These are the primary school going ages. At this stage, apart from assisting children acquire knowledge and skills, which may be catered for through subject specialisation, the children have to be helped to develop moral values and to grow in social relationships. In line with psychodynamic theories which focus on how an individual develops a personality, the role of the teacher goes beyond

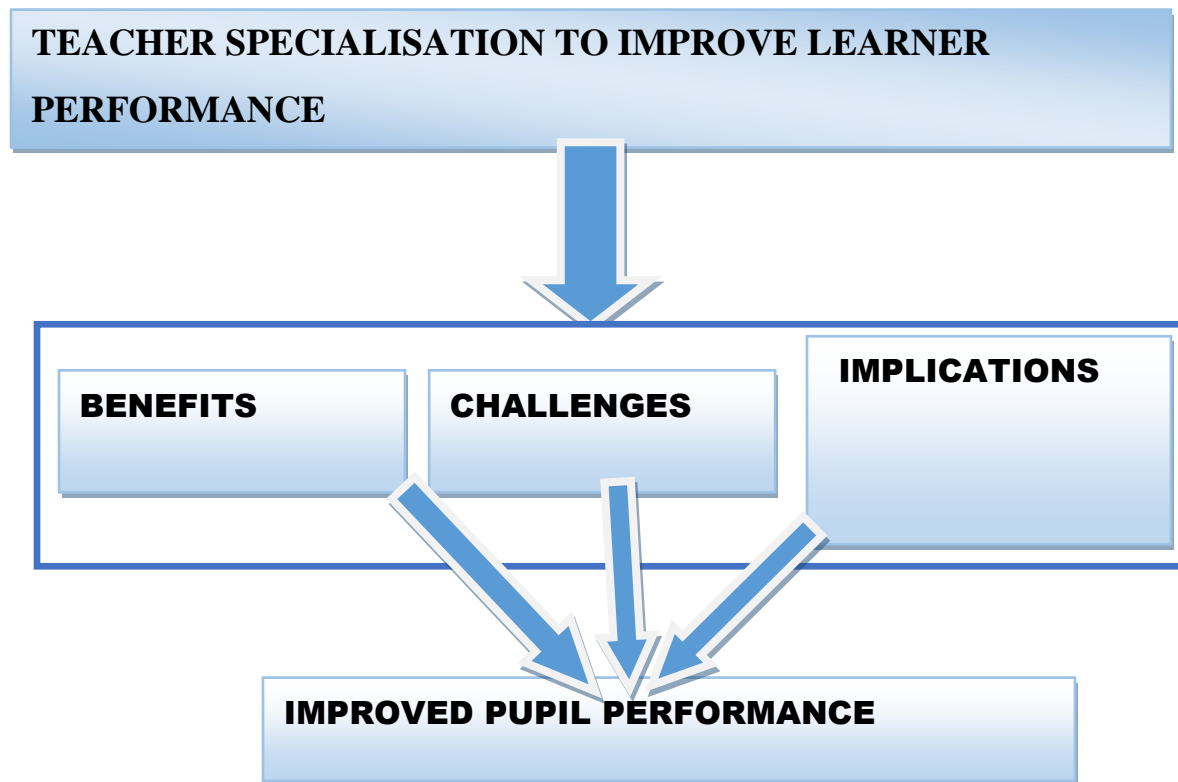
teaching. The teacher has to nurture the child at primary school level. The major question is therefore, whether subject specialisation can provide for such nurturing.

1.9. Conceptual Framework

A conceptual framework is a model of presentation through which the researcher represents the relationship between variables in the study graphically or diagrammatically (Cohen, 2003). This is also defined as a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation. It is a tool intended to assist a researcher to develop awareness and understanding of the situation under scrutiny and to communicate this (Kombo and Tromp, 2014). The duo explain that when clearly articulated, a conceptual framework has potential usefulness as a tool to assist a researcher to make meaning of subsequent findings and further helps a researcher to have organised thinking and complete an investigation successfully. Chola and Bless (1988) stress the need to also define the concepts in clear, precise, non-ambiguous and agreed upon way. They argue that concepts were the building blocks theories. Kombo and Tromp (2014) defined concept as an abstract or general idea inferred or derived from specific instances while conceptualization as inventing or contriving an idea or explanation and formulating it internally. It is an abstract, simplified view of the world that we wish to represent for some purpose.”

This study adopted a conceptual framework derived from the presentation of the results and specific objectives on teacher specialization to improve pupil performance as well as exploring the short and long term implications.

The figure below shows the conceptual framework on teacher specialization to improve performance at primary school.



Subject specialisation has negatively impacted on teacher pupil relationships and at times compromised discipline among pupils as subject specialists do not play the pastoral role played by generalists. Lack of maturity on the part of pupils could be among the challenges as pupils in most of the cases have problems with adjusting to the demands from different teachers. Also some specialist teachers could lack knowledge and skills to teach the subjects they are allocated to teach. However, the spread of wide range of knowledge and skills is one of the benefits as subject specialisation idea allows teachers to focus on one or two subjects and this improves quality of education and efficiency in education production as each teacher can concentrate on what he or she is good at (Glaser, 2011).

1.10. Limitations

All studies have limitations (Drisko, 2005) and this study was no exception. There were two limitations in this study that needed to be acknowledged. These limitations were related to the methodology used.

Firstly, methodological limitation was related to the possibility of the researcher bias. The researcher endeavored to minimize this bias by keeping a diary with key ideas, thoughts and assumptions. All data collected for this study through individual interview and questionnaire were in Kaputa District.

The final limitation related to the initial idea of sample selected (5 schools) which ended up in selecting (3 schools) due to the fact that these were the schools that introduced subject specialization in Kaputa District. The initial idea of the researcher was to have 5 schools in Kaputa District. In other words, there were only 3 specialisation schools in this particular District at the time.

1.11. Operational Definition of Terms

Primary Schools: In the Zambian Education system, they are institutions of learning covering grades one (1) to grades seven (7) with purpose of offering a foundation for mastery of formal education.

Implications: conclusion that can be drawn from something although it is not explicitly stated.

Specialization: teaching that is limited to one or two subjects in the primary school curriculum opposed o teaching by one teacher of the entire subject in the timetable

Subject specialist: one who has obtained at least a bachelor degree or diploma in one or two teaching subjects or a degree with majors in one or two teaching subjects.

Pupils: learners or Primary School children in schools

Generalist teaching: this is the type of teaching where a teacher teaches across all the subjects irrespective of his/her area of specialization.

Generalist Teachers: Teachers trained to teach all subjects at lower and middle Basic Schools.

Headteacher: Is the staff member with the greatest responsibility for the management of a school.

Benefits: something that produces good results or helpful results.

Challenges: something new and difficult which requires great effort and determination.

1.12 .Summary

This chapter presented the background to the problem. It highlighted the advent and nature of teacher specialization and its short and long term implications in Zambia. The chapter further presented the statement of the problem, purpose of the study, the study objectives together with the research questions and significance of the study. The delimitations or scope of the study, theoretical framework which will provide focus to the study and operational definition of terms have all been addressed.

CHAPTER TWO: LITERATURE REVIEW

2.0. Overview

This chapter provides scholarly literature that informed this study. It specifically, provides literature on teacher specialisation to improve pupil performance and also compile available information on benefits, challenges and implications of subject specialisation at primary. A review of these studies helped to give an insight of practical information that would answer the research questions and provide the kind of information that schools intending to teach by subject specialisation may use to enhance performance. These studies were drawn from the global level, Africa and lastly from Zambia.

2.1 The Meaning of Subject Specialisation

Specialisation teaching has become one of the priority topics of the Working Groups on the Teaching Profession (WGTP) agenda. The reason for bringing this issue on board is the recognition that specialisation teaching has a potential to improve the quality of teaching, thus contributing to the global effort of achieving Education for All (EFA) goals and Millennium Development Goals (MDGs) education related goals (Juvane, 2005).

McEwan (2008) states that the MDGs specify that by 2015 children in every country should be able to complete a full course of primary schooling. The EFA initiative promulgates a similarly ambitious goal, with an emphasis on children in difficult circumstances, ethnic minorities and girls (McEwan, 2008). The chapter presents a review of the literature related to the study. Past studies are important as they guide the researcher on other studies done on the same topic. Before commencing a study of teacher specialization to improve performance at primary, it is necessary to establish in what context the word "specialisation" and its derivatives will be used within this-paper. "Specialisation" has often been used to denote a substantial concentration of activity within a particular field of practice (Olson, 1996). Alternatively and more significantly, it has been used to indicate competence or expertise within the field. Concentration alone is not a satisfactory indicator of specialisation as it does not necessarily produce competence or expertise, although this is the usual result. For example, a teacher may devote a great deal of time to a particular area of teaching, yet still be less proficient than another teacher who spends relatively little time in the same area. The problem of arriving at a suitable definition is a difficult

one, but rather than becoming embroiled in a complex discussion of terminology, "subject specialisation" in this paper will be used as a general term to include both concentration and expertise in terms of competency in the subject matter.

At the same time, individual work rhythms have been neglected and psychological and pedagogical knowledge in the field of learning possibilities has been ignored. This segmentation can often only be bridged with great difficulty by the nevertheless necessary mechanism of interdisciplinary. Of course, subject specialisation need not lead to 'segmentation' and 'atomisation' but it would be an ever-present success as the review would show. In Ontario elementary schools' classrooms, the general classroom teacher teaches all the core subjects of the curriculum, whereas subject specialized teachers are available for the subjects of art, music and physical education. The three latter subjects are assumed to involve a talent that classroom teachers are not expected to have (Makhila, 2008). Research has found that teachers strongly appreciate the assistance they receive from these subject specialist teachers (Planel, Osborn, Broadfoot & Ward, 1998). Generalist teachers are considered specialized in age-range rather than subject, according to the Office for Standards in Education (as cited in Ardzejewska, McMaugh, & Coutts, 2010), while specialist teachers teach a subject full-time.

Secondary teachers have to complete a major in their specialty subject before teaching it (Shulman, 1986), because the prior area of study is considered to be the teacher's area of expertise. In elementary years, teachers are not required to specialize in a subject, and it is doubtful that teachers can show the same level of competence in all subjects (Ojo, Akintomide & Ethindero, 2012). For example, Buchmann suggested that it would be unreasonable to expect a teacher who is ignorant about science to plan a lesson about writing reports in science and evaluate students' assignments as this teacher will not be knowledgeable of what student progress mean in that specific lesson (as cited in Ball & MacDiarmid, 1990). Subject specialized teachers show greater enthusiasm in teaching their subject of specialization (Fromyhr, 1995), as they value their subject more highly (DeCorby, Halas, Dixon, Wintrup & Janzen, 2005). They spent years learning and deepening their knowledge in a field of study, and will use their specialized content knowledge to empower students to produce a higher quality of work (Wilson, Macdonald, Byrne, Ewing & Sheridan, 2008). Subject specialization helps teachers focus on what they are most capable of instead of spending so much time learning many subjects and not

being able to master one or be an expert in a particular one. It also gives the teachers a sense of professionalism by increasing their efficiency and effectiveness (Ojo, Akintomide & Ethindero, 2012). When teachers teach content in areas which they are not familiar with, the skills and abilities that they show when teaching their specialist subject are instantly challenged regardless of their capabilities (Loughran, Berry, & Mulhall, 2012).

There are various implications on students' learning when teachers feel that they lack content knowledge about a specific lesson. This includes inability to clarify students' misconceptions, and a failure in responding to their probing questions (OFSTED, 2009). It can also result in a disappointment for higher attaining students who seek more challenge (OFSTED, 2009) as well as failure to intervene with struggling learners (Erskine, 2010). Elliott (1985) believed that moving towards specialized teaching is the only way to ensure the high proficiency of primary teachers in all subjects.

2.2. Studies on Specialisation

A research conducted in 2005 in America by Kapfunde and Kasher, found that specialisation in subjects of greatest proficiency would enhance pupils' productivities. In the absence of an accepted practice of using specialist teachers, it is important to explore the meaning and definition of the term 'specialist' as described in the Australian literature. In their study, Angus et al. (2007) did not report or define the qualifications of the subject specialist; therefore it is difficult to conceive of the conditions or standards by which one is deemed a 'specialist'. The Ramsey Review (2000) indirectly defined specialization as part of its discussion on accreditation as teachers who have undertaken significant further studies gained through specifically designed courses. Focusing on PE, Tinning, Kirk and Evans (1993) question whether a specialist is "someone who has done a major study in physical education/human movement studies in their initial teacher training? Is it someone who has done a 'specialist' four year degree in physical education?" or 'Is it someone who is appointed to the position of physical education at a school regardless of his or her qualifications or interest in the area?' They suggest that the first definition is concerned with expertise while the second is concerned with responsibility for the subject, and hence reflecting the possibility of contextual and standards based elements in concepts of the specialist teacher.

One contextual element in the use of specialist teachers can be found in Queensland where specialist teachers are systematically allocated to fill relief time. These specialists deliver subject content in areas such as PE and are specifically trained in the delivery of this subject (DinanThompson, 2009). In a contrasting example of contextual variation, Hargreaves (1992) found that in one Canadian state, teachers preferred that the ‘relief time’ teacher deliver a discrete subject, however these teachers were not specifically trained in the delivery of this subject.

In addition to contextual or standards based concepts of the specialist teacher, is the nature of the subject to which a specialist might be allocated and the values implicit in this decision. In the emerging discourse supporting the use of specialist teachers, the ‘subject’ is prominent in even this limited debate. For example Masters (2009) prioritizes the core areas of literacy, numeracy and science and suggests the deployment of specialists, while research by Morgan and Hansen (2007) suggests that classroom teachers in NSW seem to defer the “skills and frills” (Stodolsky, 1988) subjects of Creative Arts and PE to the specialist teacher. Indeed, there is an extensive body of work which suggests that delivering the curriculum is not a values free exercise but rather is influenced by epistemological beliefs about the subjects themselves. Stodolsky called this the ‘subject matters’. Over time researchers in this area have used the lens of the subject to focus on: how cultural norms and assumptions relate to the subject; subject status; the body of subject knowledge; teachers’ work; and how school leaders’ influence the delivery of subjects. For example, in the USA Burch and Spillane (2003) described how factors such as district policy, threat of closure and exam performance resulted in Mathematics and Literacy being prioritized by school leaders. In another study Burch and Spillane (2005) found that even when outwardly there were no differences in the value placed on Literacy and Numeracy reform, senior administrators acted in ways which supported an epistemological hierarchy. Put simply, epistemological beliefs can shape and influence policy (Rowan & Miskel, 1999). In considering the use of specialist teachers the value of the subject it may shape the decision about the allocation of a specialist teacher.

In Zambia it is the headteacher who allocates teachers and hence is responsible for the generalist or specialized delivery of the curriculum. This study examined the prevalence of specialist use in Zambian government primary schools and the factors influencing headteachers’ decisions to appoint specialists to certain subject domains. Furthermore, it specifically focused on whether

epistemological beliefs had a role in the work of primary school teachers. In other words, asking questions about individual subjects provided a framework to explore what headteachers perceive is the role of the primary school teacher.

2.3. Studies on Generalists Teachers

McGee & Fraser, (2008) describe generalist teachers as active and purposeful agents in the design of teaching programme and assert that they are at the centre of creating opportunities for their students to learn and achieve in all essential learning areas. They are responsible for the day-to-day decisions in their classrooms and have a high degree of autonomy in selecting and organizing the specific learning experiences for their students, albeit while trying to meet the obligations of their schools and curriculum guidelines. As these teachers are with their students all day and so can see the opportunities for teaching and for linking it to other curriculum learning, they are in a position to help students to regard learning as a normal and relevant part of life (Ojo, Akintomide & Ethindero, 2012).

In this arrangement a teacher is the central point of learning in a classroom situation, for example at the primary school level in Nigeria, a teacher teaches across all the subjects irrespective of his/her area of specialization. The teacher has a class and takes all the subjects. It is worth noting that the teaching methodology of a teacher influences students interest in that particular subject (Ohiwerei & Nwosu, 2009). A National Certificate of Education (NCE) holder who specializes in English and Yoruba Languages for example might not be able to teach Mathematics and Science effectively if employed to teach all subjects in the primary school. Metzler and Woessman, (2012) the nature of teaching can be different in rural areas than in suburban or urban areas, because of the small size of rural districts and schools. Teachers often need to teach multiple subjects and possibly multiple grades, sometimes in multi-grade, mixed-age classrooms.

Aaronson, Barrow, & Sander, (2007) indicated that when teachers teach in areas which they are not familiar with, the skills and abilities that they show when teaching their specialist subject are instantly challenged regardless of their capabilities. The perception that, basic school teachers have been given an all-round training and as a consequence, have adequate knowledge on all subjects raises some concerns about instructional quality in Zambia. Globally, teacher quality has been shown by several studies as a key factor of student learning. In this vein, the knowledge

level of teachers on subjects has been shown to be significantly and consistently related to students' achievement level (Hanushek, & Rivkin, 2006).

Snook, (2012) conducted a study on primary school education data that pupils were only taught by a single teacher particularly who was not experienced in a particular subject area and the pupils did not have the privilege to benefit from any other teachers. In addition, a study assessing grades 2 to 6 teacher effectiveness from two school districts in New Jersey from 1989/90 to 2000/01, teacher know-how was depicted as the only significant determinant of pupil performance on mathematics and reading exam results. It however could not identify any noticeable teacher characteristics to have significant effects on pupil's performance in the primary school (Rockoff, 2004). Ell (2011) in his study stated that New Zealand primary school teachers are generalists who are expected to teach a broad range of core curriculum areas with competence and effectiveness, supported by a firm grounding in subject-based knowledge and pedagogy. But many teachers may still find themselves teaching subjects in which they may have received very limited training or personal experience. Internationally, this situation seems to apply in primary education.

Similarly, generalist teachers have ways in which they identify themselves as teachers in their classrooms and this 'lens' not only influences how teachers perceive themselves, but also determines their subsequent actions (Wiggins, 2001). Furthermore and Wiggins (2008) found that whilst generalist teachers demonstrated innovative and student-centered learning activities when teaching other subjects, when teaching music they adopted a completely different, "prima donna" approach (p. 14) rather than the usual democratic one. Such an observation suggests that the way teachers view themselves as individuals, or as teachers in a given context, can dramatically influence their subsequent approaches. The concept of self-identity in the professional development of teachers is explored throughout pre-service education, as individuals experience the transition from student to teacher identity (Hargreaves, Purves, Welch & Marshall, 2007; Joseph & Heading, 2010). The view of oneself as an individual and more specifically, as a teacher, is dynamic and ever-changing, dependent on the exposure to reflective and collaborative experiences (Hargreaves, Miell & Macdonald, 2002).

Few studies have attempted to examine the relationship between personal school experiences in PE of non-specialist pre-service teachers and their perceptions of PE. In a study of British

primary pre-service teachers, Carney and Chedzoy (1998) reported that subjects with negative prior experiences held such strong beliefs about their abilities that it affected their learning at university. One particular student, despite a positive experience in gymnastics at university, rejected what he had learned and still perceived gymnastics as threatening as a result of a negative experience in gymnastics at school. The researchers concluded, “if a student had an interest in an area and had positive prior experiences of an activity, he or she was more likely to be committed to that area” (p.32). Furthermore, some indication of an association was provided qualitatively by Chedzoy (2000).

In other contexts it has been argued that the generalist primary teacher might be more appropriately employed as an ‘expert’ deliverer of prioritized key learning areas such as literacy, numeracy and science. In his review into improving Literacy, Numeracy and Science Learning in Queensland, Australia, Masters (2009) claimed that “ideally, every primary school teacher would be an expert teacher of literacy, numeracy and science”, thus explicitly prioritising the development of teacher competencies in some subject areas over others. This review further recommended that teachers be offered the opportunity to develop specialised subject knowledge and also advocated the employment of specialist teachers. Williams (2009) further articulated this vision by suggesting that primary schools would emulate the practice of high schools, forming curriculum departments with specialist teachers, whereby the specialist teacher “would hone their knowledge by teaching across year levels, and by delivering the same lessons to numerous classes within the same year level.” Williams further claimed that “curriculum and learning objectives would become truly standardised as specialists not only deliver deep knowledge but also uniformly plan and evaluate lessons”. Support for this position was found in an OFSTED (2009) survey which reported that when teachers “were less secure about aspects of a lesson which required subject-specific knowledge” they were unable to provide students with opportunities for deep learning. Such discourses represent a shift from the ideologically valued position of the subject generalist to one which appears to value the ‘deep knowledge’ of the subject specialist.

2.4. Selected Studies on Specialist Teachers

An American researcher Glaser (2011) views subject specialisation as a model to reach every pupil with excellent teachers. This is done by allowing teachers to teach their best subjects,

whilst others cover other duties which may be measured of lesser significance in the improvement of the pupil. However, these two scenarios have brought conflict within teachers in Zimbabwe because there is no clear criterion on who takes the core subjects and who takes the lesser subjects in Zimbabwean primary schools. In any cases there would be very few teachers who would be willing to teach subjects that are considered of lesser importance. Therefore, one can tell that this arrangement may have a negative impact on organisational relations. However, a Kenyan researcher (2008) explains that subject specialisation for a teacher is expected to provide a strong subject-matter in a particular subject. On the other hand, subject specialist brings a high level of subject knowledge to their teaching.

The first official endorsement of more subject specialist teaching in primary schools is found in 1978 in Primary Education in England through a Survey by Her Majesty's Inspectors of Schools, (DES, 1978). This pre-dates the Education Reform Act (ERA) of 1988 by ten years. However, it was this act, with its introduction of a National Curriculum in England and Wales, which provoked further discussion of the deployment of subject specialists (Campbell, 1992) which resulted from ERA when that the teacher was faced with teaching 'nine or ten National Curriculum subjects. To differentiate teaching accordingly, and to cover the detailed curriculum specifications embodied in the attainment targets for each subject and level, Campbell proposed that a solution to this 'nightmare' was an increase in teaching by specialist teachers. By the time that Campbell coined his memorable phrase (teaching by specialist teachers); the idea of increased deployment of subject specialists had already been officially aired. Alexander et al, 1992, introduced the classification of primary teachers' roles as 'generalist class teacher', 'generalist / consultant', 'semi specialist' and 'specialist'. It recognised that the National Curriculum made great demands on the subject knowledge of teachers. While it did not recommend anyone model, it clearly implied that greater attention needed to be given to subject specialism's than had been the case previously. Almost immediately teacher education institutions in England began to prepare students as subject' consultants' (Edwards, 1992). The discussion paper provoked both responses (e.g. Thomas, 1992; Watkinson, 1992) and further exposition of the ideas contained in it (Richards, 1994).

The three OFSTED reports of 1993, 1994 and 1997) made it clear that using subject specialists in some way or other is now the 'official' practice which primary schools in England are expected to adopt. There is very little analysis of the problem and the proposed solution, and no

independent research evidence to point to the relative effectiveness of generic class teachers and subject specialists. The subject-based National Curriculum was not to be argued with (Ball, 1995) and the problems which stemmed from it were to be solved by following further the logic of a subject based curriculum. In September 1998 the Universities Council for the Education of Teachers (UCET) published their occasional paper on Subject Specialists -Primary Schools (Thornton, 1998) which sets out to ‘give an insight into the nature of subject specialism’s in primary schools; the way in which the concept has developed over time; the ways in which it is understood and interpreted by key players and the educational arguments for and against its adoption.

The 1994 Revised National Policy on Education for Botswana proposed that the society of Botswana needs specialist subject teachers who are competent, knowledgeable and skilled to prepare learners who are educated and informed who would face 21st century challenges without hesitation. ‘Subject specialist’ teaching has long featured in primary education in many African countries more specially Namibia and also in some European countries. The practice tended to be in the form of the specialist teacher of art, music or physical education taking a class for a period or so each week to supplement the teaching of the generic class teacher, who was expected to cover all the ‘core’ subjects of the curriculum. These exceptions were always in areas where, it was assumed, there was some innate ‘talent’ involved that some teachers could not reasonably be expected to possess. Teachers themselves have been highly supportive of the assistance they receive from these types of specialist (Planel et al: 1998).

With the case of Botswana engaging specialist teachers depended on the discretion by the school head in quest for better results and it was termed ‘semi specialisation’. The Revised National Policy on Education of 1994; REC.24 [paragraph; 4.8.36], on teacher management and teacher development, points out that: “from standard four onwards pupils should gradually be introduced to teaching by specialists teachers,” (Republic of Botswana 1994:20).The Revised National Policy on Education gives priority to universal access to basic education, equity and quality education. As a way of improving quality, Recommendation 24 (c) of the RNPE recommended that teaching by specialist teachers be gradually introduced from standard four in the quest for quality.

In line with the recommendation, the Ministry of Education decided to pilot teaching by specialist teachers from standard four to standard six. The pilot is based on the premises that a large number of teachers (63%) are certificate holders who have not specialised in any area of the curriculum while 37% are Diploma and Degree holders (Statistics and returns –Ministry of Education). To kick start the implementation, the Department did appoint a committee of 14 members comprised of Inspectors, Heads of Schools, Primary School Management Advisors, School Heads representatives and Regional Education Officers to work on the logistics and modalities of implementing the pilot project.

Since specialisation is a new development in Botswana's primary schools, it has been decided to introduce it gradually. Therefore teaching by specialisation would be done within streams (i.e. stream of teachers sharing subjects). However, in schools where there is one stream for each standard, teachers would teach across, for instance a standard four teacher teaching some subjects in standard four and five and vice versa.

The National Primary School heads Conference, Regional Education Officers; Principal Education Officers (Management and Inspectorate) have been informed about the pilot and advised to mobilize piloting schools. Still to be consulted are: Teacher organisations; Teacher training and development; Parents Teachers Associations (PTAs); Local authorities including Education Secretaries and School to be involved in the pilot.

Monitoring was intensified since the project started. A monitoring tool was developed. School Heads, PEO IIs (Inspectorate and Management) would monitor the project. The committee would also carry out some school visits to get the feel of how the pilot is carried out. The Standard Four Attainment Tests and the PSLE would be used to evaluate the project. Therefore the regional collation of Standard Four Attainment Tests would be prepared and analysed thoroughly and submitted to the Department. Inspectoral areas will also use their common inspectoral tests to evaluate the performance. Reports from schools, and PEO IIs would be used as well. Meetings would also be used for evaluating the pilot project as well as any Research submission from the University of Botswana.

In Zambia, subject specialisation has been practiced mainly in secondary schools. At primary school, teachers have been generalists. The introduction of subject specialisation at primary school required authorisation from the Ministry of General Education which is the organ of the

government responsible. Such change could increase the wide range of knowledge and skills as teachers focus on one or two subjects and this improves quality of education and efficiency in education production as each teacher can concentrate on what he or she is good at (Basheka, 2009).

However, research conducted in Zambia by Chaaban (2011), reviews that specialization in subjects of greatest proficiency would result in pupils' good performance in school work. He argued that lack of teachers' specialisation in a particular subject result in pupils poor performance because most of the time, teachers do not prepare enough as they should be reason being that they are caught with a lot of subjects to go through and this result in giving pupils unnecessary information. On the other hand, Basheka (2009) also explains that generalistaion gets to know the pupils very well and can maintain a proper overview of the whole educational experience of the pupils, thus ensuring coherence and balance.

Subject specialisation is therefore a new development in Zambian Primary Schools. Though subject specialisation is good and justified, it was dormant until 5th April 2019 when the permanent secretary for ministry of general education in Zambia in his letter informed all the provincial education officers, all district education board secretaries and all head teachers that in view of the re-occurrence of poor learning out comes over the years at primary especially in numeracy and literacy and the need for a strong foundation for learners, the ministry decided to introduce a system of teacher specialisation at primary school level. He further informed the concerned supervisors that the ministry is aware that at primary school, teachers are trained to teach all the subject areas. However, headteachers are required to implement this policy direction based on the identified teacher strengths and competences. This pronouncement was made without the involvement of headteachers and teachers because it was seen as an integral part of quality learning and teaching in various subjects and disciplines. It was hoped that this measure would supplement other measures for improved learner performance at primary school level when staffing levels are good and when teachers are well qualified in various subject areas which can help them deliver the lessons with vast knowledge.

2.5 Literature on Specialisation Reforms

The education reform act of 1988 introduced a new compulsory subject of technology, but there were insufficient funds to equip all schools to teach the subject. A first attempt at developing

centres of excellence, the city technology college programme between 1988 and 1993, had produced only 15 schools. In 1994, the conservative government at the urging of Sir Cyril Taylor designated 35 grant maintained and voluntary aided schools as technology colleges. The schools were required to arrange private sponsorship of £100,000 and would then receive a matching government capital grant and increased recurrent funding. The following year the programme was opened to all maintained schools and specialism in languages was added. Specialism in arts and sport were added in 1996.

As specialism implied diversity of schools, it was opposed by many supporters of comprehensive schools, including many in the labour party. Nevertheless, in 1997 the new labour government also encouraged by Sir Cyril Taylor adopted the embryonic programme and the number of specialist schools continued to grow. The school standards and framework act 1998 made it possible for specialist schools to select up to 10% of their intake on aptitude in the existing specialisms in sport, the arts, modern languages and technology though new selection for aptitude in technology was prohibited in 2008. However few have taken up this option.

The 2001 white paper schools achieving success envisaged expansion of the programme to 50% of secondary schools by 2005 and introduced new specialisms in business and enterprise, engineering, mathematics and computing and science. The emphasis was shifting from centres of excellence to means of driving up standards in most schools. The required amount of private sponsorship was halved and could be made up of goods and services in lieu of cash. Software donations had been ineligible due to the difficulty in evaluating the true value of something that has no manufacturing cost and can simply be given away as a form of collateral but this changed when Oracle and then Microsoft were allowed to sponsor the programme with in kind donations. In 2002 the government introduced the partnership fund founded at £3 million per annum to make up the shortfall for schools that were unable to raise the required £50,000 of private sponsorship. Specialisms in humanities and music were added in 2004. By 2008 approximately 90% of maintained secondary schools had become specialist schools.

Extension of the specialist programme to primary schools is being trialled at 34 schools in England, starting in 2007. The specialisms involved in the pilot are arts, music, languages, science and physical education. A specialist schools programme has been trialled by the

department of education of Northern Ireland from 2006 with 44 schools being awarded the status by September 2009.

To apply for specialist school status, a school must demonstrate reasonable standards of achievement plan with quantified targets related to learning outcomes. The school must raise £50,000 in private sector sponsorship. Private sector sponsorship includes charitable trusts, internal fund raising and donations from private companies. Specialist schools must still meet the full requirements of the English national curriculum, so the specialism is seen as adding value to the existing statutory provision rather than being a radical departure from it. The important aspect in the eyes of the government is the focus that the specialism provides for providing leadership in the quest for whole school improvement.

Additionally, the Report of the National Commission on Education (Republic of Botswana: 1993), otherwise known as the Kedikilwe Report, and the Revised National Policy on Education of 1994, made quite strong arguments against very strict compartmentalization of subjects. Tabulawa (Gazette paper: 18/03/2008) urges that; “subject specialisation and compactalisation of subject should be avoided and every effort should be made to establish linkages between the subjects in a holistic way” (p.172). The argument was clear as the move has been made to alter the curriculum in fundamental way, especially in the direction of integration. The Ministry of Education introduced specialised teaching in the primary level.

Further, the 1993 National Commission on education went around the country collecting views from the general public on education issues. This culminated to the Report of the National Commission on Education (1993). Teachers and the general public were concerned about the quality of teaching and learning. This concern emanated from unsatisfactory pass rate in Primary School Leaving Examinations which customers and stake holders had to judge performance of Botswana primary schools.

For this reason, one section of the report reads, “One factor that both teachers and the general public considered to affect the quality of teaching and learning at primary level was the generalist teacher”. According to the report this issue generated two views. One view favored specialization in teachers ‘areas of greatest proficiency. The proponents of this view argued that this would promote the quality of teaching in critical areas like mathematics, Science and Practical subjects. This appeared to enjoy the majority of the general public.

The second view opposed to specialization and favored generalist teaching. The arguments that supported this view were that specialization at primary level could harm socialization and progress of learners. They submitted that primary school pupils needed to know and identify with their teachers and who in turn should ensure that they progress through the curriculum. Therefore in coming up with recommendation 24 ©, the commissioners recommended that teachers be allowed to specialize in subjects of their greatest proficiency and from the second view, the commissioners considered the idea of pupils knowing and identifying with teachers.

It would be recalled that the report of the National Commission on Education (1993) gave birth to the white paper document referred to as the Revised National Policy on Education of 1994. The views raised by the general public with regard to specialisation were captured in recommendation 24(c) of this policy document and reads "...from standard four onwards pupils should gradually be introduced to teaching by specialist teachers." The recommendation approved generalist teaching from standard one to three and teaching by specialists from standard four onwards.

As the custodian of primary education, the Department of primary education took charge with the portfolio responsibility to implement this policy recommendation. The department adopted the recommendation as one of its initiatives for improving quality of education in primary schools. The department of primary education as a department was charged with the responsibility of quality assurance in primary schools, concurs with the move that subject specialization be introduced in primary schools. The department is convinced that if teachers specialize in their subjects of greatest proficiency, there was a high probability of improving the quality of teaching and learning. Based on this reasoning the Department of Primary Education decided to take up the recommendation for implementation. The department then deliberately came up with implementations of subjects' specialization as one of its initiatives under the objective, "achieve quality of pre primary and primary education".

This new policy of 1994 on Botswana primary education suggested the responsibility for teachers to abandon teaching different subjects. One teacher would no longer be responsible for teaching all subjects. The teachers, generally three in number, share two classes. One teacher is responsible for the humanities, the second for mathematics and sciences, and the third for social

sciences religious and moral education inclusive. A specialist teacher also comes in for foreign languages, creative and performing arts, (Millennium goals, 2000).

2.6 Gaps in Literature

In this literature review I explored what the literature says about the benefits, challenges and implications on teacher specialisation at primary. Many authors have laboured much and acknowledged on the benefits and challenges of subject specialisation at primary. However, despite the many scholars, current studies on challenges and benefits of subject specialisation do not bring out both the theoretical and empirical argument about the two themes and no one has written on the implications of subject specialisation basing on subject sharing, pupil performance, the policy and regulation guiding subject specialization and the cost of re-training teachers. It is for this reason that this study intends to establish and brings out both the theoretical and empirical argument about the two themes. It was my hope to provide better solutions on the benefits, challenges and implications on specialist teaching and pupil performance in primary schools. Additionally, most studies are relatively small scale and suggestive rather than conclusive.

2.7 Summary

This chapter addressed issues relate to subject specialisation teaching at primary. It started by conceptualising the meaning of subject specialisation at primary then proceeded to look at studies on specialisation, studies on generalist teachers, selected studies on specialist teachers, literature on specialisation reforms and ended by providing insights on the gaps in literature.

CHAPTER THREE: METHODOLOGY

3.0. Overview

Research methodology is the specific science of research that followed to accomplish predetermined research. Hence, all specific methods used in accomplishing this study are presented in this chapter. This section describes the research design, target population, population sample, study location, sampling procedures, methods of data collection and data analysis.

This chapter further discusses the research design and methodology employed to explore teacher specialization to improve pupil performance at primary in selected schools. Research methods are ways in which the researcher collects and analyses data. They are systematic and purposeful. In a broader context, the term methodology refers to a design whereby the researcher selects data collection and analysis procedures to investigate a specific research problem (McMillan & Schumacher, 2010). The chapter also outlines of data collection techniques, data analysis procedures, trustworthiness of the research, as well as ethical considerations during the study.

3.1. Study Location

The place where data is collected is referred to as a research site (Creswell, 2013). In this case, my research was conducted in Kaputa district. Kaputa district is basically found in Northern Province and it lies within the middle veld of Zambia whose altitude above sea level is between 900 meters and 1200 meters. The annual rainfall in Kaputa is between 800mm and 1000mm. The district is on a plateau with moderately high rainfall whose mean annual value is 815.1mm (CSO, 2015).

There are quite a number of primary schools in Kaputa district. Most of them run from grade one to nine. The locations of the study areas are Kaputa primary school, Mantapala primary school and Kafuma primary and all these schools are situated in Kaputa district of Northern Province of Zambia. The two chosen primary schools run from Grade one (1) to nine (9) while the other one runs from grade one (1) to seven (7). The primary schools are conveniently selected. They were selected on the basis of them implementing specialisation at primary school.

3.2. Research Design

Creswell (2012), states that a research design is the specific procedure employed in carrying out a research process. It involves the collection of data, data analysis, and report writing. Chola (2016:31) also contends that “a research design is a framework in the whole process of research aimed at pointing the researcher in the direction of that research.” Therefore, a research design is a systematic plan or procedure which would lead a researcher to successful study of a phenomenon. It is a blueprint that highlights the methods the researcher will use in conducting the research and arrive at the intended results. A research design further describes how the study is conducted. It summarises the procedures for conducting the study, including when, from whom, and under what conditions the data were obtained (McMillan & Schumacher, 2006). The study design used was narrative case study design because it involved description of variables from the social actor perspective. A case study is defined as a particular instance or problem that requires investigation (Merrriam, 1998). In Yin ;(2009) a case study is defined as “an empirical inquiry about a contemporary phenomenon”. The study was a qualitative and it adopted a qualitative research approach. Qualitative research, according to McMillan and Schumacher (2006), is an inquiry in which researchers collect data in face to face situations by interacting with selected persons in their settings (e.g. schools). The qualitative research method describes and analyses people’s individual and collective social actions, beliefs, thoughts and perceptions.

The qualitative research approach is the most relevant design for this study due to the fact that I personally collected data in the field at the site where participants experience the issue or problem under study (i.e. schools). It also allows data collection through multiple sources (Creswell, 2009).The methodology has the advantages of gathering the views and opinions of teachers and school headteachers from the three primary schools that had introduced subject specialisation.

3.3. Target Population

Best and Kahn, (2006) define population as, “a group of individuals with at least one common characteristic which distinguishes that group from other individuals.” However, a target population is the list or record of individuals in a population that a researcher actually obtains for the study (Creswell (2012). It is simply a specific group to whom a researcher plans to generalize the findings. Study population could simply be understood as a special group of participants

carefully selected to take part in the research. A population is further defined as a group of elements or cases, whether individuals, objects or events, that conform to specific criteria and to which we intend to generalize the results of the research (McMillan & Schumacher, 2006). According to Gay (1992) the population is the group of interest to the researcher, the group to which the researcher would like the results of the study to be generalisable. De vos (1998) asserts that population refers to individuals in the universe who **possess** specific characteristics, or the total set from which the individuals or units of the study are chosen. Kaputa district has a population of forty schools and these are primary and secondary schools. In these schools there are a total of 40 school managers and 257 classroom teachers. The targeted population of teachers and headteachers are selected on the basis of them being implementing subject specialisation in schools.

3.4. Population Sample

A sample is a group of subjects or participants from whom the data is collected (McMillan & Schumacher, 2006). The sample of the study consisted of Fifteen (15) was selected from a population with the intention of investigating on the benefits and challenges towards subject specialisation at primary. Purposive sampling was used to select respondents. The method was used because in this type of sampling, the sampled schools were believed to be more fit than other schools because of conducting specialist teaching. The advantage of this method was that the researcher was allowed to use the respondents who had the required information regarding the objectives of the study. In this case, the researcher had respondents who were competent and with experience in the subject of study.

3.5. Inclusion and Exclusion Criteria

Headteachers and primary school Teachers on the basis of them handling subject specialisation at primary and they had first-hand experience on teaching by subject specialisation at primary.

All Primary schoolteachers who were not coming from Kaputa, Mantapala and Kafuma primary schools were excluded on the fact that they are not practicing teaching by subject specialisation during the time of my research.

3.6. Sampling Procedures

Sampling is the process of selecting a number of individuals for a study in such a way that the individuals represent the larger group from which they were selected (Gay, 1992). According to Gay (1992), the purpose of sampling is to use a sample to gain information about a population. For the purpose of this study, I used purposive sampling. According to McMillan and Schumacher (2006), purposive sampling involves selecting information-rich cases for in-depth study when one wants to understand something about those cases without needing or desiring to generalise to all such cases. Purposeful sampling is done to increase the utility of information obtained from a small sample. It requires that information be obtained about variations among the sub-units before the sample is chosen. In this study, I purposefully sampled schools that offer subject specialization at primary classes. Teachers who teach with specialisation classes were also purposefully sampled. These are teachers who had first-hand experiences of teaching within subject specialisation contexts and were likely to answer the research questions of the study. Headteachers were also sampled purposefully. These are the headteachers of the three sampled schools with specialisation classes.

A total of three (3) Primary Schools which are in rural areas were sampled. The purposive sampling technique enabled the researcher to pick individuals with the vital information to ensure relevant data would be collected. The sampling used were a sample from the public schools selected to represent other government institutions. The study populace was for fifteen(15) teachers. Since the study was focused on the already selected schools by the researcher, a purposive sampling of teachers was conducted for both sexes.

3.7 Data Collection Instruments

Research involves gathering information about the variables in the study. The researcher chooses from a wide range of techniques and approaches to collect data from the subjects. Each method has advantages and disadvantages, and the specific approach adopted should be the best one for answering the research question (McMillan & Schumacher, 2006). The methods of data collection that I used comprise interview schedule and open ended questionnaire. Through interviews, I was able to explore participants' responses and examine their attitudes, feelings and values more easily. According to Creswell (2009), interviews allow the researcher control over

the line of questioning. Creswell (2009) also indicates that, through questionnaire, the researcher has a series of questions and other prompts for the purpose of gathering information from respondents. The information pertaining to benefits and challenges of teachers towards subject specialisation at primary was collected using interview method and a questionnaire.

3.7.1 Interviews

Merriam (1999:71) describes interviews as a ‘conversation with a purpose’ where the interviewer elicits information from the participants. This type of information generally encompasses participants’ opinions, feelings, experiences, meanings and intentions during the interview. In qualitative interviews, according to Creswell (2009), the researcher conducts face-to-face interviews with participants, interviews participants telephonically, or engages in focus group interviews. He further indicates that these interviews involve unstructured and generally open-ended questions that are few in number and intended to elicit views and opinions from the participants.

In this study, I employed focus group interviews and face-to-face individual interviews. McMillan and Schumacher (2006) argue that focus group interview is used to obtain better understanding of a problem, concern or idea, and that by creating a social environment in which group members are stimulated by one another’s perceptions and ideas, the researcher can increase the quality and richness of data through a more efficient strategy than through one on one interview. I conducted semi-structured interviews with teachers with specialisation in three (3) schools where there were subject specialization at primary. Each group consisted of three (3) participants.

To create a conversational tone during interview, I used semi-structured question. Semi-structured questions, according to McMillan and Schumacher (2006), have no choices from which the respondent selects an answer. Rather, the question is phrased to allow for individual responses. A semi structured question is an open-ended question, which, however, but is fairly specific in its intent. In order to make follow-ups and ask individuals to explain their ideas in more detail or to elaborate on what they have said, I probed between questions to give respondents time to think before they responded. Because primary data of qualitative interviews are verbatim accounts of what transpires in the interview sessions (McMillan & Schumacher,

2006), a tape recorder was used to ensure completeness of the verbal interaction and to provide material for reliability checks.

3.7.2 Open Ended Questionnaire

An open ended questionnaire is another method or technique the researcher used to collect data in the field. It is a research instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents. The researcher opted to use this kind of an instrument because it protected the privacy of the participants.

3.8 Data Collection Procedures

The researcher carried out the interviews with all the sampled respondents to be interviewed. The responses were recorded using a tape recorder and a note book. The interviews and questionnaires were used to obtain data for all the research questions. The other respondents were given time to fill in open questionnaires and returned them to the researcher.

3.9 Data Analysis

Qualitative data is analysed primarily in an inductive manner which involves organising data into categories and identifying patterns among the categories (McMillan & Schumacher, 2006). According to Creswell (2009), the process of data analysis involves preparing data for analysis, conducting different analysis, moving deeper and deeper into understanding the data, representing the data, and interpreting the larger meaning of the data. According to Creswell (2009), researchers must use the following steps to analyse data from the specific to the general: Organizing and preparing data for analysis. This involves transcribing interviews, typing field notes and arranging the data into different types depending on the sources of information;

Reading through all data to obtain a general sense of the information and to reflect on its overall meaning; coding the data. Coding is the process of organising the material into chunks or segments of text before bringing meaning to information; Using the coding process to generate a description of the setting or people, as well as categories or themes for analysis; Interrelating themes to convey the findings of the analysis; and Interpreting the meaning of the data.

In this study, data was collected by using open ended questionnaires and interview schedule. The data that was obtained through interview schedule was analyzed by using content analysis to establish some themes (Thematic analysis). According to Cohen et al; (2007) content analysis is a research technique for making replicable and valid inferences from the meaningful matter to the contexts of their use.

The researcher carefully went through the responses given by the respondents to each question in order to understand the meaning that they communicated. From these responses, the researcher developed broad themes that reflected these meanings. The researcher went through the transcripts of the interviews and questionnaires so as to classify the responses under the different themes. The researcher integrated them into the text of the report by counting how frequently a theme occurred.

3.10 Credibility and Trustworthiness of the Research

Trustworthiness, also called validity in qualitative designs, is the degree to which the interpretations have mutual meaning between the participants and the researcher (McMillan & Schumacher, 2006). According to Creswell (2009), validity is one of the strengths of qualitative research, and it is based on determining whether the findings are accurate from the standpoint of the researcher, the participants or the readers of an account.

Issues of ensuring data trustworthiness in research have become very significant and a source of concern of many researchers. The trustworthiness of the research findings depends on the strategies a researcher employs as ways of ensuring accuracy and credibility. According to Joppe (2000) the extent to which results are consistent over time and an accurate representation of the total population under study is referred to as reliability or trustworthiness and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable.

Credibility or Trustworthiness of the research was ensured through the application of consistent checks. For qualitative data, independent codes were used to sample raw data and categories were created to assess consistency. Data from respondents was also used to appraise the interpretation and explanation pulled from the data. The targeting of teachers and headteachers from different schools who were implementing specialisation, who after being subjected to the

same interview, gave the same responses clearly indicated the credibility and trustworthiness of the research.

3.11 Ethical Considerations

McMillan and Schumacher (2006) argue that ethics generally deal with beliefs about what is right or wrong, proper or improper, good or bad. They further argue that the primary investigator of the study is responsible for the ethical standards to which the study should be adhered to. Further, there is much increased and still growing concern for ethical issues in social research today, stimulated by the growth in the use of qualitative methods (punch, 2006). Realizing that there were numerous stakeholders in my research ranging from my study population, supervisor, examiners, interviewers to be engaged and The University of Zambia, my research report took into consideration the following ethical issues; Informed consent was obtained from all the participants, the people were informed on the criteria used in selecting them and why they were selected in this regard and confidentiality and anonymity are essential ethical issues of any research. Clearance was obtained from The University of Zambia as well.

3.12 Summary

This chapter discussed about the research design and methodology I used to collect data. This was followed by a discussion of the population, sampling procedures, sample, data collection techniques, data collection procedures and data analysis techniques. Trustworthiness and ethical considerations were also discussed.

CHAPTER FOUR: PRESENTATION OF RESULTS AND ANALYSIS

4.0 Overview

Chapter Four presents the findings of the study under investigation. Data presented in Chapter Four of this study was obtained using various research instruments that included interviews and open ended questionnaires. The data was also presented in line with the generated themes which were in line with the research questions of the study. The research questions of the study were: what are the benefits experienced by subject specialisation teachers at primary in selected schools in Kaputa district; what are the challenges experienced by subject specialization teachers at primary in selected schools in Kaputa district; what are the short and long term implications of teacher specialisation in kaputa district and what strategies can be used to make teaching and learning successful within the context of subject specialisaion at primary in selected schools in Kaputa district. The audio-recorded interviews were fully transcribed with names anonymised using pseudonyms and codes. Interviews were simultaneously collected and analyzed manually using thematic analysis until theoretical saturation was reached.

The chapter also descriptively presents, as much as possible, the actual words said by respondents (verbatim), while other words have been paraphrased.

4.1 Biographical Information of Respondents

Table 1.0 below shows the sex, age group, years of experience and profession qualification of respondent. Most of the respondents (80 percent) were female while (20 percent) were male. In terms of age groups, (53 percent) of the respondents were in the age group 30-39, (27 percent) of the respondents were in the group of 20-29 and (20 percent) were in the group of 40-49. In terms of years of experience, (40 percent) of the respondents had between 6-10 years of experience. For those with 0-5 and 11-15 years of experience, they both accounted for slightly above a quarter (27 percent) each while those with between 16-20 years only accounted for (6 percent) of the respondents. With regards to professional qualification, majority of the teachers about (61 percent) respondents had a primary Teachers diploma. One fifth had bachelor of education (PRI) while slightly above one tenth (13 percent) had Bachelor of Education (SEC) and only less than one tenth (6 percent) had a primary Teachers certificates.

Table 1: Shows Demographic Data of Participants

BACKGROUND CHARACTERISTICS	FREQUENCY	PERCENT
SEX		
Male	3	20
Female	12	80
AGE GROUP		
20-29	4	27
30-39	8	53
40-49	3	20
YEARS OF EXPERIENCE		
0-5	4	27
6-10	6	40
11-15	4	37
16-20	1	6
PROFESSION QUALIFICATION		
Primary TRS Certificate	1	6
Primary TRS Diploma	9	61
Bachelor Of Education (PRI)	3	20
Bachelor Of Education (Sec)	2	13
Total	15	100

The study presents the bio-data of the three school headteachers and twelve primary school teachers who responded to the open-ended questionnaires and interviews. The second section of data presentation and discussion focused on the responses from the school headteachers and teachers who introduced subject specialisation teaching. The three school headteachers in the

study above were old, mature and experienced enough in educational management. There had been in the teaching field for a good number of years with vast experience in the allocation of classes, distribution of resources and in educational management and administration in general. On qualifications, ten teachers who responded to the study, about (60 percent) of the teachers had a Diploma in Education as the highest qualification, (7 percent) had a Certificate in Education as the highest qualification (20 percent) had a Bachelor of Education (primary) as their highest qualification and (13 percent) had a Bachelor of Education (secondary). Qualifications are very important in education as they define one's level of bias and specialisation.

4.2 Findings on Benefits of Teacher Specialisation

The first objective of the study was to establish the benefits experienced by subject specialisation teachers at primary in selected schools in Kaputa District. The findings are presented in themes and verbatim. The results showed that various themes emerged from the interviews.

Fifteen (15) participants were interviewed to establish the benefits experienced by subject specialization teachers at primary. 12 out of 15(80%) participants reported that subject specialization brings a high level of knowledge. Subject knowledge has a very important role to play because high quality teaching rests on teachers understanding the subjects they are teaching by knowing the structure and sequencing of concepts, developing factual knowledge essential to each subject and guiding their pupils into the different ways of knowing. It is also clear that when there is a lack of subject expertise or it is unevenly spread across teaching and pupil's exam results are risk. Thus, the issue of high level of subject knowledge as a benefit of subject specialisation programme emerged as a theme in this study.

Some of the views given by the participants for example, (P2) included the following as indicated in transcribed verbatim:

Teachers on a high level of subject knowledge as a benefit of subject specialisation outline that they are much more interested in the quality of teaching and for children to be inspired by teachers who love their subjects than in any specific curriculum structure.

Another participant (P6) echoed similar sentiments and stated that with focus on level of subject knowledge, significant learning can be achieved:

Where children are passionate about subjects they study because teachers are also passionate and this produces a real desire for learning that should be at the heart of any school's provision and needs relentless focus on the part of everyone from senior team to subject leaders.

Another theme that emerged from the findings was the issue of teacher confidence. In view of subject specialisation, 15 teachers interviewed, 13 out of 15 (87%) were in support because they felt that specialisation will bring about confidence and mastering of the subject as teachers will be teaching the same subject all the time and will gain experience overtime.

One of the class teachers (P2) commented that:

A confident teacher would have a positive impact on his or her pupils' achievement, attitude, affective and even socio-emotional growth. To improve the learning experience of slow learners enhancing teacher's beliefs in their teaching competence may be a viable approach.

Another participant (P4) echoed similar sentiments and commented that:

Teachers deliver lessons with much confidence and the master of subject content is very high. They understand pupils better and knew more pupils psychological and cognitive needs and they are more capable of employing a variety of strategies to retain attention of low performing pupils in class.

Yet another participant (P11) stated that:

For more confidence teachers, you could see the difference in that the majority of the pupils in class listened to teachers and pupils interact with a higher level of engagement.

Another theme that emerged from the findings was, 'Specialised Teachers Show Greater Enthusiasm in Teaching'. All the fifteen (15) participants revealed that Subject specialization helps teachers focus on what they are most capable of instead of spending so much time learning many subjects and not being able to master one or be an expert in a particular one. It also gives the teachers a sense of professionalism by increasing their efficiency and effectiveness.

One of the participants (P1) stated that:

Specialised teachers show greater enthusiasm as they value their subject more and they spend years learning and deepening their knowledge in a field of study.

Another theme that emerged from the findings was, “Efficiency in Production”. All the fifteen (15) participants revealed that subject specialization can also bring about efficiency and productivity in the delivery of lessons to pupils but only if there is adequate Infrastructure in place:

One of the participants (P6) stated that:

Teachers are able to break each job into smaller tasks that are manageable which contributes to competent delivery of service in education. Teachers are also able to concentrate on what he or she is good at and this really helps teachers to expertise in their area of focus hence is expected to improve efficiency, output and outcome.

A majority of the participants view subject specialisation as a positive way to improve the quality of teaching because there is improved delivery of lessons from the teachers. In view of subject specialization to improve performance, 15 teachers interviewed and 13 out of 15 (87%) were in support that subject specialization can improve pupil performance because teachers have enough time and expertise to prepare lessons and deliver according to the expected levels.

One of the class teachers (P9) commented that:

Teachers with particular knowledge, interest, content and expertise create the best environment for learning. Teachers who major in their subject area are the most reliable predictors of pupils' achievement. Giving teachers the opportunity to teach subjects related to their interest and expertise is definitely reflected on their pupil's performance.

Yet another participant (P11) stated that:

Subject specialization improves pupil performance because it gives the teacher a strong grounding in the area of specialization and such makes the teacher relevant, effective and efficient as the teacher becomes more knowledgeable in the subject area and an expert on subject matter.

Table 2: showing emerging themes

Key words	Near themes	Emerging themes
<ul style="list-style-type: none">• High quality of teaching.• Teachers are passionate.• Gives pupils high desire for learning.• Improves pupil performance.• Improve learning experience of slow learners.• Teachers understand pupils better.• Teachers are able to apply a variety of strategies• Retain attention of slow performing pupils.• Pupils are engaged in a variety of activities.• Increases efficiency in teachers.• Subjects are valued most.• Knowledge is deepen.• Teacher's area able to break each work into smaller tasks.• Teachers have more time to prepare lesson plans.	<ul style="list-style-type: none">• The role of teacher specialisation• Significant of subject knowledge• Impact of teacher confidence on pupils• Teachers to focus on what they are capable of• Gives teachers a sense of professionalism• Increase in production• Teachers become effective and efficient• Teachers become experts	<ul style="list-style-type: none">• Level of subject knowledge• Teacher gains more confidence• Greater enthusiasm in teaching• Ensures efficiency in production.• Improve pupil performance

Clearly, from the above verbatims, near themes analysis were generated from common or key words. The following themes emerged under the benefits of teacher specialization: Level of subject knowledge, Teacher gains more confidence, Greater enthusiasm, Ensures efficiency and improves pupil performance.

4.3 Findings on Challenges of Teacher Specialisation

The second objective of this study was to establish the challenges experienced by subject specialization teachers at primary. The findings showed various themes that emerged from this objective.

Out of the 15 participants, 1 have a primary teachers' certificate, 9 have a primary teachers' diploma certificates, 3 have a bachelors of education (primary) and 2 have a bachelors of education (secondary). All the participants meet the requirement meaning that they are fully qualified to be teachers. However, only 2 of the participants were qualified to teach by specialisation classes during their teacher training. When answering the question on training, most of the participants reported that they were not trained in specialist teaching. Only two of them said that they attended workshops for only two days. One of the participants also reported that the workshop he attended was just a briefing and that they were promised that further workshops will follow. According to this participant, these workshops never took place.

Some of the views given by the participants for example, (P8) included the following as indicated in transcribed verbatim:

I am not trained in specialisaion teaching. I only attended a workshop where we were just briefed about specialisation teaching. We were not told anything in detail. We were promised that there will be other workshops in specialisation teaching but that is not happening. `

Another participant (P6) from Kaputa primary stated that:

I never attended a workshop for specialist teaching and we have never been trained on how specialization teaching works especially when we are teaching.

Views from the participants suggest that specialist teachers are teaching in these classes without relevant knowledge and skills to teach in these classes. The fact that specialist teachers attend the same workshops as generalist teachers implies that these teachers are treated in the same way as generalist teachers. It also implies that these teachers have to adapt their general knowledge

of teaching to their specialist classroom on their own. When asked about the type of training they need, this is what they said: 15 teachers interviewed and 13 out of 15(87%) stated that:

One of the class teachers (P13) commented that:

I think that if the ministry can introduce training in specialist teaching, even though it will still be difficult, maybe things will be better. It will enable us to know how to work in specialisation classes, but now because just as we are with no training, we just make sure that at least learners are engaged with some work.

Yet another participant (P1) stated that:

Yes, we need that because we have just started teaching by specialisation and we don't know anything about it. Maybe if we are trained for two or three months, not two days. Maybe if we are trained for a longer time things would have been much better. We need training in specialisation teaching.

From the above responses, one can deduce that there is need for training in specialization teaching. Teachers are willing to be trained and expect that such training to take place over a period of two to three months. Teachers are of the idea that if they are trained in specialisation teaching, the teaching and learning process in these classes will improve.

Another great theme that emerged from the findings with regard to challenges of teaching by subject specialisation was the issue of absence of continued profession teacher development. In response to this question on teacher development most participants stated that there is nothing they are doing to develop themselves. One teacher mentioned that he is studying on a part time basis, but these studies have nothing to do with specialisation teaching. Therefore, all they do is to make sure that they are teaching.

One of the class teachers (P9) commented that:

There is nothing we do, we don't even meet so that we can share any latest information especially on how we can overcome the challenges that we are encountering in our day today teaching. We just make sure that we are teaching.

Yet another participant (P11) stated that:

We have furthered our studies on distance basis, but it has nothing to do with specialisation teaching. We still have a lot of problems on how to teach through subject specialisation.

These responses suggest that there is no development of any kind for these teachers. Teachers do not know of any strategies to develop competence in specialized teaching. The fact that some of them are studying on distance basis is an indication that they are eager to learn but do not know of how to develop their competence in specialised teaching.

When participants were further asked whether they have knowledge of the subjects they teach, they said that they do not. The following are the participants' responses of the 15 teachers interviewed 12 out of 15(80%) stated that:

One of the class teachers (P14) commented that:

No, we do not have the knowledge of these subjects. We just teach them because we have to. It does not matter as to whether you know the subject or not, you have to take it once you are being allocated by the administrators and learners have to be taught.

Yet another participant (P11) stated that:

We do not, we just struggle with these subjects and it is not good for the learners because in most cases, teachers concentrate on the subject they are comfortable with and neglect the others since it is based on sharing rather than on specialization.

These responses suggest that there is no teacher development of any kind for these teachers and that when subject allocation is done, their knowledge on the subject is not considered since the system at the moment is based on subject sharing. Some of the subjects are neglected as teachers only concentrate on the subjects they are knowledgeable about.

Another great theme that emerged from the findings with regard to challenges of teaching by subject specialisation was the issue of support from the ministry. Lack of support was also raised as one of the challenges experienced by specialised teachers. Participants argued that they do not receive any professional and monetary support from curriculum advisors to teach in by subject

specialisation classes for holding workshops and training of teachers who are already in the teaching system. They further advanced that whenever curriculum advisors visit their schools, they expect to see everything that can give teachers hope to teach by subject specialisation. Fifteen (15) participants were interviewed to establish the challenge experienced by subject specialization teachers at primary in terms of support given to them by curriculum advisors. 12 out of 15(80%) participants reported that they do not receive support in any form from neither the ministry of general education nor curriculum advisors.

One of the class teachers (P14) commented that:

Since we started working here, we have never received any support with regard to teaching by specialization in terms of money to be used for organizing workshops and other trainings especially for teachers who are already in the teaching system. We have never received such support from them financially to hold trainings to be acquainted with relevant knowledge on teaching by subject specialisation. They only want us to work like a normal school.

Another participant (P10) echoed similar sentiments and commented that:

There is no support given in any form. There is no single day when curriculum advisors have shown some understanding that we are a specialised school. You will find that they want lesson plans for all the classes. All these lesson plans have to be there.

Yet another participant (P6) stated that:

It is very much difficult to find yourself working in a primary school with specialised classes. You cannot provide them with your full support because you also don't have time especially when you also have the class to teach. It is just a matter of sitting down with teachers and asks them how things are going.

This confirms that specialised teachers are left to deal with subject specialisation teaching alone. Teachers and headteachers have to find a way of working in these classes by themselves and no fund is attached to this development for conducting workshops and training of teachers who are

already in the teaching system. This implies that there is no coordination between curriculum advisors in terms of support thus professional isolation between the school management and the curriculum advisors.

Further, another great theme that emerged from the findings with regard to challenges of teaching by subject specialisation was the issue of poor classroom management. Participants stated that there is too much noise in their classrooms. Participants stated that there is too much noise in their classrooms especially at primary school level because the pupils take time to settle down when the teacher is switching from one subject to another in the same class as the programme did not allow for spill over into the time for a next lesson while the pupils would not have finished written exercise hence description and noise during change- over. Furthermore, teachers have a lot of books to mark if they are not specialised because they have to switch from Mathematics to English or English to Science.

All the fifteen (15) participants revealed that there is too much noise in the classrooms especially at primary school because pupils take time to settle down when the teacher is switching from one subject to another since the program did not allow for spill over into the time for a next lesson.

One of the participants (P6) stated that:

Another problem is that when you are teaching especially those pupils at lower grades, most pupils are too slow to write the exercise given to them and in most of the time, pupils do not complete the exercise given to them and when the other teacher comes in class, he or she wants to rub off the work which is on the board. That in most of the cases brings noise in classes and it is very difficult to control the situation.

The above response suggests that these teachers struggle with managing their classrooms. Learners are very slow in doing the tasks given to them by respective teachers. Pupils are expected to complete the task without the teacher's supervision and this is difficult for these learners. They often make noise and interfere with the other lesson.

Table 3: showing emerging themes

Key words	Near themes	Emerging themes
<ul style="list-style-type: none"> Teachers were not told anything concerning teaching by specialisation. Teaching without relevant knowledge and skills. It is based on sharing Standards officers do not provide adequate professional support. Poor teaching strategies. Administrators also have their own classes. Creates professional isolation between teachers and curriculum advisers. Pupils take time to settle down. It does not allow spill over into the time for a next lesson. Most pupils are too slow. 	<ul style="list-style-type: none"> Inadequate trainings Inadequate workshops Lack of skills Lack of teacher competency in specialised teaching. Lack of teacher development. Inadequate fund to support specialisation. Monitoring is based on teaching documents. Lack of support from school administrators. Lack of coordination between teachers and curriculum advisers. Too much noise during change over. Workload in terms of marking is very high. 	<ul style="list-style-type: none"> Lack of teachers qualification. Absence of continued professional teacher development. Lack of support. Poor classroom management.

Clearly, from the above verbatims, near themes analysis were generated from common or key words. The following themes emerged under the challenges of teacher specialization: Lack of

teacher qualification, absence of continued profession teacher development, lack of support and poor classroom management.

4.4 Implications of Teacher Specialisation to Improve Pupil Performance

The third objective of this study was to explore the short and long term implications of teacher specialization in Kaputa District as a way of improving performance. The findings showed various themes that emerged from this objective. Through the process of analyzing the themes that emerged from this research study and comparing and contrasting the existing body of literature, various implications were determined.

When asked about subject specialization and pupil performance this is what the participant said: Of 15 teachers interviewed 13 out of 15 (87%) stated that:

One of the class teachers (P15) commented that:

When teachers possess subject-matter knowledge, it directly improves their teaching experiences by elevating their comfort level, and this enhances the students' learning and academic achievement. The familiarity with the content allows teachers to work in their comfort zone with less stress and anxiety.

Another participant (P4) stated that:

Teachers' expertise allows them to have a bigger picture of what they are transferring to the students. They are able to deliberately answer students' deep questions, clarify misconceptions, connect concepts with real life examples, and integrate cross-curricular expectations and thereby give the true performance in different learning areas as different teacher's views pupils differently.

Yet another participant (P1) stated that:

When a teacher is an expert of a subject, he or she shows great interest in teaching it and this gets directly reflected on the students and on the way they perceive the lessons. And when they engage in authentic projects that

reflect real life situations, pupils engage in the learning and become more successful. Hence performance can be improved.

The above responses suggest that most teachers considered subject specialisation as good for Primary Schools. They preferred subject specialisation because it ensured the teachers and make in-depth research on the subject matter and this improved their subject matter knowledge. Subject specialisation ensured different teacher impact on Children's' learning differently thereby motivating the students and improving learning. Teachers attributed improved pass rate at their schools to subject specialization. Subject specialisation is a welcome way to improve teaching at primary school level because it will not only bring out the best of the teachers but also help pupils understand subjects better as each teacher will focus mainly on their specialised subject and ensure they deliver quality lessons to the pupils hence improving pupil performance.

Another theme that emerged from the findings was the policy and regulations guiding subject specialization. (15) Participants stated that the policy and regulation guiding subject specialization should focus not only on teaching aspect but also the teacher education programme that had to produce specialist teachers at primary.

One of the headteacher (P11) commented that:

The introduction of teaching by subject specialization at primary schools is a new policy change in the ministry of general education. However, such change would focus not only on teaching aspect in primary schools but also on teacher education programmes. The government was supposed to consider the role of teacher training colleges in the new paradigm when developing relevant policies and regulations.

Another theme that emerged from the findings was the education cost towards teaching by subject specialization at primary schools.(15) Participants stated that this new development is expensive and it should focus not only on teaching aspect but also the teacher education programme that had to produce specialist teachers at primary schools meaning therefore that the ministry must organize workshops, meetings and re-training of teachers who are already in the teaching system in the new paradigm.

One of the headteacher (P1) commented that:

Though the initiative was a step in the right direction, it has come with no resources or budget attached to it. Pre-service and in-service teacher education programmes do not address the curricular and instructional demands of specialized teaching. Specialization is being implemented in schools by teachers with little experiences. It is based on sharing subjects and teachers are teaching subjects in which they are not specialized. Therefore the government should start deploying teachers to teach subjects in which teachers are well equipped.

Table 4: showing emerging themes

Key words	Near themes	Emerging themes
<ul style="list-style-type: none"> • Improves teaching experiences. • Teachers are familiarise with content. • Teachers are more creative in delivering lessons. • Increase pupil performance. • Improves subject matter knowledge. • Improves pass rate. • Adopt the secondary school training approach • Organising of workshops to retrain in-service teachers. 	<ul style="list-style-type: none"> • Teachers are equipped with subject knowledge • Bring less stress and anxiety amongst specialised teachers. • Clarifications of misconceptions. • Teachers are ensured with in-depth research. • The role of teacher training college. • Training of pre and in-service teachers. 	<ul style="list-style-type: none"> • Subject specialisation and pupil performance • The policy and regulations guiding subject specialisation • Education cost towards teaching by subject specialisation.

Clearly, from the above verbatims, near themes analysis were generated from common or key words. The following themes emerged under the implications of teacher specialisation: Subject specialization and pupil performance, the policy and regulations guiding subject specialization and education cost.

4.5 Findings on Proposed Recommendations That Could Make Teaching and Learning Successful By Subject Specialisation

The fourth objective of this study was to propose how teaching and learning can be successful by subject specialization. The findings showed various themes that emerged under this objective.

One of the themes that emerged under this objective was the issue of continued professional teacher development. Fourteen (14) out of 15 (93%) participants reported that continued professional teacher development must be strengthened. Some of the views given by the participants included the following as indicated in transcribed verbatim:

For example, (P7) stated that:

Strengthening continued profession teacher development gives the teacher the chance to reinforce existing skills as well as learning new skills that were not covered during teacher training. Therefore, specialization is a new development which was not covered at teacher training college and it must be shared in this meeting.

Another participant (P14) commented that:

Continued professional teacher development gives proof of teacher's competence. It helps the teacher to stand out from the rest of other teachers. A teacher can become more competent than the others and also tells that the knowledge is up to date.

Yet, another participant (P6) commented that:

Teachers who have been in the profession for many years are usually reluctant to change their teaching styles. Continued professional teacher development will let teachers to stay in touch with the latest developments in the education sector and help teachers to change their way of teaching.

It is an evidence of competence, career opportunities and exchange of knowledge required to be done into our ministry in order for us to grow professionally.

Another vital theme that emerged was the issue of teacher training programme. Twelve (12) out of 15 (80%) participants stated that specialization teaching should form part of the teacher training programme.

One of the participants (P1) commented that:

Public Teachers colleges should be realigned to train teachers for subject specialization. This will help newly appointed teachers when they are employed in schools with specialized classes.

Another vital theme that emerged was the issue of reviewing our education policy. Thirteen (13) participants stated that the ministry of general education must provide trainings to staff officers such as curriculum advisors to provide close monitoring.

In view of this, one of the participants (11) commented that:

Public To effectively implement specialization, there is need to review our education policy, educating our future so that all teachers in primary schools be trained on subject specialization at Diploma, Degree and Masters Level. Additionally, all primary school certificates must be phased out and those affected are allowed to pursue Diploma or any higher education with relevancy in subject specialization.

The table below shows the summary of the research findings of the study in accordance with the four specific objectives on the basis of the major themes emerged in chapter four.

Table 5: showing emerging themes

Key words	Near themes	Emerging themes
<ul style="list-style-type: none"> • Gives the teacher chance to reinforce existing skills • Gives the teacher 	<ul style="list-style-type: none"> • Strengthening of continued professional teacher development. 	<ul style="list-style-type: none"> • Continued professional teacher development.

<p>chance to learn new skills.</p> <ul style="list-style-type: none"> • Gives proof of teachers competency • Teachers are able to stand from the rest of other teachers. • Help teachers to change their way of teaching. • Specialisation teaching should form part of the teacher training. • All primary school teachers certificate must be phased out. 	<ul style="list-style-type: none"> • Teachers can stay in touch with the latest development in education. • Realigning of public teachers colleges. • Intensive training to curriculum advisers. • Provide close monitoring. 	<ul style="list-style-type: none"> • Teacher training programme • Review of education policy.
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Clearly, from the above verbatims, near themes analysis were generated from common or key words. The following themes emerged under the proposed recommendations that could make teaching and learning successful by subject specialisation: Strengthened continued professional teacher development, realigned teacher training colleges and reviewing of our education policy.

4.5 Summary

Chapter Four as presented findings of the study. The findings of the study were presented according to themes that emerged in line with the specific objectives of the study. The next chapter presents discussion of the findings.

CHAPTER FIVE: DISCUSSION OF FINDINGS

5.0 Overview

The previous chapter presented findings of the study on ‘teacher specialization and pupil performance in primary schools: exploring the short and long term implications’. This chapter discusses the findings of the study based on the research objectives which were: to establish the benefits experienced by subject specialisation teachers at primary in selected schools in Kaputa district; establish challenges experienced by subject specialization teachers at primary in selected schools in Kaputa district; explore the short and long term implications of teacher specialisation in kaputa district as a way of improving pupil performance and to propose recommendations on the strategies that could make teaching and learning successful within the context of subject specialisaion at primary in selected schools in Kaputa district.

5.1 Benefits of Teacher Specialisation at Primary

The first research question of this study focused on establishing what the benefits experienced by subject specialization teachers at primary. The question sought to establish the benefits of teacher specialization at primary in Kaputa District.

5.1.1 Level of Subject Knowledge

Teachers differ greatly in how much they teach their students, but little is known about which teacher attributes account for this .The research findings under this theme indicated that subject knowledge has a very important role to play because high quality teaching rests on teachers understanding the subjects they are teaching, knowing the structure and sequencing of concepts, developing factual knowledge essential to each subject and guiding the pupils in class that teachers are teaching and in most cases, teachers teach with the attitude of what they know about the subject, together with their experiences and beliefs. Participants reported that teachers are interested in the quality of teaching and children are inspired by teachers who love their subject. Another participant reported that pupils are passionate about subjects they study because teachers are also passionate and this produces a real desire for learning that should be at the heart of any school. Level of subject knowledge therefore helps teachers to focus on what they are most capable of instead of spending so much time learning many subjects and not being able to master one or be an expert in a particular one. It also gives the teachers a sense of professionalism by

increasing their efficiency and effectiveness (Ojo, Akintomide & Ethindero, 2012). When teachers teach content in areas which they are not familiar with, the skills and abilities that they show when teaching their specialist subject are instantly challenged regardless of their capabilities (Loughran, Berry, & Mulhall, 2012). Teachers need to ensure that their knowledge is broad as well as deep. Pupils learn best when they are provided with a wide variety of examples to illustrate an abstract concept (Willingham 2009). For example in geography, a teacher might want pupils to understand the idea of appropriate technology. To achieve this, teachers need to draw on a wealth of examples from his or her own subject knowledge. Subject knowledge can be drawn from reading of text books, subject associations which also offers training sessions and conferences where new ideas can be shared and discussed and knowledge is built. Additionally, social media has certainly made developing subject knowledge easier than ever with communities of teachers willing to share resources, discuss teaching difficult concepts and help out those new to the profession.

This finding is also in line with the findings of Brown (2008) who explained that, a growing body of research has found out that teacher expertise is the most important school factor that influences student achievement. He further argues that teachers who know a great deal about teaching and learning and who work in environments that allow them to know students well are critical elements of successful learning. This, according to Little (2005) cited in Brown, (2008), is critical in specialisation teaching contexts, where student diversity and differentiation is high.

Research suggests that specialist teachers, like other teachers, need, inter alia, a deep and flexible understanding of subject matter and how to represent ideas so that they are accessible to others (Brown, 2000). He further suggest that teachers need to develop pedagogical content knowledge that takes into account not only how to represent the topic under study, but also how the particular students they teach are likely to understand that material and how they learn. Brown (2008) also suggests that teachers also need to understand development that is how children and adolescents think and behave, what they are trying to accomplish, and how to help them grow in particular areas at particular ages in particular contexts.

5.1.2 Teacher Confidence

From the emerged themes, teachers gain more confidence when most teachers are fully aware that teaching is a passionate and an enjoyable career for many. Participants reported that teachers deliver lessons with much confidence and the matter of subject content is very high. Teachers understand pupils better and knew more pupils psychological and cognitive needs and they are more capable of employing a variety of strategies. Similarly, teachers need to gain more confidence during teaching in order to succeed. Having more confidence may depend on various factors including the school and classroom environment, the language of instruction and the level of confidence in teaching the subject content.

Teachers' confidence level in teaching is a very strong parameter in their teaching effectiveness. When teachers are hesitant about aspects of a lesson, they are unable to provide students with deep learning opportunities. They feel that these lessons require subject-specific knowledge that they do not acquire (OFSTED, 2009).

This finding is in line with Ojo, Akintomide & Ethindero (2012) who stated in his study that most teachers who specialized in subjects that they majored feels more confident and comfortable in teaching what they know. Another important aspect and a component of teachers' confidence level is their self-efficacy. A person's self-efficacy is a person's own belief in his/her personal capabilities to perform a specific task. It is what motivates a person to accomplish a goal. Many researches outlined the importance of the teacher's self-efficacy, and how it is reflected in the teacher's classroom. It is, according to Lockman, how a teacher believes in his/her own effectiveness and ability to practically overcome any challenges related to student learning (Wimsatt, 2012). Woolfolk and Hoy claimed that it influences teachers' behaviors and practices in classroom as well as leads to positive student results (Mansfield & Woods-McConney, 2012). Furthermore, Lockman, Wingfield, Galper, Denton and Seefeldt, all explained that those with high self-efficacy and high expectations for themselves and their students, benefit from advanced gains in their students' achievement (as cited in Wimsatt, 2012). A teacher's high self-efficacy is obviously an essential factor in effective teaching and students' achievement, as it brings positive and enthusiastic attitudes in the classroom. It is important to acknowledge that the subject matter or the curriculum that the teachers are required to teach influence the teachers' own perception of

their self-efficacy, as some teachers may have higher efficacy levels in one subject compared to other subjects (Mansfield & Woods-McConney, 2012).

5.1.3 Enthusiasm in Teaching

Another great theme that emerged from the findings was greater enthusiasm in teaching. Teacher enthusiasm has captured the attention of researchers, teachers, and lay-persons for the better part of the last century and for a good reason: Enthusiasm has consequences for both students and teachers. Participants reported that specialized teachers show greater enthusiasm as they value their subject and they spend years learning and deepening knowledge in a field of study. Enthusiastic teachers not only motivate, inspire, and excite students but they also promote learning and improve student achievement. Enthusiastic teachers also appear to be happier and healthier and teachers in general appear to believe that being enthusiastic makes them more effective (Sutton, 2005). Teacher enthusiasm in terms of its affective component which reflects the degree of enjoyment, excitement, and pleasure that teachers typically experience in their professional activities, (Kunter 2008).

This finding is in line with Janzen (2005) who stated in his study that subject specialized teachers therefore show greater enthusiasm in teaching their subject of specialization as they value their subject more highly. Teachers spent years learning and deepening their knowledge in a field of study and will use their specialized content knowledge to empower students to produce a higher quality of work (Wilson, Macdonald, Byrne, Ewing & Sheridan, 2008). In a study conducted by Wenglinsky, the teachers' educational backgrounds did have a positive influence on the student performance in the mathematics and science parts of the 1996 National Assessment of Educational Progress (as cited in Fong-Yee & Normore, 2013). After examining the scores of 15,000 eighth grade students, they found that students who had teachers with majors or minors in either math or science scored 39% higher than students who were instructed by teachers who did not have such preparation (as cited in Fong-Yee & Normore, 2013).

5.1.4 Efficiency in Production

The other vital theme that emerged from the findings was greater efficiency in production. Participants reported that teachers are able to break each job into smaller tasks that are manageable which contributes to competent delivery of service in education. Elliott (1985)

believed that moving towards specialized teaching is the only way to ensure the high proficiency of primary teachers in all subjects. In research, science and mathematics are the two most discussed and studied subjects to require specialist teachers or teachers with deep content knowledge, as both of them require teachers to have deeper understanding than the average individual (Peace, 2012). In these two specific subjects, deeper understanding of the content is required from teachers who are able to answer content questions and not just have knowledge in pedagogical practices (Peace, 2012). The idea of subject specialisation allows teachers to focus on one or two subjects. They are able to reach a wide range of pupils in their subject area.

This finding is in line with Kapfunde (2000) who stated in his study that at school level subject specialisation provides an opportunity for a teacher to specialise in doing that single task which ensures efficiency in production. In this regard subject specialisation is credited with improving quality of education and efficiency in education production. Specialisation entails breaking each job into smaller tasks that are manageable. Since subject specialisation in education fits well into one of the principles of the Scientific Management Theory as postulated by Taylor and others, subject specialisation also aims at improving education production.

This finding is also in line with Kasher (2005) who stated in his study that specialisation involves intentional narrowing of practice which contributes to competent delivery of service in education hence ensures efficiency in production. The focus of both Kapfunde (2000) and Kasher (2005) on specialisation is on the improvement of teaching and learning. As noted above subject specialisation at primary school is some form of division of labour. As such, it is envisaged to increase education production as each teacher can concentrate on what he/she is good at. This helps the teacher to develop expertise in the area of focus. Specialisation in education is expected to improve efficiency, output and outcome. If that is the case specialisation in education is expected to increase both teacher and pupil performances. This should then contribute to high pass rates as indicators of high output in schools.

5.1.5 Pupil Performance

Further, the other important theme that emerged from the findings was an improvement in pupil performance. The study revealed that learner performance is a concern in subject specialisation classes. Teachers are of the perception that learners can perform to their best ability because there is more time for research by teachers and that it is very easy for teachers to prepare lesson

plans because teachers have more subject knowledge in their subject. Participants reported that teachers with particular knowledge, interest, content and expertise create the best environment for learning. Teachers who major in their subject area are the most reliable producers of pupils' good performance. Other responses that emerged noted that in some instances teacher-pupil relations had actually widened as a result of specialisation. Another participant reported that subject specialization improves pupil performance because it gives the teacher a strong grounding in the area of specialization and such makes the teacher relevant, effective and efficient as the teacher becomes more knowledgeable in the subject area and an expert on subject matter and thus improves performance.

This finding is also in line with Makhila, (2008) who stated in his study that most teachers considered subject specialisation as good for Primary Schools. He went even further and state that teachers preferred subject specialisation because it ensured them and make in-depth research on the subject matter and this improved their subject matter knowledge and performance. Subject specialisation ensured different teacher impact on Children's' learning differently thereby motivating the students and improving learning. Teachers attributed improved pass rate at their schools with subject specialization.

This finding is also in line with Baily, (2001) who stated in his study that the role of subject specialisation in schools is to improve performance of the teacher, school and pupil. This comes about as subject specialisation gives the teacher a strong grounding in the area of specialisation. Such grounding makes the teacher relevant, effective, and efficient as the teacher becomes knowledgeable in the subject area and an expert on subject matter. If this argument holds true, we should therefore expect an improvement in the performance and quality of the passes in primary schools that have adopted the specialisation model when compare with those that still follow the generalist model in Zambian primary schools.

In this regard, the school headteachers were asked to indicate their grade seven percentage pass rates. The results for both primary schools show that there had been some improvements in the performance of the grade seven pupils in public examinations. However, it should be noted that there are many factors that contribute to improvement in performance at school level. In this case, a change from generalised teaching to subject specialisation could be one of the contributory factors to an improvement in educational output. Most teachers considered subject

specialisation as good for Primary Schools. They preferred subject specialisation because it ensured the teachers and make in-depth research on the subject matter and this improved their subject matter knowledge. Subject specialisation ensured different teacher impact on Children's' learning differently thereby motivating the students and improving learning. Teachers attributed improved pass rate at their schools to subject specialization.

The area of teaching especially young children is multifaceted. It goes beyond the teacher playing an academic role only, which subject specialisation seems to promote. Another respondent noted that pupils behave differently when they meet different teachers. The teacher went on to say that pupils for example, are punctual for lessons when they know that a teacher is particular about punctuality and do the opposite when the other teacher is not punctual. This finding is also in line with Jowawa, (2012) who stated in his study that primary school pupils need their teachers as models and teacher-pupil relations had actually widened as a result of specialisation. Other respondents in the study noted that specialisation had improved the discipline at their schools as several teachers will be monitoring the same pupils and this has resulted in discipline improving greatly. It was also noted that when it comes to generalist, a pupil's failure in one subject may have a negative effect on the other subject while specialisation gives the true performance in different subject areas as different teachers view pupils differently.

5.2 Challenges of Teacher Specialisation at Primary

The second objective of this study was to establish the challenges experienced by specialized teachers at primary. In the quest to address this objective the research question: what are the challenges experienced by subject specialization teachers at primary in selected schools in Kaputa district was to be answered.

5.2.1 Lack of Teacher Qualification

The first theme that emerged from the findings on challenges was teacher qualification. The study revealed that teachers who are teaching in specialization classrooms are qualified teachers who meet the minimum requirement for appointment as teachers. Most of them have primary teachers' certificates, primary teacher's diploma and first degrees in education as requirements for teacher's qualification. All the participants meet the requirements meaning that they are fully qualified to be teachers. However, none of the participants were trained to teach specialisation

classes during their teacher training. More institutions need to look into the issue of training specialized teachers.

This finding is also in line with Joubert, (2007) who stated in his study that all training institutions should make specialization teaching part of teacher training. Participants reported that they are not trained in specialization teaching. Some just attended workshops where they were just briefed about specialisation teaching. They were not told anything in detail and promised that there will be other workshop in specialization teaching but that is not happening. In- service training for these teachers is also not adequate. Views from the participants suggest that specialist teachers are teaching in these classes without relevant knowledge and skills to teach in these classes. The fact that specialist teachers attend the same workshops as generalist teachers implies that these teachers are treated in the same way as generalist teachers. It also implies that these teachers have to adapt their general knowledge of teaching to their specialist classroom on their own.

Another participant reported that he never attended a workshop for specialist teaching and never been trained on how specialisaion teaching works. This finding is also in line with Hammond, (2005) who stated in his study that trained teachers have a better grasp of subject knowledge, pedagogy and classroom practices than untrained teachers. Joubert (2007) found that national governments in Africa require all teaching to follow the national curriculum. From the above responses, one can deduce that there is need for training in specialization teaching. Teachers are willing to be trained and expect that such training to take place over a period of two to three months. Teachers are of the idea that if they are trained in specialisation teaching, the teaching and learning process in these classes will improve. A generally acknowledged point made by specialised practitioners is that the specialisation classroom is more of a challenge than the generalised classroom (Kyne, 2005). Skills and behaviours required of specialised teachers are different, and coordinating activities is more difficult (Lingam, 2007).

5.2.2 Absence of Continued Professional Teacher Development

Above all, another great theme that emerged from the findings on challenges was absence of continuous professional teacher development. Continued professional teacher development is therefore a planned, continuous and lifelong process whereby teachers try to develop their professional qualities and to improve their knowledge, skills and practice, leading to their

empowerment, the improvement of their agency and the development of their organization and their pupils. Since 1996, major changes have occurred in education policy in Zambia. Contrary to expectation, these changes have not always been welcomed by most teachers. They have, for example, been challenged to move to an outcome based education approach in an extremely short period of time, as well as to attend to learners with barriers to learning in an inclusive classroom. While these changes have allowed teachers some freedom, they have also caused stress, since many teachers are not equipped to deal with such changes. Management of human resources and continuous staff development and training has also become crucial Heyns, (2000).

This finding is also in line with Bubb, (2004) who stated in his study that the successful implementation of new policies, such as the outcome based curriculum and inclusive education, will only be effective if teachers are adequately prepared and equipped by means of initial retraining and they realise the importance of improving their practice by means of continuous professional teacher development. One of the participant reported that there is nothing we do; we just make sure that we are teaching. It has become necessary to help teachers update their knowledge and skills and to deal with change, on the one hand, and manage human resources better, on the other Anderson, (2001). However, there is no teacher development with regard for subject specialisation teaching. Subject knowledge is also not considered when subjects are allocated to teachers. Research shows that an inspiring and informed teacher is the most important school related factor influencing learner performance. Given the poor performance of Zambian schools in this area, it is critical that we pay close attention to how we train and support both new and experienced teachers. Continuing professional teacher development is an integral part of teacher education because only continued learning and training assures teachers keep up to date with new research on how children learn, emerging technologies for the classroom and new curriculum resources. These responses suggest that there is no continuous professional teacher development of any kind for these teachers.

This finding is also in line with Bredson, (2003) who stated in his study that teachers do not know of any strategies to develop competence in specialization teaching. The fact that some of them are studying on distance bases is an indication that they are eager to learn but do not know of how to develop their competence in specialisation teaching. Another participant reported that we have furthered our studies on distance basis, but it has nothing to do with specialisation teaching. Their responses also reveal that these teachers are frustrated and suggest that there is no

teacher development of any kind for these teachers and that when subject allocation is done, their knowledge on the subject is not considered Weddington, (1995). Yet another participant reported that we do not have the knowledge of these subjects. We just teach them because we have to. It does not matter as to whether you know the subject or not, you have to take it once you are being allocated by the administrators and learners have to be taught. This reveals that some of the subjects are neglected as teachers only concentrate on the subjects they are knowledgeable about.

5.2.3 Lack of Support

Additionally, the other great theme that emerged from the findings on challenges was lack of support in terms of finances and trainings. One of the participants reported that since we started working here, we have never received any support with regard to teaching by specialization in terms of money to be used for organizing workshops and other trainings especially for teachers who are already in the teaching system. We have never received such support. There was a time when one of the curriculum advisors came and we told him that we are experiencing difficulties with specialisation classes. What he said is that we, as the people in the situation, we are the ones who can help them because we are in the situation every day, whereas we were expecting them to help us in order for us to get some relief. They are unable to help us. Curriculum advisors do come here, but they only want what they are here for. Curriculum advisors such as standards officers are the ones who often come here and they will be looking for what they are here for, for example lesson plans records of work or weekly forecasts and schemes of work. They want to see them. But they don't show us how to write timetables, class management and teaching strategies. There is no support from them financially to hold trainings to be acquainted with relevant knowledge on teaching by subject specialisaion. They only want us to work like a normal school. The findings show that there is lack of support for specialisation teachers. Another participant confirmed that there is no support given in any form. There is no single day when curriculum advisors have shown some understanding that we are a specialised school. You will find that they want lesson plans for all the classes. All these lesson plans have to be there. When we indicate that we are a specialised school and we need their support in any form for us to teach effectively, they acknowledge that they are aware but expect us to have all the lesson plans regardless of our humble appeal to receive any kind of support from them. Curriculum

advisors don't help us with anything. In fact, they give us pressure. When they come here they don't care that we are a specialised school. They want to see everything per class.

This finding is also in line with Little, (2004) who stated in his study that curriculum advisors do not provide them with any support for specialisation teaching and that during their supervisions they do not consider that teachers teach by subject specialisation classes. Little (2004) further argues that many policy makers, planners, professional support staff and the public at large, are unaware of the extent and nature of the needs of specialisation classes. The study also revealed that headteachers of these schools also do not provide support for these teachers as they also have their classes to teach.

One of the main findings of this study was that the specialisaion teachers interviewed did not receive any professional training to teach in a specialisation class context. This was acknowledged by most teachers interviewed. The training that teachers receive at higher institutions of learning prepares them mainly for teaching generalist class environment. This led to specialisation teachers feeling unprepared to perform to expectations in the specialization classes. The lack of teacher support was one of the major challenges faced by the teachers at these specialisation schools Beukes, (2006). This appeared as problematic because teachers reported that for the last two years they were not receiving sufficient teaching support at the national and regional level. As a result, teachers of specialisation classes were trying to manage specialisaion classes on their own by using the trial and error method. Based on this view, it can be seen that the specialization teachers were at a disadvantage in two ways. Firstly, the majority had no professional training to teach in a specialisation classroom. It was confirmed by teachers that they were ill-prepared to operate effectively in a specialisation classroom. Further, no support has been given financially by the government through the ministry of general education to conduct some training locally at school level in order to boost up support to teachers who are teaching by subject specialization and to impart them with subject knowledge on how to teach by subject specialisation.

5.2.4 Poor Classroom Management

Furthermore, the other challenge identified in this study had to do with the organisation and management of specialisation classrooms. Classroom organisation and management is the core element of specialisation teaching (Kapenda, 2010). The programme did not allow for "spill

over” into the time for a next lesson while the pupils would not have finished written exercises. One of the participants reported that another problem is that when you are teaching especially those pupils at lower grades, most pupils are too slow to write the exercise given to them and in most of the time, pupils do not complete the exercise given to them and when the other teacher comes in class, he or she wants to rub off the work which is on the board. That in most of the cases brings noise in classes and it is very difficult to control the situation. This normally brings about noise during change-over by subject teachers. The finding of this study revealed that discipline and classroom management were the major challenges hindering specialisation classrooms and mostly, truant pupils are not easy to monitor.

This finding is also in line with Taole, (2012) who stated in his study that when a teacher is an expert of a subject, he or she shows great interest in teaching it and this gets directly reflected on the students and on the way they perceive the lessons. And when they engage in authentic projects that reflect real life situations, pupils engage in the learning and become more successful. Hence performance can be improved. Specialization also improved the discipline amongst pupils because several teachers will be monitoring the same pupils and this has resulted in discipline to improve greatly as discipline is viewed as an indicator of a well performing school. Classroom management is a challenge for specialisaion teachers due to lack of discipline by pupils in these classes. In most cases, the learners do not even complete the task assigned to them. Apart from the problems associated with the classes under specialisation, the participants noted that there was lack of maturity on the part of pupils. Pupils in most of the cases had problems with adjusting to the demands from different teachers especially at grade 5, 6 and 7 and that actually made them to be making a lot of noise while in class.

5.3 Implications of Teacher Specialisation to Improve Pupil Performance

The third objective of this study was to explore the short and long term implications of teacher specialization in Kaputa District as a way of improving pupil performance at primary. In the quest to address this objective the research question: what are the short and long term implications of teacher specialization in Kaputa District as a way of improving pupil performance in selected primary schools was to be answered.

5.3.1 Subject Specialization and Pupil Performance

The first theme that emerged from the findings on the implications of teacher specialization was pupil performance. The study revealed that most teachers considered subject specialisation as good for Primary Schools. They preferred subject specialisation because it ensured the teachers and make in-depth research on the subject matter and this improved their subject matter knowledge. One of the participants reported that when teachers possess subject-matter knowledge, it directly improves their teaching experiences by elevating their comfort level, and this enhances the students' learning and academic achievement.

This finding is also in line with Ndwai, (2002) who stated in his study that the familiarity with the content allows teachers to work in their comfort zone with less stress and anxiety. It allows them to be more creative in the way they deliver the lesson by using their interests and expertise they have in their specialized subject and in some instances teacher- pupil relations had actually widened as a result of teacher specialization. Another participant reported that teachers' expertise allows them to have a bigger picture of what they are transferring to the students. They are able to deliberately answer students' deep questions, clarify misconceptions, connect concepts with real life examples and integrate cross-curricular expectations and thereby give the true performance in different learning areas as different teacher's views pupils differently. Subject specialisation ensured different teacher impact on Children's' learning differently thereby motivating the students and improving learning. Yet another participant reported that when a teacher is an expert of a subject, he or she shows great interest in teaching it and this gets directly reflected on the students and on the way they perceive the lessons. And when they engage in authentic projects that reflect real life situations, pupils engage in the learning and become more successful. Hence performance can be improved.

This finding is also in line with Makhila, (2008) who stated in his study that specialization also improved the discipline amongst pupils because several teachers will be monitoring the same pupils and this has resulted in discipline to improve greatly as discipline is viewed as an indicator of a well performing school. Teachers attributed improved pass rate at their schools to subject specialization. Subject specialisation is a welcome way to improve teaching at primary school level because it will not only bring out the best of the teachers but also help pupils understand

subjects better as each teacher will focus mainly on their specialised subject and ensure they deliver quality lessons to the pupils hence improving pupil performance.

5.3.2 The Policy and Regulations Guiding Subject Specialisation

The other important theme that emerged from the findings on the implications of teacher specialization was the policy and regulations guiding subject specialization. The policy and regulations guiding subject specialisation should focus not only on teaching aspect but also the teacher education programme that had to produce specialist teachers at primary. One of the participants reported that the introduction of teaching by subject specialization at primary schools is a new policy change in the ministry of general education. However, such change would focus not only on teaching aspect in primary schools but also on teacher education programmes. The government was supposed to consider the role of teacher training colleges in the new paradigm when developing relevant policies and regulations. Issues that would need clarity would be on whether teacher training colleges would need to continue training primary school teachers in the entire primary school curriculum subject or adopt the secondary school training approach in which student teachers specialize in teaching of two subjects. Meanwhile, the school curriculum has remained predominantly generalized and it is too silent over this policy change. It is therefore very important in developing relevant policies and regulations to take note of various stakeholders in the ministry of general education. Further, there is no clear evidence in terms of the policy document that introduced teaching by subject specialization at primary school because the schools only received a circular written and signed by the permanent secretary, ministry of general education to that effect and the circular did not specify the number of hours that the specialist teacher had to work.

From the researcher's point of view on the curriculum which is still silent on whether teacher training colleges would need to continue training primary school teachers in the entire primary school curriculum subject or adopt the secondary school training approach in which student teachers specialize in teaching of two subjects. The researcher noted various implications on pupils' learning as most teachers feel that they are still lacking content knowledge on the subject they are allocated to teach. This would include inability of teachers to clarify pupil's misconceptions and a failure in responding to pupils probing questions as well as failure to

intervene with struggling learners. It is therefore important to review the curriculum in order to be in line with the prevailing conditions of teaching by subject specialization at primary.

5.3.3 Education Cost towards Teaching by Subject Specialisation at Primary

Another vital theme that emerged from the findings was the education cost towards teaching by subject specialization at primary schools. Though the initiative was a step in the right direction, it has come with no resources or budget attached to it. One of the participants reported that pre-service and in-service teacher education programmes do not address the curricular and instructional demands of specialized teaching. Teachers are ill prepared for the challenges they face in practice as specialized teachers because teaching styles focus on the transmission of knowledge from the teacher to the learner when the teacher is fully equipped with high level of subject knowledge. Specialization is being implemented in schools by teachers with little experiences. Specialized teaching is based on sharing subjects and teachers are teaching subjects in which they are not specialized. Therefore the government should start sending teachers to teach subjects in which teachers are well equipped. Also teachers colleges should start training teachers to teach subjects in which they are specialized. Teachers colleges should revisit the curriculum by starting training teachers for subject specialization.

From the researcher's point of view, the researcher noted that the government should also put in place the financial resources that will allow some stakeholders in the ministry of general education to conduct some workshops and training of pre and in-service teachers to equip them with new skills of teaching by subject specialization and encourage teachers to go for further studies in order to be equipped with subject matter knowledge required.

5.4 Proposed Recommendations on How to Make Teaching and Learning Successful By Subject Specialisation at Primary

The fourth objective of this study was to propose recommendations on how to make teaching and learning successful within the context of subject specialization in Kaputa District. In the quest to achieve this objective, participants were asked to suggest alternative strategies that the ministry of general education could use in order to make teaching and learning by subject specialization to be a successful program and to counteract the challenges with teacher specialisation. The findings showed various themes that emerged under this objective.

5.4.1 Continued Professional Teacher Development

One of the themes that emerged under this objective was the issue of continued professional teacher development. Continued professional teacher development refers to any activities aimed at enhancing the knowledge and skills of teachers by means of orientation, training and support Coetzer, (2001). The development is also likely to affect attitudes, approaches and may therefore contribute to the improvement of the quality of the learning and teaching process. Generally, participants reported that strengthening continued profession teacher development gives the teacher the chance to reinforce existing skills as well as learning new skills that were not covered during teacher training. Therefore, specialization is a new development which was not covered at teacher training college and it must be shared in this meeting. Further, training such as this one can allow teachers to build on their interaction skills and learn strategies for helping the pupils to achieve their full potential.

This finding is also in line with the sentiments of Bredeson, (2003) who stated that effective continued professional teacher development should firstly be aware of and address the specific needs of teachers. Hence teaching by subject specialization in primary schools was the need which was supposed to be addressed by the government through the ministry of general education by engaging and allowing teachers to incorporate the program into continued professional teacher development topics throughout the year. Once these needs have been identified, activities need to be properly planned to support teachers in applying the knowledge and teaching methodology creatively and confidently Anderson, (2001). Another participant reported that continued professional teacher development gives proof of teacher's competence. It helps the teacher to stand out from the rest of other teachers. A teacher can become more competent than the others and also tells that the knowledge is up to date. Continued professional teacher development adds to the skills and knowledge the teacher has already had to be a better teacher. It helps the teacher to learn new techniques in teaching pupils and teachers to grow professionally and improve classroom skills.

This finding is also in line with Collinson (2000) stated that the best results of teaching by subject specialisation are obtained if the programme is formally and systematically planned and presented with the focus on enhancement of personal and professional growth by broadening knowledge, skills and positive attitudes towards teaching by subject specialisation. To allow

professional development to proceed successfully it should be a continuous process, contributing to the general improvement of education Bredeson, (2003). Yet another participant reported that teachers who have been in the profession for many years are usually reluctant to change their teaching styles.

Further the researcher also supports the opinion highlighted by the participants stating that continued professional teacher development will let teachers to stay in touch with the latest developments in the ministry of general education and help teachers to change their way of teaching. It is an evidence of competence, career opportunities and exchange of knowledge required to be done into our ministry in order for us to grow professionally. Isolated inputs which do not build on one another have little value for those attending the training. Personal development is also enhanced by the diversity of the teaching corps regarding training, background, and needs. Professional development does not only require the informal and spontaneous learning of teachers from one another but also relies on the prior knowledge, wealth of potential and experience of each participant, which can be built upon and incorporated into further initiatives of teaching by subject specialisation. Obtaining knowledge and sharing existing knowledge and skills with others to join forces are valuable tools for change and improvement in terms of teaching by subject specialisation. Programmes for continued professional teacher development must therefore cater for this diversity so that the needs of all participants can be met.

5.4.2 Teacher Training Programme

Further great theme that emerged was the issue of teacher training programme. Generally, participants stated that public teachers colleges should be realigned to train teachers for subject specialization. This will help newly appointed and teachers when they are employed in schools with specialized classes to teach effectively with a lot of confidence. Additionally, more institutions need to look into the issue of training specialised teachers in order to equip teachers with subject knowledge and skills in order to deliver the lessons effectively.

This finding is also in line with Joubert (2007) stated that all training institutions should make specialisation teaching part of teacher training. Views from the participants suggest that specialisation teachers are teaching in these classes without relevant knowledge and skills to teach in these classes. The fact that specialisation teachers attend the same teacher training as

generalist teachers implies that these teachers are treated in the same way as generalist teachers. It also implies that these teachers have to adapt their general knowledge of teaching to their specialisation classes on their own.

Further, the researcher also supports the opinion highlighted by the participants stating that from the above responses, the researcher can deduce that the government through the ministry of general education should organise and train some teachers with some skills in specialised teaching in order to equip them with subject knowledge and skills for handling specialized classes. Teachers are willing to be trained and expect that such training to take place over a specified period of time. Teachers are of the idea that if they are trained in specialised teaching, the teaching and learning process in these specialized classes will improve.

5.4.3 Insert Subject Specialisation Component in Our Education Policy

The other important theme that emerged was the issue of inserting specialisation component in our education policy. Generally, participants stated that to effectively implement specialization, there is need to insert or add the component of subject specialisation in our education policy which has remained predominantly silent, educating our future so that all teachers in primary schools be trained on subject specialization at Diploma, Degree and Masters Level.

Further, the researcher also supports the opinion highlighted by the participants stating that all primary school certificates must be phased out and those affected are allowed to pursue Diploma or any higher education with relevancy in subject specialization. There is a need to consider the role of teacher training colleges in the new paradigm by ensuring that teacher training colleges adopt the secondary school training institution approach in which student teachers specialise in the teaching of two subjects.

5.5 Summary

This chapter discussed the findings of the study and revealed their short and long term implications of teacher specialization as a way of improving pupil performance in Kaputa District. This chapter demonstrated that the objectives of the study were answered. The following chapter will give the conclusions and remarks to the major findings, recommendations and suggested future research.

CHAPTER SIX: SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.0 Overview

This chapter gives the conclusion of the study. It highlights the findings of the study, the conclusion drawn from it and the recommendations. Suggestions are also made for further areas of research.

6.1 Summary

So far, this dissertation has explained chapter one (1), which focused on explaining the background of teacher specialization which helped to justify the need to conduct this study. The dissertation has also explained chapter two (2) which presented literature reviewed, chapter three (3) showing the methods used to conduct this study, chapter four (4) presenting findings from the research field, and chapter five (5) which focused on the discussion of the research findings. This chapter thus presents the conclusion of the study and recommendations drawn from the findings of the study. The chapter also gives suggestions for further research.

6.2 Conclusions

The purpose of this study was to establish how teacher specialization can improve pupil performance at primary schools in Kaputa District. The study focused on exploring the short and long term implications of teacher specialization in Kaputa District as a way of improving pupil performance. The study was purely qualitative research and used a case study research design.

From the findings, it was clear that the long and short term implications of teacher specialization at primary was that; there was more of subject sharing than subject specialisation since teachers were teaching subjects they did not specialize in. Therefore the government should start deploying teachers to teach subjects in which teachers are well equipped. Also teachers colleges should start training teachers to teach subjects in which they are specialized. Teachers colleges should revisit the curriculum by starting training teachers for subject specialization. Further, there is need to review our education policy which has remained predominantly silent, educating our future so that all teachers in primary schools be trained on subject specialization at Diploma, Degree and Masters Level. Meanwhile, the school curriculum has remained predominantly generalized and it is too silent over this policy change. It is therefore very important in

developing relevant policies and regulations to take note of various stakeholders in the ministry of general education. Further, there must be a clear evidence in terms of the policy document that introduced teaching by subject specialization at primary school because the schools only received a circular written and signed by the permanent secretary, ministry of general education to that effect and the circular did not specify the number of hours that the specialist teacher had to work.

Further, the study also established that all primary school certificates must be phased out and those affected must be allowed to pursue Diploma or any higher education with relevancy in subject specialization. Additionally, there is need to consider the role of teacher training colleges in the new paradigm by ensuring that teacher training colleges adopt the secondary school training institution approach in which student teachers specialize in the teaching of two subjects.

Furthermore, the study established the benefits experienced by specialisation teachers, the study found that teachers have time to research on a specific subject thereby increasing the level of subject knowledge, efficiency in production and wider subject coverage for a specific subject hence improves pupil performance. The study established that specialist teachers, like other teachers, need, inter alia, a deep and flexible understanding of subject matter and how to represent ideas so that they are accessible to others. Further, teachers need to develop pedagogical content knowledge that takes into account not only how to represent the topic under study, but also how the particular students they teach are likely to understand that material and how they learn. Teachers also need to understand development that is how children and adolescents think and behave, what they are trying to accomplish, and how to help them grow in particular areas at particular ages in particular contexts. Additionally, teachers deliver lessons with much confidence and the matter of subject content is very high. Teachers understand pupils better and knew more pupils psychological and cognitive needs and they are more capable of employing a variety of strategies. Similarly, teachers may gain more confidence during teaching in order to succeed. Having more confidence depends on various factors including the school and classroom environment, the language of instruction and the level of confidence in teaching the subject content. Teachers' confidence level in teaching is a very strong parameter in their teaching effectiveness.

Specialisation further involves intentional narrowing of practice which contributes to competent delivery of service in education hence ensures efficiency in production. Therefore, specialisation aimed at improving of teaching and learning in class. As we have established, subject specialisation at primary school is in form of division of labour. As such, it is envisaged to increase education production as each teacher can concentrate on what he/she is good at. This helps the teacher to develop expertise in the area of focus. For this reason, specialisation in education is expected to improve efficiency, output and outcome for both teachers and pupils. This should then contribute to high pass rates as indicators of high output in schools.

However, the findings of the study on challenges associated with teacher specialisaion at primary school was that, pupils in most of the cases had problems with adjusting to the demands from different teachers especially at grade 5, 6 and 7. Further, no support has been given financially by the government through the ministry of general education to conduct some training locally at school level in order to boost up support to teachers who are teaching by subject specialization and to impart them with subject knowledge on how to teach by subject specialisation. Additionally, classroom management is another challenge for specialisaion teachers due to lack of discipline by pupils in classes. In most cases, the learners do not even complete the task assigned to them in good time. Apart from the problems associated with the classes under specialisation, lack of maturity on the part of pupils was a challenge. Pupils in most of the cases like the truant one were very difficult to be monitored by teachers. The study further established that even though there is an indication of teacher specialization being done in primary schools, teachers indicated being frustrated by the model used as it lacks support, difficult to manage classes since most teachers have no skills to manage specialization classes and it is based on sharing rather than subject specialization.

Furthermore, the study seems to suggest that continued profession teacher development must be strengthened as it gives the teacher the chance to reinforce existing skills as well as learning new skills that were not covered during teacher training. Additionally, public Teachers colleges should be realigned to train teachers for subject specialization as this will help newly appointed teachers when they are employed in schools with specialized classes. Finally, there is need to review our education policy, educating our future so that all teachers in primary schools are trained in subject specialization at Diploma, Degree and Masters Level and all primary school

certificates must be phased out and those affected must be allowed to pursue Diploma or any higher education with relevancy in subject specialization.

6.3 Recommendations

This section looks at the recommendations of teacher specialization to improve pupil performance at primary: exploring the short and long term implications. Based on the research findings, the following are some of the recommendations that needed to be considered:

1. Continued profession teacher development must be strengthened in schools that have introduced teaching by subject specialisation as it gives the teacher the chance to reinforce existing skills as well as learning new skills such as teaching by subject specialisation that were not covered during teacher training.
2. Public Teachers colleges should be realigned to train teachers for subject specialization as this will help newly appointed teachers when they are employed in schools with specialized classes.
3. There is need to insert the component of teaching by subject specialisation in our education policy, educating our future so that all teachers in primary schools are trained in teaching by subject specialization either at Diploma, Degree or Masters Level.
4. A model should be designed in the distribution of teachers when specialised teachers are deployed and posted by the government through the ministry of general education that equality to rural primary schools should be considered as well.
5. The government through the ministry of general education must provide positive support in terms of finances so that stake holders in the ministry can provide some training through workshops to in- service teachers to equip them with subject knowledge and skills to teach by subject specialization.

6.4 Recommendation for Further Research

The study focused on selected Primary Schools in Kaputa District and therefore the possibility of generalization is limited. There is need for in-depth studies involving many schools. The study on teacher specialisation teaching in primary schools can be explored further. I recommend the following further studies on specialisation teaching in primary schools:

1. Quality education for learners is very crucial and therefore, challenges experienced by teachers should not be ignored. I, therefore recommend that future research should focus on the performance of learners in specialisation classes.
2. Headteachers have a crucial role in ensuring effective curriculum implementation in their schools. Further study could focus on how schools with specialisation classes are managed.

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APPENDICES

APPENDIX A

P.O BOX 490025,
KAPUTA.
15 TH OCTOBER, 2019
CONTACT NO: 0979016751
EMAIL: lumyabighton1@ gmail.com

THE HEAEDTEACHER,
KAFUMA PRIMARY SCHOOL,
BOX 490025,
KAPUTA.

Dear sir,

REF: REQUEST FOR PERMISSION TO CONDUCT MDEA RESEARCH IN YOUR SCHOOL

**TITLE: TEACHER SPECIALISATION TO IMPROVE PUPIL PERFORMANCE:
EXPLORING THE BENEFITS, CHALLENGES AND TERM IMPLICATIONS**

The above subject matter bears reference.

I, Brighton Lumya, under the supervision of Dr. Gift Masaiti in the department of research studies am doing research towards master of education in educational management at the University of Zambia. I hereby request your permission to conduct a study, “entitled benefits and challenges of subject specialisation teachers at primary at your school.

The study will entail interviewing headteachers and teachers of selected schools with subject specialisation classes. The expected duration of the interview is 30 minutes.

I also undertake to ensure confidentiality and anonymity during the study will be maintained and that data will be kept in a safe place upon completion of the study. Participation will be voluntary at all times.

Hoping for your positive response.

Yours faithfully,

BRIGHTON LUMYA.

APPENDIX B

APPENDIX B

All communication should be
Addressed to the Head teacher

In reply please quote
No:



**REPUBLIC OF ZAMBIA
MINISTRY OF GENERAL EDUCATION**

**KAFUMA PRIMARY SCHOOL,
P.O BOX 490025,
KAPUTA.**

17th OCTOBER, 2019.

TO: MR. LUMYA BRIGHTON.

Dear sir,

RE: RECOMMENDATION LETTER TO CONDUCT RESEARCH AT KAFUMA.

The above matter refers.

I would like to recommend the application to conduct research at kafuma primary school with benefits and challenges of subject specialization at primary.

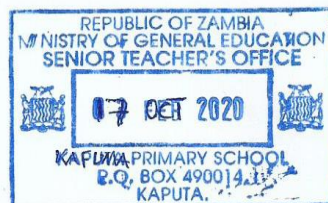
The permission is given on the bases that your research will not disturb teaching and learning.

Hoping that you will find this in order.

Faithfully yours,

MR.KALUMBA FRANCIS.

HEAD TEACHER- KAFUMA PRIMARY SCHOOL.



APENDIX C

A LETTER REQUESTING TEACHERS TO PARTICIPATE IN A SEMI-STRUCTURED INTERVIEW SCHEDULE.

C/O LUMYA BRIGHTON,

P.O BOX 490025,

KAPUTA.

15TH OCTOBER, 2019.

Dear Teacher,

REQUEST TO PARTICIPATE IN A SEMI- STRUCTURED INTERVIEW.

TITLE: TEACHER SPECIALISATION TO IMPROVE PUPILPERFORMANCE: EXPLORING THE BENEFITS, CHALLENGES AND LONG IMPLICATIONS

This letter is an invitation to you to participate in a study on the benefits and challenges of subject specialisation at primary experienced by teachers in Kaputa district. I, Lumya Brighton, am conducting this study as part of my MDEA Studies at the University of Zambia. I have purposefully identified you as a possible participant because of your valuable experience and expertise in my research topic.

I would like to provide you with more information about this project and what your involvement would entail if you should agree to take part. The study requires me to interview you together with other two teachers at your school. In this interview, I would like to find out your views and opinions on this topic. The information from the semi- structured interview will be used to improve the quality of teaching and learning with subject specialisation at primary.

Your participation in this study should be voluntary. It will involve an interview of approximately 30 minutes in length. You may decline to answer any of the interview questions if you so wish. Furthermore, you may decide to withdraw from the study at any time without any negative consequences.

With your permission, the semi- structured discussion will be audio-recorded and will be recorded in note book to facilitate the collection of accurate information, which will be later transcribed for analysis. Shortly after the transcription has been completed, I will send you a

copy of the transcript to give you an opportunity to confirm the accuracy of our conversation and to add or to clarify any points. All information provided will be considered completely confidential. Neither your name nor the name of your school will appear in any publication resulting from this study and any identifying information will be omitted from the report. However, with your permission, anonymous quotations will be used. Data collected during this study will be retained safely. There are no known anticipated risks to you as a participant in this study.

I look forward to speaking with much and thank you in advance for your assistance in this project. If you accept my invitation to participate, I will request you to sign a consent form.

Yours sincerely,

Brighton Lumya.

APPENDIX D

SEMI- STRUCTURED INTERVIEW CONSENT AND CONFIDENTIALITY AGREEMENT

Igrant my consent to participate in a discussion and that the information I share during the (semi- structured interview) may be used by the researcher, Lumya Brighton, for research purposes. I am aware that the semi- structured discussions will be digitally recorded and grant consent for these recordings. I also undertake not to share information shared in the group discussion with any person outside of the group, in order to maintain confidentiality.

Participant's Name (please print):.....

Participant's Signature:

Researcher's Name: Lumya Brighton.

Researcher's Signature:.....

Date:

APPENDIX E

LETTER REQUESTING THE HEADTEACHER TO PARTICIPATE IN THE STUDY

C/O LUMYA BRIGHTON,

P.O BOX 490025,

KAPUTA.

15TH OCTOBER, 2019

To the Headteacher,

.....

Dear Sir/ Madam

REQUEST TO PARTICIPATE IN THE STUDY.

I am a Masters student at the University of Zambia under the supervision of Dr. Masaiti. G. I hereby request your consent to participate in my research study entitled is 'Benefits and Challenges of subject specialisation at primary in Kaputa district'.

Your participation will involve you answering questions regarding your experiences as the headteacher in a school with subject specialisation at primary. The interviews will take 30 minutes to complete. I also request your permission to use a tape recorder during the interview to ensure that accurate information is collected and later transcribed for analysis.

I will ensure that anonymity and confidentiality are upheld at all times. Your name and your school's name will remain confidential. Participation in this research is completely voluntary and you may withdraw from the research without consequence. However, with your permission, anonymous quotations will be used in the research document. Data collected during this study will be kept safely throughout my study. There are no known or anticipated risks in this study.

It is my hope that your participation will provide long-term benefits to you as a school headteacher and also teachers teaching by subject specialisation at primary.

Your cooperation will be greatly appreciated.

.....

(Date)

..... (Signature)

APPENDIX F

HEADTEACHER'S CONSENT FORM TO PARTICIPATE IN THE STUDY

I, _____, have read and fully understand the request letter to participate in the research on benefits and challenges experienced by subject specialisation teachers at primary schools in Kaputa district.

I also understand that confidentiality and anonymity during the study will be maintained and that my participation is voluntary I accept and give my consent to participate.

.....

(Date)

..... (Signature)

APPENDIX G

SEMI-STRUCTURED INTERVIEW SCHEDULE FOR TEACHERS

(This schedule will form the foundation for the semi-structured interview. It will be regarded as the guideline for the interview process. This schedule will have open questions).

OPENING

I am very happy to meet you My name is Lumya Brighton. Thank you for giving me this chance to talk to you. I am a postgraduate student at The University of Zambia. I am doing a research on teacher specialization to improve pupil performance: exploring the benefits, challenges and implications. I would like to ask you some questions on this topic, your education, some experiences you have had and some of your interests in order to learn more and share this information within our district. I hope to use this information to help our district and the nation become more comfortable on perceptions towards subject specialization at primary by knowing you better. Your responses will be useful in providing important information for my study. Your responses will be used exclusively for the research purposes and will be treated with ultimate confidentiality. I shall tape record your answers only if you agree to it. In addition, I shall write your answers in my note book to make sure that nothing is lost and the interview will take about 30 minutes. Are you available to respond to some questions at this time? Therefore, kindly be honest. Let me begin by asking you some questions about you and the school.

BODY

What is the name of the school?

Sex M () F ()

1. How many years have you been in service?
2. What is your professional qualification?
3. What are your views on primary school teachers being specialised in a particular subject?
4. What is the extent to which a subject specialised primary teacher gets to know pupils well?
5. What do you think performs better between the generalist and teachers who have been assigned with specific subjects to teach?

6. Are there some benefits of teaching by subject specialization at your school? If any, what are some of them?
7. Are there some challenges face by primary subject specialised school teachers in teaching their specialised subjects? If any, what are these?
8. What are the challenges faced by primary school teachers in teaching all the general subjects allocated? If any, what are these?
9. What do you think could be the short and long term implications of teacher specialization at primary?
10. Do you like this model or would you prefer to see something different?

CLOSING

I appreciate the time you took for this interview. Is there anything else you think would be helpful for me to know on exploring the short and and long term implications on teacher specialization at primary that I can include in this research? Would it be alright to call you if I have any more questions? Thanks again.

APPENDIX H

SEMI-STRUCTURED INTERVIEW SCHEDULE FOR HEADTEACHERS

(This schedule will form the foundation for the semi-structured interview. It will be regarded as the guideline for the interview process. This schedule will have open questions).

OPENING

I am very happy to meet you My name is Lumya Brighton. Thank you for giving me this chance to talk to you. I am a postgraduate student at The University of Zambia. I am doing a research on teacher specialization to improve pupil performance: exploring the benefits, challenges and implications at primary school. I would like to ask you some questions on this topic, your education, some experiences you have had and some of your interests in order to learn more and share this information within our district. I hope to use this information to help our district and the nation become more comfortable on perceptions towards subject specialization at primary by knowing you better. Your responses will be useful in providing important information for my study. Your responses will be used exclusively for the research purposes and will be treated with ultimate confidentiality. I shall tape record your answers only if you agree to it. In addition, I shall write your answers in my note book to make sure that nothing is lost and the interview should take about 10 minutes. Are you available to respond to some questions at this time? Therefore, kindly be honest. Let me begin by asking you some questions about you and the school.

BODY

What is the name of the school?

Sex M () F ()

1. How many years have you been in service?
2. What is your professional qualification?
3. Did you have teachers at your school who have specialized in their teaching? Or have been allocated specific subjects to teach?
4. In your experience as the headteacher, how are your teachers prepare to teach through subject specialization?

5. What are your views on primary school teachers being specialised in a particular subject?
6. What is the extent to which a subject specialised primary teacher gets to know pupils well?
7. What do you think performs better between the generalist and teachers who have been assigned with specific subjects to teach?
8. Are there some benefits of teaching by subject specialization at your school? If any, what are some of them?
9. Are there some challenges faced by primary subject specialised school teachers in teaching their specialised subjects? If any, what are these?
10. What are the challenges faced by primary school teachers in teaching all the general subjects allocated? If any, what are these?
11. What do you think about the current system for teaching and learning in terms of subject specialization model?
12. Do you like this model or would you prefer to see something different?

CLOSING

I appreciate the time you took for this interview. Is there anything else you think would be helpful for me to know on short and long term implications on teacher specialization at primary that I can include in this research? Would it be alright to call you if I have any more questions?

Thanks again

APPENDIX I

OPEN ENDED QUESTIONNAIRE FOR RESPONDENTS.

Dear respondents,

I am a student at the University Of Zambia (UNZA) undertaking a study on the topic: **Teacher Specialisation to Improve Pupil performance: Exploring the Benefits, Challenges and Implications. A case of selected primary schools in Kaputa District.** Your school has been randomly selected to participate in the activity. Attached is a copy of the questionnaire designed to get your response on issues related to this topic. I will truly appreciate if you spend a few minutes of your time filling this questionnaire.

Your identity will remain anonymous while the information sought will be used for academic purposes only.

Thank you for your assistance as I anticipate your response.

INSTRUCTIONS:

1. Please be totally frank when giving opinion and do not discuss statements with anyone.
2. Please return the questionnaire after completion

NB: Indicate your appropriate answer(s) by ticking inside the boxes provided.

SECTION A: BACKGROUND CHARACTERISTICS

NAME OF SCHOOL -----

1. Sex Male [☐] Female [☐]

2. Age group. 20-30 [☐] 31-40[☐] 41-50[☐] 51 and above [☐]

3. How many years have you been in teaching?

0-5[☐] 6-10[☐] 11-15[☐] 16-20[☐] 21-25[☐]

4. What is your professional qualification?

Primary Teachers' Certificate [☐] Primary teachers' Diploma [☐] Bachelor of Education [☐]

Others (specify) _____

SECTION B: TEACHER SPECIALISATION TO IMPROVE PUPIL PERFORMANCE.

5. Are you for the view that when primary school teachers are being specialised in a particular subject can bring high levels of subject knowledge?

Agree [☐] Disagree [☐] I don't know [☐] Strongly agree [☐] Strongly disagree [☐]

6. Rank the extent to which a subject specialised primary teacher gets to know pupils well and can maintain a proper overview of the whole educational experience of the pupils

EXTENT	RANKING	TICK
Very High	1	
High	2	
Medium	3	
Low	4	

SECTION C: CHALLENGES FACE BY TEACHERS IN TEACHING SUBJECTS.

7. Are you for the idea that lack of maturity on the part of pupils in most cases can give problems with adjusting to the demands from different teachers?

Agree [☐] Disagree [☐] I don't know [☐] Strongly agree [☐] Strongly disagree [☐]

8. Do you accept that truant pupils are not easy to be monitored in most cases by teachers who are teaching by specialisation at primary?

Agree [☐] Disagree [☐] I don't know [☐] Strongly agree [☐] Strongly disagree [☐]

9. Is it true that teachers who teach by specialisation at primary are over loaded by a high workload and too much marking?

Agree [☐] Disagree [☐] I don't know [☐] Strongly agree [☐] Strongly disagree [☐]

10. Can subject specialisation at primary school comprise discipline among pupils for not interacting with pupils by specialist teachers most of the time?

True [☐] False [☐] I don't know [☐]

SECTION D: BENEFITS OF SUBJECT SPECIALISATION

11. Can subject specialisation at primary allow teachers who are excellent in one core subject to pair with other teachers to produce excellent results by focusing on their area of strength?

Agree [☐] Disagree [☐] I don't know [☐] Strongly Agree [☐] Strongly Disagree [☐]

12. Are you for the idea that by subject specialisation at primary, teachers may reach more pupils while maintaining or gaining planning time?

Agree [☐] Disagree [☐] I don't know [☐] Strongly Agree [☐] Strongly disagree [☐]

13. Do you believe that through subject specialisation at primary, various teachers bring variety in the classroom and learning become more exciting?

True [☐] False [☐] I don't know [☐]

14. Do you still believe that different teachers impact on the pupils differently thereby improving learning?

True [☐] False [☐] I don't know [☐]

15. From your answers above, how well do you agree or disagree that high levels of subject knowledge and higher quality of teaching are more likely to come from specialist subject teacher than a generalist subject teacher?

Agree [☐] Disagree [☐] I don't Know [☐] Strongly Agree [☐] Strongly Disagree [☐]

16. With the introduction of the new curriculum by the Ministry of General Education is there a much need for specialisation in certain subject? Yes [☐] No [☐] I don't know [☐]